# 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"),

Tasi Tours and Transportation, Inc. P.O. Box 501023 Saipan, MP 96950

is authorized to discharge treated wastewater from the Managaha Island Wastewater Treatment facility to an existing leaching field (herein designated as Discharge Serial Number 001), located approximately 150 feet inward of the north shoreline of Managaha Island, which discharges into the groundwater in an aquifer matrix comprised of beach sand with a direct, hydrological connection to the nearby lagoon waters by the Tanapag Harbor of the Philippine Sea,

Latitude: 15° 14′ 31.1″ N Longitude: 145° 42′ 44.7″ E

to Class AA receiving coastal and oceanic waters surrounding Saipan, Commonwealth of the Northern Mariana Islands, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein, and in the attached 15 pages of U.S. EPA Region 9 *Standard Federal NPDES Permit Conditions*, dated July 27, 2011.

This permit shall become effective on August 1, 2013.

This permit and the authorization to discharge shall expire at midnight, <u>July 31, 2018</u>.

Signed this 26<sup>th</sup> day of July 2013.

For the Regional Administrator

/s/

Jane Diamond, Director Water Division EPA, Region 9

## SECTION A. EFFLUENT LIMITATION AND MONITORING REQUIREMENTS

Based upon the current average capacity of 0.005 MGD, the permittee is authorized to discharge treated domestic wastewater from Discharge Serial Number 001 into an existing leaching field located approximately 150 feet inward of the north shoreline of Managaha Island, which discharges into the groundwater in an aquifer matrix comprised of beach sand, with a direct, hydrological connection to the nearby lagoon waters by the Tanapag Harbor of the Philippine Sea, Saipan.

- 1. During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee shall not discharge to receiving waters, except from Discharge Serial No. 001 as specified below.
- 2. The influent shall be sampled prior to it entering the sedimentation tank. The effluent shall be sampled after final treatment prior to discharge to the leaching field, and prior to mixing with the receiving waters, where representative samples of the effluent can be obtained.
- 3. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Parameter	Units	Monthly Average	Weekly Average	Daily Maximum	Monitoring Frequency <sup>1</sup>	Sample Type
Flow <sup>1</sup>	MGD				Once/month	Instantaneous
$BOD_5^2$	mg/l	30	45		Once/month	8-hour Composite
	lbs/day	1.3	1.9			
TSS <sup>2</sup>	mg/l	30	45		Once/month	8-hour Composite
	lbs/day	1.3	1.9			
Enterococci <sup>3</sup>	CFU/100 mL	35 <sup>4</sup>		104 <sup>5</sup>	Quarterly	Grab
Total Residual Chlorine <sup>6</sup>	μg/l	7.5		13	Quarterly	Grab
Priority Pollutant Scan <sup>7</sup>	μg/l				Once during Year 1 of Permit	8

## FOOTNOTES:

- 1. Both the influent and effluent shall be monitored and reported. The effluent shall be sampled prior to discharge to leaching field Serial Number 001. All samples shall be discrete unless otherwise noted.
- 2. For BOD<sub>5</sub> and TSS, the arithmetic means of values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same times during the same period.
- 3. Limitation is based on applicable CNMI *Water Quality Standard* and 40 CFR CFR 122.44(d).

- 4. Geometric mean of samples collected during the calendar month.
- 5. Single sample maximum.
- 6. Limitation is based on applicable CNMI *Water Quality Standards* and 40 CFR CFR 122.44(d). If chlorination is used, upon initiation and throughout the duration of effluent chlorination, the permittee shall operate the plant to achieve the lowest possible residual chlorine while still complying with effluent limits for *Enterococci*.
- 7. Priority Pollutants: During Year 1 of the permit cycle, the permittee shall monitor for the full list of priority pollutants in the Code of Federal Register (CFR) at 40 CFR Part 423, Appendix A. No limit is set at this time. Should the results reveal levels below EPA's National Water Quality Criteria for priority pollutants, monitoring will no longer be required for the remainder of the permit cycle.
- 8. The permittee shall collect 24-*hour composite samples* for metals, 2,3,7,8-TCDD(dioxin), pesticides, base-neutral extractables, and acid-extractables. The permittee shall collect *discrete samples* for cyanide, total phenolic compounds and volatile organics.

### SECTION B. GENERAL DISCHARGE SPECIFICATIONS

In accordance with 40 CFR 122.44(d) and consistent with the Commonwealth of Northern Mariana Islands (CNMI) specific water quality criteria for Class AA marine waters, the following requirements shall apply to the permittee.

- 1. There shall be no discharge of pollutants to the receiving waters that will cause:
  - a. Materials to settle to form objectionable sludge or bottom deposits.
  - b. Floating debris, oil, grease, scum, or other floating materials.
  - c. Substances in amounts sufficient to produce taste, odor in the water, or detectable off flavor in the flesh of fish; or in amounts sufficient to produce objectionable odor, turbidity in the water, or other conditions in the receiving waters.
  - d. High temperatures; biocides; pathogenic organisms; toxic, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human health or aquatic life, or in amounts sufficient to interfere with any beneficial use of the receiving waters.
  - e. Substances or conditions or combinations thereof in concentrations to produce undesirable aquatic life.
  - f. Toxic pollutants in concentrations to be lethal to, or that produce detrimental physiological responses in human, plant, or animal life. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive

- success of resident or indicator species and/or significant alterations in population or community ecology or receiving water biota.
- g. The *Enterococci* concentration in the receiving waters to exceed a geometric mean of 35 per one hundred milliliters (CFU/100mL) based on samples taken over a 30-day period, nor any instantaneous reading to exceed 104 CFU/100 mL.
- h. The maximum levels of total residual chlorine in the receiving waters to exceed a geometric mean of 7.5  $\mu$ g/l based on samples taken over a consecutive 30-day period, nor any instantaneous reading to exceed 13  $\mu$ g/l.
- i. The pH in the receiving waters to deviate more than 0.5 units from a value of 8.1.
- j. The nitrate-nitrogen concentration in the receiving waters to exceed 0.20 mg/L.
- k. The total nitrogen concentration in the receiving waters to exceed 0.4 mg/L.
- 1. The orthophosphate concentration in the receiving waters to exceed 0.025 mg/L.
- m. The total phosphorous concentration in the receiving waters to exceed 0.025 mg/L.
- n. The unionized ammonia concentration in the receiving waters to exceed 0.02 mg/L.
- o. The concentration of dissolved oxygen in the receiving waters to be less than 75% saturation.
- p. The concentrations of total filterable suspended solids in the receiving waters to be increased from ambient conditions at any time, or to exceed 5 mg/L except when due to natural conditions.
- q. The salinity of the receiving waters to be altered more than 10% of the ambient conditions, or to otherwise adversely affect the sedimentary patterns and indigenous biota, except when due to natural causes.
- r. The temperature of the receiving waters to vary by more than 1.0°C from ambient conditions.
- s. The turbidity at any point in the receiving waters, as measured by nephelometric turbidity units (NTU), to exceed 0.5 NTU over ambient conditions.
- t. The health and life history characteristics of aquatic organisms in receiving waters affected by the discharge to differ substantially from those for the same receiving waters in areas unaffected by the discharge. Also, the discharge shall not cause a

detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life in the receiving waters.

# 2. <u>Discharge Prohibition</u>

The discharge of radioactive materials at any level to the receiving waters is strictly prohibited.

# SECTION C. RECEIVING WATER MONITORING REQUIREMENTS AND CONDITIONS

1. In accordance with 40 CFR 122.44(d) and consistent with the CNMI specific water quality criteria for Class AA marine waters, the permittee shall conduct the following receiving water monitoring program for the Managaha Island facility discharge. The permittee shall verify all station locations (latitude and longitude) and submit this information to the CNMI Department of Environmental Quality (DEQ), with a map showing the locations of these stations in the first quarterly receiving water monitoring report.

# a. Receiving Water Monitoring Stations

Station ID(s)	Location			
Station 1	At the north shoreline, at a water depth of 12 inches, directly opposite from the leaching field distribution box. A permanent marker shall be established and maintained in a location far enough inland to be protected from erosion and storm damage, but visible enough to easily serve as the sampling location reference.			
Station 2	Shoreline 75 feet <b>west</b> of Station 1, at the water depth of 12 inches.			
Station 3	Shoreline 75 feet <b>east</b> of Station 1, at the water depth of 12 inches.			

# b. <u>Receiving Water Monitoring Parameters</u>

Receiving Water Characteristic <sup>1</sup>	Units	Site(s)	Monitoring Frequency	Sample Type/ Sampling Depths <sup>2</sup>
рН	units	1, 2, 3	Quarterly	Grab
Nitrate-Nitrogen	mg/L	"	"	"
Total Nitrogen	mg/L	"	"	"
Total Phosphorus	mg/L	"	"	"
Unionized Ammonia	mg/L	"	"	"

#### NOTES:

1. Concentration limitation is based on applicable CNMI Water Quality Standards and 40 CFR 122.44(d).

- 2. For grab samples, the sampling depth profile at each station is 6 inches below the surface. Samples shall be collected and analyzed according to *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004), or as directed by CNMI DEQ.
- 2. The permittee shall submit quarterly water column monitoring reports to USEPA Region 9 and CNMI DEQ by the 28th of April, July, October, and January for each period covering the previous three calendar months. These reports shall include:
  - a. A description of climatic and receiving water characteristics at the time of sampling (*e.g.*, weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, *etc.*).
  - b. A description of the sample collection and preservation procedures used in the receiving water monitoring program.
  - c. A description of sample stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediments, rocks, shell litter, calcareous worm tubes, etc.)
  - d. A description of the specific method used for laboratory analysis.
  - e. An in-depth discussion of the results of the receiving water monitoring program with regard to compliance with this permit and Section 403(c) of the Clean Water Act. All tabulations and computations shall be explained.
- 3. At the direction of USEPA Region 9 and CNMI DEQ, the permittee shall submit for USEPA Region 9 and CNMI DEQ approval a water quality monitoring program and/or a sediment quality, biological resources, and/or human health risk monitoring program; CWA Section 403: Procedural and Monitoring Guidance (EPA 842-B-94-003, 1994) should be consulted in conjunction with development of the monitoring program.

## SECTION D. BIOSOLIDS REQUIREMENTS

The permittee shall comply with all standards for biosolids use and disposal established under Section 405(d) of the Clean Water Act, including existing standards under 40 CFR Parts 257, 258 and 503.

## SECTION E. PERMIT REOPENER

Should any of the monitoring results indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above water quality criteria, the permit may be reopened for the imposition of water quality based limits and/or whole effluent toxicity limits. Also, this permit may be modified, in accordance with the requirements set forth at 40 CFR Parts 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any new EPA-approved CNMI water quality standards.

### SECTION F. MONITORING AND REPORTING

# 1. **Reporting of Monitoring Results**

a. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with effluent limitations and permit requirements. Monitoring results shall be reported on monthly Discharge Monitoring Report (DMR) forms (EPA No. 3320-1) supplied by the Regional Administrator, to the extent that the results reported may be entered on the forms. Monthly DMR forms shall be submitted quarterly on the 28th day of the month following the previous quarterly reporting period; for example, the three monthly DMR forms for the reporting period January through March shall be submitted by April 28th. Duplicate signed copies of these, and all other reports required herein, shall be submitted to both offices at:

U. S. Environmental Protection Agency, Region 9 Enforcement Division Information Management Section (ENF 4-1) 75 Hawthorne Street San Francisco, CA 94105

Division of Environmental Quality Commonwealth of the Northern Mariana Islands P.O. Box 501304 Saipan, MP 96950

- b. The Discharger has the option to submit all monitoring results in the electronic reporting format approved by U.S. EPA. The Discharger may submit DMRs electronically using EPA's NetDMR application. NetDMR is a national tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA. By using NetDMR, dischargers can discontinue mailing hard copy forms under 40 CFR 122.41 and 403.12.
- c. Monitoring must be conducted in accordance with EPA test procedures approved under Title 40, U.S. Code of Federal Regulations ("CFR"), Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, as amended. For effluent analyses, the permittee shall utilize an analytical method with a published Method Detection Limit (MDL; as defined in Section E of this permit) that is lower than the effluent limitations (or lower than applicable numeric water quality criteria). If all published MDLs are higher than the effluent limitations or water quality criteria, then the permittee shall utilize the analytical method with the lowest published MDL. The permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the minimum level (ML), as defined in Section G. of this permit.
- d. For samples collected during the monthly reporting period, report on the DMR form:

- (1) The *maximum value*, if the maximum value is greater than the ML; or  $NODI(Q)^1$ , if the maximum value is greater than or equal to the laboratory's MDL, but less than the ML; or  $NODI(B)^1$ , if the maximum value is less than the laboratory's MDL; and
- (2) The *average value* of all analytical results where 0 (zero) is substituted for *NODI(B)* and the laboratory's MDL is substituted for *NODI(Q)*, if more than one sample is collected during the monthly reporting period.
- e. As an attachment to each DMR form submitted during this permit term, the permittee shall report for all parameters with monitoring requirements specified under Section F. of this permit: the analytical method number or title, preparation and analytical procedure utilized by the laboratory, and published MDL or ML; the laboratory's MDL, the standard deviation (S) from the laboratory's MDL study, and the number of replicate analyses (n) used to compute the laboratory's MDL; and the ML.

# 2. <u>Monitoring and Records</u>

In addition to the information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: Laboratory(ies) which performed the analyses and any comments, 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 Part 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times, and preservation.

# 3. Twenty-Four Hour Reporting of Noncompliance

a. In accordance with 40 CFR 122.41(1)(6), the permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following persons or their offices:

Wastewater Enforcement Office (ENF 3-1) CNMI Division of Environmental Enforcement Division (670) 664-8500 U.S. EPA Region (415) 972-3518

b. If the permittee is unsuccessful in contacting the person(s) above, the permittee shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within five (5) days of the time the

<sup>1</sup> NODI(Q) means "No discharge/No data" (not quantifiable); NODI(B) means "No discharge/No data" (not detected).

permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps or planned to reduce, eliminate, and prevent reoccurence of the noncompliance.

c. In accordance with Section 12 of the CNMI Water Quality Standards, the permittee shall allow the Director (or his authorized representative) prompt access to the Managaha Island WWTP and appurtenances for the purpose of inspecting the premises for compliance with the terms of the water quality certification. The inspection may be made without advance notice to the permittee, with good purpose, at the discretion of the Director, but shall be made at reasonable times, unless an emergency dictates otherwise.

## SECTION G. DEFINITIONS

The following definitions shall apply unless otherwise specified in this permit:

- 1. "8-hour Composite sample" means, for flow rate measurements, the arithmetic mean of no fewer than 8 individual measurements taken at equal intervals for eight (8) hours or for the duration of discharge, whichever is shorter. An 8-hour composite sample means, for other than flow rate measurement, a combination of eight (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 flow.
- 2. "24-hour Composite sample" means, for flow rate measurements, the arithmetic mean of no fewer than 8 individual measurements taken at equal intervals over any 24- hour period, or for the duration of discharge, whichever is shorter, that reasonably represents the calendar day. A 24-hour composite sample means, for other than flow rate measurement, a combination of eight (8) individual portions obtained at equal time intervals over any 24- hour period, or for the duration of discharge, whichever is shorter, that reasonably represents the calendar day. 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 flow.
- 3. "Commonwealth" or "CNMI" means Commonwealth of the Northern Mariana Islands.
- 4. "DEQ" means the Commonwealth Division of Environmental Quality.
- 5. "Director" means the Director of the Commonwealth Division of Environmental Quality.
- 6. "Discrete sample" means any individual sample collected in less than 15 minutes.

- 7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.
- 8. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that sampling day.
- 9. "Daily maximum" discharge limitation means the highest allowable "daily discharge" during the calendar month.
- 10. "Daily average" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 11. "Discrete sample" means any individual sample collected inless than 15 minutes. The sampling perod shall coincide with the period of maximum discharge flow.
- 12. "EPA" means the United States Environmental Protection Agency.
- 13. "Grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 14. "Instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 15. "Method Detection Limit (MDL)" is the minimum concentration of an analyte that can be detected with 99% 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.
- 16. "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). Published method-specific MLs are contained in 40 CFR Part 136, Appendix A, and must be utilized if available. If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times

the published 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 Part 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 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, or 5) x 10n, where n is zero or an integer. (For example, if an MDL is 2.5  $\mu$ g/l, then the calculated ML is: 2.5  $\mu$ g/l x 3.18 = 7.95  $\mu$ g/l. The multiple of (1, 2, or 5) x 10n nearest to 7.95 is 1 x 101 = 10  $\mu$ g/l, so the calculated ML, rounded to the nearest whole number, is 10  $\mu$ g/l.)
- 17. "Monthly average" concentration for *E. coli* means the geometric mean of measurements made during a month. The geometric mean is the nth root of the product of n numbers.
- 18. "Monthly average" concentration limitation means the arithmetic mean of consecutive measurements made during a calendar month.
- 19. "Monthly average" limitation means the highest allowable discharge of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measure during that month.
- 20. "Regional Administrator" means EPA Region 9's Regional Administrator.
- 21. "Weekly average" (or 7-day average) is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.