

PART I - EFFLUENT LIMITATIONS AND REQUIREMENTS

- A. Unitek Environmental-Guam (hereinafter, the “permittee”) is authorized to discharge wastewater from its mobile treatment plant through Discharge Outfall Nos. 001, 002, and 003 to Apra Harbor. Effluent limitations and requirements are based on a design flow rate capacity of the mobile treatment plant at 0.144 million gallons per day (“MGD”). In accordance with 40 CFR 122.45(f), effluent limits are expressed in both concentration and mass except for pollutants or parameters that cannot be expressed appropriately by mass. Such effluent discharge shall be limited, monitored, and reported by the permittee as specified in Table 1.
- B. The discharge shall be free from substances, conditions, or combinations thereof that:
1. cause visible floating materials, debris, oils, grease, scum, foam, or other floating matter which degrades water quality or use;
 2. produce visible turbidity, settle to form deposits or otherwise adversely affect aquatic life;

Table 1 - Effluent limitations and requirements for pollutants or parameters.

Pollutant/Parameter	Daily Maximum Allowable Effluent Limitation		Monitoring Requirements ¹	
	Concentration Limit	Mass Limit	Monitoring Frequency	Sample Type
Flow Rate (MGD)	NA ²	NA	Continuous	Metered
pH ³ (Std. Units)	6.5 - 8.5	NA	Once/Month	Grab
Oil and Grease	15 mg/l	8.176 kg/d	Once/Month	Grab
Lead ⁴	0.210 mg/l	0.114 kg/d	Once/Month	Grab
Orthophosphate	0.10 mg/l	0.055 kg/d	Once/Month	Grab
BTEX (mg/l)	NA	NA	Once/Year	Grab

MGD - million gallons per day; Std Units - standard units; mg/l - milligrams per liter; BTEX - benzene, toluene, ethylbenzene and xylene.

¹If there is no discharge from an outfall during any one month period, report “C” in the “No Discharge” box on the Discharge Monitoring Report for that month; a “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place.

²A “NA” means not applicable as no numerical limits are established for the pollutant or parameter.

³pH shall be measured at the time of sampling.

⁴Daily maximum effluent limitation for lead is based on total recoverable metal and on an acute discharge flow duration of less than or equal to 24 hours. For a chronic discharge flow duration greater than 24 hours, the permittee shall also meet the monthly effluent limitation for lead of 0.0081 mg/l using composite sampling methods, as defined in Part VII of this permit.

3. produce objectionable color, odor or taste, directly or by a chemical or biological action;
 4. injure or are toxic or harmful to humans, animals, plants or aquatic life; or
 5. induce the growth of undesirable aquatic life.
- C. The discharge shall not cause the turbidity values in the receiving water to exceed 1.0 Nephthleometric Turbidity Units over ambient conditions.
- D. The discharge shall not cause the temperature of the receiving water to be changed by more than 1.8°F (1.0°C) from ambient conditions.
- E. The discharge shall not contain concentrations of oil or petroleum products that:
1. cause a visible film, or sheen, or result in visible discoloration of the surface with a corresponding oil or petroleum product odor;
 2. cause damage to fish, invertebrates, or objectionable degradation of drinking water quality; or
 3. form an oil deposit on the shores or bottom of the receiving body of water.
- F. The discharge shall be free of toxic substances in concentrations that produce detrimental physiological, acute or chronic responses in human, plant, animal or aquatic life.
- G. The discharge shall be free of toxic substances in concentrations that produce contamination in harvestable aquatic life to the extent that it causes detrimental physiological, acute or chronic responses in humans or protected wildlife, when consumed.
- H. The survival of aquatic life in marine waters subjected to the discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge.
- I. The discharge, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard.
- J. The discharge of pollutants at any point other than specifically described in this permit is prohibited, and constitutes a violation thereof.

PART II - MONITORING AND REPORTING REQUIREMENTS

- A. Samples and measurements shall be representative of the volume and nature of the discharge. All samples and measurements shall be taken at the point

immediately following the final treatment process and before mixing with the receiving water.

- B. Photo documentation of the discharged effluent is required once per quarter. Photos shall be taken of the effluent as it enters Apra Harbor and must be of suitable quality to adequately assess visible sheening, discoloration, and turbidity of the receiving water, as a result of the discharge. All photos must be labeled with the outfall number, date and time and be attached to the monthly Discharge Monitoring Report (“DMR”) form (EPA Form 3320-1).
- 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 a Method Detection Limit (“MDL”) or Minimum Level (“ML”) that is lower than the effluent limitations described in Table 1 of this permit. If all published MDLs or MLs are higher than the effluent limitations, the permittee shall utilize the test method procedure with the lowest MDL or ML. The permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Effluent analysis for lead shall measure “total recoverable lead,” except as provided under 40 CFR 122.45(c).
- D. The permittee shall develop a Quality Assurance (“QA”) Manual for the field collection and laboratory analysis of samples. 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. At a minimum, the QA Manual shall include the following:
1. Identification of project management and a description of the 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;
 2. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (“QC”) samples; preservatives and holding times for the samples (see 40 CFR Part 136.3); and chain of custody procedures;
 3. Identification of the laboratory(ies) used to analyze 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; MDL and 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 in response to problems identified during QC checks; and
4. Discussion of how the permittee will perform data review and reporting of results to EPA and Guam EPA and how the permittee will resolve data quality issues and identify limits on the use of data.
- E. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory(ies), the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee's QA Manual shall be retained on the permittee's premises and available for review by EPA or Guam EPA upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
- F. For samples collected each month of the reporting period, report on the monthly DMR the following:
1. The maximum value, if result is greater than or equal to the ML; or
 2. NODI(Q), if result is greater than or equal to the laboratory's MDL but less than the ML; or
 3. NODI(B), if result is less than the laboratory's MDL.
- G. As an attachment to each DMR form submitted during this permit period, the permittee shall report for all pollutants or parameters with monitoring requirements specified in Table 1 of this permit: the analytical method number or title, preparation and analytical test procedure utilized by the laboratory, 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.
- H. In addition to 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(ies). The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 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, and sample receipt condition, holding time, and preservation.

- I. All monitoring results shall be submitted in such a format as to allow direct comparison with effluent limitations and requirements in this permit. Monitoring results must be reported on a monthly DMR form. DMR forms shall be submitted quarterly and on the 15th of the month following the previous quarterly reporting period. For example, the three DMR forms for the reporting period January through March shall be submitted by the 15th of April. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator of EPA and the Administrator of Guam EPA at the following addresses:

Regional Administrator
EPA - Region IX
Pacific Islands Office, CED-6
75 Hawthorne Street
San Francisco, California 94105

Administrator
Guam EPA
P.O. Box 22439- GMF
Barrigada, Guam 96921

PART III - TWENTY-FOUR HOUR REPORTING OF NONCOMPLIANCE

- A. In accordance with 40 CFR 122.41(l)(6), the permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally, within 24 hours from the time the permittee becomes aware of the circumstances, to EPA and Guam EPA. The permittee shall notify EPA and Guam EPA at the following telephone numbers:

Pacific Islands Compliance Officer
EPA - Region IX
(415) 972-3769

Administrator
Guam EPA
(671) 475-1658

A written submission shall be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause and the period of noncompliance, including exact dates and times. If noncompliance has not been corrected, the written submission shall contain the anticipated time the noncompliance is expected to continue, and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

PART IV - POLLUTION PREVENTION PLAN REQUIREMENTS

- A. The permittee shall develop (or update) and implement a EPA-approved Pollution Prevention Plan which identifies a pollution prevention committee or individual(s) within the plant organization responsible for developing, implementing and maintaining the Pollution Prevention Plan. The Pollution Prevention Plan must be submitted to EPA and Guam EPA for approval within 30 days and implemented within 60 days of the effective date of this permit.
- B. The Pollution Prevention Plan shall identify all activities and materials that may be significant pollutant sources. For source identification, the Pollution Prevention Plan shall include:
1. a drainage site map where the mobile treatment plant is typically stored, maintained, or operated. The map shall outline the drainage area of each outfall and identify existing structural control measures to reduce or prevent pollutants discharging into Apra Harbor;
 2. a narrative description of all activities that may be a source of pollutants;
 3. a narrative description of significant materials that will be treated, stored, or disposed of while storing, maintaining or operating the mobile treatment plant; and
 4. a description of material loading and unloading areas.
- C. In accordance with section 304(e) of the Act and 40 CFR 122.44(k), the permittee shall develop and implement Best Management Practices (“BMPs”) that are designed to prevent pollutants from entering Apra Harbor and other surface waters while maintaining, operating, transporting and/or storing the mobile treatment plant. The BMPs shall be included in the Pollution Prevention Plan. The BMPs shall ensure that:
1. vehicle and equipment maintenance areas are regularly inspected and cleaned for spills and leaks (including storm inlets); have spill response equipment (e.g., drip pans, sorbent pads) to respond immediately to spills or leaks; and have proper storage of all fluids, including greases, used oil, cleaning solvents, hydraulic and transmission fluids, in accordance with local and federal laws;
 2. vehicle and equipment washing areas have appropriate containment and/or diversionary structures or equipment to ensure wash water is discharge to the sanitary sewer or is filtered and recycled where feasible;
 3. vehicle and equipment fueling areas are paved with concrete; and have appropriate containment and/or diversionary structures or equipment to prevent spills, fail-safe engineering devices to prevent overflows during refueling, and spill response equipment (e.g., drip pans, sorbent pads and

- booms) to respond immediately to spills;
4. other areas or equipment associated with the maintenance, operation, and storage of the mobile treatment plant are routinely cleaned up and the litter, debris, and waste oil, fuel or sludges related to its use is properly stored or disposed of in accordance with local and federal laws;
 5. storm drains are regularly inspected and cleaned, especially after large storms;
 6. mobile treatment plant is routinely inspected for leaks and spills and maintained to ensure proper operation; and
 7. employees or other individuals operating the mobile treatment plant are properly trained on pollution prevention measures including spill response and storm water management.

PART V - PERMIT REOPENER

This permit contains a reopener provision that allows EPA to modify the permit in accordance with the requirements set forth in 40 CFR 122 and 124 and section 5104.A.9 of Guam's water quality standards to include conditions or limitations to address exceedances of Guam water quality standards based on newly available information.

PART VI - STANDARD PERMIT CONDITIONS

This permit requires the permittee to comply with the attached EPA Region IX *Standard Federal NPDES Permit Conditions*, dated July 1, 2001.

PART VII - DEFINITIONS

- A. A "composite" sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. 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 18th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.
- B. A "daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day 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 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 day.

- C. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.
- D. A “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. 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 18th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.
- E. A "mass-based limit" is defined by the following equation:
- $$X \text{ (mg/l)} \times 8.345 \times \text{average daily flow (MGD)} = Y \text{ (lbs/day)}$$
- Where:
- X = concentration-based limit
 - Y = mass-based limit
 - 8.345 is the conversion factor to convert mg/l and MGD into lbs/day
- F. A “maximum daily effluent limitation” means the highest allowable “daily discharge.”
- G. The “method detection limit” or “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 a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.
- H. The “minimum level” or “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 in a specific analytical procedure, assuming that all the method-specific 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). 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 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 non-metals:

1. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 2. 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 ug/l, then the calculated ML is: $2.5 \text{ ug/l} \times 3.18 = 7.95 \text{ ug/l}$. The multiple of $(1, 2, \text{ or } 5) \times 10^n$ nearest to 7.95 is $1 \times 10^1 = 10 \text{ ug/l}$, so the calculated ML, rounded to the nearest whole number, is 10 ug/l.)
- I. A “NODI(B)” means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory’s MDL.
- J. A “NODI(Q)” means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory’s MDL, but less than the ML.