CHAPTER 11-55 APPENDIX I

NPDES GENERAL PERMIT
AUTHORIZING DISCHARGES OF TREATED
PROCESS WASTEWATER ASSOCIATED WITH
WELL DRILLING ACTIVITIES

This General Permit is effective on

DEC 0 6 2013

and expires four years from this date,
unless amended earlier.

1. Coverage under this General Permit

   (a) This general permit covers only discharges of treated process wastewater associated with well drilling activities upon compliance with the applicable general permit requirements. Treated process wastewater covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters.

   (b) This general permit covers all areas of the State except for discharges in or to state waters classified by the department as "class 1, inland waters," "class AA, marine waters," and areas restricted in accordance with the State's "No Discharge" policy in chapter 11-54 titled "Water Quality Standards."

2. Limitations on Coverage under this General Permit

   (a) This general permit does not cover the following:

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(1) Discharges of treated process wastewater into a sanitary sewer system;

(2) Discharges of treated process wastewater which initially enter separate storm water drainage systems, unless a permit, license, or equivalent written approval is granted by the owner(s) of the drainage system(s) allowing the subject discharge to enter their drainage system(s); except if the permittee is the owner of the drainage system; and

(3) Discharges of well pump testing wastewaters which are not associated with well drilling activities.

(b) The director may require any permittee authorized by this general permit to apply for and obtain an individual permit, in accordance with sections 11-55-34.05 and 11-55-34.10.

3. Term of General Permit

(a) This general permit becomes effective when section 11-55-34.02(b)(8) becomes effective ten days after filing with the office of the lieutenant governor. This general permit expires four years after the effective date or when amendments to section 11-55-34.02(b)(8) are adopted, whichever is earlier.

(b) A notice of general permit coverage under this general permit expires:

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(1) Four years after the effective date of this general permit;

(2) When the notice of general permit coverage specifies; or

(3) When amendments to section 11-55-34.02(b)(8) are adopted,

whichever is earliest, unless the notice of general permit coverage is administratively extended under section 11-55-34.09(d).

4. Notice of Intent Requirements

(a) The owner or its duly authorized representative shall submit a complete notice of intent no later than thirty days before the proposed starting date of the discharge or thirty days before the expiration date of the applicable notice of general permit coverage.

(b) The owner or its duly authorized representative shall include the following information in the notice of intent:

(1) Information required in section 34 of appendix A of chapter 11-55;

(2) Legal name, street address, telephone and fax numbers, and contact person(s) for the designer(s) of the well drilling process wastewater treatment facility(ies);

(3) Site characterization report which includes:

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(A) The history of the land use at the proposed drilling site,

(B) The potential pollution source(s) at the proposed drilling site,

(C) The potential pollutant(s) present at the proposed drilling site,

(D) Any proposed corrective measures, and

(E) Pollutants that may be in the effluent;

(4) Brief description of the project, including:

(A) An estimated timetable of the drilling activities, including the date when the contractor will begin the well drilling process;

(B) Details of the proposed wastewater(s) discharge(s):

(i) Estimates of the quantity and frequency of the proposed discharge(s) and

(ii) The name(s) of the chemical(s) or material(s) listed by both chemical and trade names that is(are) present in the proposed wastewater(s) discharge(s). Also, provide the material safety data sheet (MSDS) for

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the chemical(s) or materials; and

(C) The time frame of the proposed discharges;

(5) Quantitative data on pollutants that the owner or operator of the activity knows or reasonably should know are or will be present in the discharge and for which pollutants numerical criteria for the receiving state waters are specified in section 11-54-4;

(6) Name, street address, and phone and fax numbers of each contract laboratory or consulting firm that performed any of the analyses in accordance with section 4(b)(5), as applicable. This information shall be submitted with the notice of intent or thirty days before the start of well drilling activities;

(7) Well drilling plan designed to comply with the basic water quality criteria specified under chapter 11-54. The plan shall include:

(A) The well drilling equipment to be used,

(B) Process wastewater treatment design,

(C) Design concerns,

(D) Calculations used in the treatment design, and

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(E) Proposed mitigative measures.

The site-specific detailed well drilling plan shall be submitted to the director with the notice of intent or thirty days before the start of well drilling activities. The plan, and all subsequent revisions, shall be retained on-site or at a nearby field office; and

(8) Well drilling best management practices plan to ensure that the well drilling effluent discharge will meet conditions of this general permit, basic water quality criteria, and applicable specific water quality parameters. The well drilling best management practices plan shall include:

(A) A schedule of activities;

(B) Prohibited practices;

(C) Operation and maintenance procedures to prevent or reduce the pollution of state waters, including:

(i) Responsible field person of the system, by title or name;

(ii) Operations plan;

(iii) Maintenance scheduling or action criteria, and program;

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(iv) Effluent monitoring program (e.g. visual inspection);

(v) Cessation of discharge plan; and

(vi) Effluent control plan;

(D) Other management practices to prevent or reduce the pollution of state waters;

(E) Treatment requirements; and

(F) Practices to control project site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage or stockpiling area(s).

The site-specific detailed well drilling best management practices plan shall be submitted to the director with the notice of intent or thirty days before the start of well drilling activities. The plan, and all subsequent revisions, shall be retained on-site or at a nearby field office.

(c) The director may require additional information to be submitted.

(d) The owner or its duly authorized representative shall submit a complete notice of intent to the director at the following address or as otherwise specified:

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Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

5. Standard Conditions

The permittee shall comply with the standard conditions as specified in appendix A of chapter 11-55. In case of conflict between the conditions stated here and those specified in the standard general permit conditions, the more stringent conditions shall apply.

6. Effluent Limitations and Monitoring Requirements

(a) The discharges shall be limited and monitored by the permittee as specified in this section and in Table 34.7 (Daily maximum effluent limitations for saline water apply only when discharges to saline water occur and daily maximum effluent limitations for fresh water apply only when discharges to fresh water occur.)

(1) Sampling Points

The permittee shall collect representative discharge samples at the end of effluent discharge point(s) prior to entering the receiving state water or separate storm water drainage systems.

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(2) Collection of Samples

The permittee shall take samples and measurements for the purposes of monitoring which are representative of the volume and nature of the total discharge.

(3) Types of Samples

(A) "Grab Sample" means an individual sample collected within the first fifteen minutes of a discharge.

(B) "Composite sample" means a combination of at least eight sample aliquots, collected at periodic intervals during the operating hours of the facility over a 24hour period. The composite shall be flow proportional; either the time interval between each aliquot or the volume of each aliquot shall be proportional to the total effluent flow since the collection of the previous aliquot. The permittee may collect aliquots manually or automatically, unless otherwise stated.

(4) Test Procedures

(A) The permittee shall use test procedures for the analysis of pollutants which conform with regulations published under Section 304(h) of the Act.

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(B) Unless otherwise noted in this general permit, the permittee shall measure all pollutant parameters in accordance with methods prescribed in 40 CFR Part 136, promulgated under Section 304(h) of the Act. The permittee may submit applications for the use of alternative test methods in accordance with 40 CFR §136.4.

(C) The permittee shall use test methods with detection limits that reflect the applicable numerical limitations as specified in chapter 11-54. If the test result is not detectable, indicate that the test result is "less than #," where the # is the lowest detection limit of the test method used.

(5) Recording of Results

The permittee shall comply with section 14(c) of appendix A of chapter 11-55 for each measurement or sample taken under the requirements of this general permit.

(b) Basic Water Quality Criteria and Inspections

(1) The permittee shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-4.

(2) The permittee shall timely inspect the receiving state waters, effluent, and

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control measures and best management practices to detect violations of and conditions which may cause violations of the basic water quality criteria as specified in section 11-54-4. (e.g., the permittee shall look at effluent and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce odor or off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life.)

(c) There shall be no discharge of floating solids or visible foam.

(d) There shall be no visible oil sheen in the effluent.

(e) The permittee shall take all reasonable steps to minimize or prevent any discharge, use, or disposal of sludge or sediments in violation of this general permit or applicable law. Sludge, sediments, or any other material generated by any treatment process shall be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material shall be in compliance with 40 CFR Parts 501 and 503.

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7. Corrective Action

The permittee shall immediately stop, reduce, or modify the discharge as needed to stop or prevent a violation of the basic water quality criteria as specified in section 11-54-4.

8. Reporting Requirements

(a) Reporting of Monitoring Results

(1) The permittee shall report monitoring results on a discharge monitoring report form (EPA No. 3320-1) or other form as specified by the director. The permittee shall submit results of all monitoring required by this general permit in a format that demonstrates compliance with the limitations in Table 34.7 and other requirements of this general permit.

(2) The permittee shall submit monitoring results obtained during the previous calendar month, postmarked or received by the department no later than the twenty-eighth day of the month following the completed reporting period.

(3) The permittee shall also submit the monitoring results with laboratory reports, including quality assurance/quality control data; effluent flow calculations; and any additional treatment strategies to be implemented based on monitoring results.

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(4) Should there be no discharges during the monitoring period, the discharge monitoring report form shall so state.

(b) Additional Monitoring by the Permittee

If the permittee monitors any pollutant at location(s) designated herein more frequently than required by this general permit, using approved analytical methods as specified in section 6(a)(4)(B) of this general permit, the permittee shall include the results of this monitoring in the calculation and reporting of the values required in the discharge monitoring report form. The permittee shall also indicate the increased frequency.

(c) Reporting of Noncompliance, Unanticipated Bypass, or Upset

(1) The permittee or its duly authorized representative shall orally report any of the following when the permittee or its duly authorized representative becomes aware of the circumstances:

(A) Violation of an effluent limitation specified in Table 34.7 or a basic water quality criteria specified in section 6(b) of this general permit;

(B) Discharge or noncompliance with effluent limitations which may endanger health or the environment; or

(C) Unanticipated bypass or upset.

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(2) The permittee shall make oral reports by telephone to the Clean Water Branch at (808) 586-4309 during regular office hours which are Monday through Friday (excluding holidays) from 7:45 a.m. until 4:15 p.m. or the Hawaii State Hospital Operator at (808) 247-2191 outside of regular office hours.

(3) The permittee shall provide a written report within five days of the time the permittee or its duly authorized representative becomes aware of the circumstances. The written report shall include the following:

(A) Description of the noncompliance, unanticipated bypass, or upset and its cause;

(B) Period of noncompliance, unanticipated bypass, or upset including exact dates and times;

(C) Estimated time the noncompliance, unanticipated bypass, or upset is expected to continue if it has not been corrected; and

(D) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance, unanticipated bypass, or upset.

(4) The director may waive the written report on a case-by-case basis if the oral report has been received within twenty-four hours.

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(d) Planned Changes

The permittee shall report any planned physical alterations or additions to the permitted facility, not covered by 40 CFR §122.41(l)(1)(i), (ii), and (iii) to the director on a quarterly basis.

(e) Schedule of Maintenance

The permittee shall submit a schedule for approval by the director at least fourteen days prior to any maintenance of facilities which might result in exceedance of effluent limitations. The schedule shall include a description of the maintenance and its reason; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

9. Submittal Requirements

(a) The owner or its duly authorized representative shall submit signed copies of monitoring and all other reports required by this general permit to the director at the following address or as otherwise specified:

Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

(b) The owner or its duly authorized representative shall include the following certification statement and an original

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signature on each submittal in accordance with section 11-55-34.08(e) or (f):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

(c) The owner or its duly authorized representative shall include the notice of general permit coverage file number on each submittal. Failure to provide the assigned notice of general permit coverage file number for this facility on future correspondence or submittals may be a basis for delay of the processing of the document(s).

10. Additional Conditions

The director may impose additional conditions under section 11-55-34.09(b).

11. Record Retention

The permittee shall retain all records and information resulting from the monitoring

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activities required by this general permit including all records of analyses performed and calibration and maintenance of instrumentation for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation or administrative enforcement action regarding the discharge of pollutants by the permittee or when requested by the director or Regional Administrator.

12. Falsifying Report

Knowingly making any false statement on any report required by this general permit may result in the imposition of criminal penalties as provided for in Section 309 of the Act and in section 342D-35, HRS.

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CHAPTER 11-55 APPENDIX I

TABLE 34.7

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
FOR DISCHARGE OF TREATED EFFLUENT
FROM WELL DRILLING ACTIVITIES

Effluent Parameters	Effluent Limitations {1}		Monitoring Requirements	
	For Saline Water	For Fresh Water	Minimum Frequency	Type of Sample
Quantity of Discharge (gallons)	{2}	{2}	Daily	Calculated or Estimated
Oil and Grease (mg/l)	15	15	{3}	Grab {4}
Benzene (mg/l) {5}	1.7	1.8	{3}	Grab
Total Suspended Solids (mg/l)	{6}	{6}	{3}	Grab
Turbidity (NTU)	{6}	{6}	{3}	Grab
Ammonia Nitrogen (NH_4-N/l) {7}	{6}	{6}	{3}	Grab
pH (standard units)	{6}	{6}	{3}	Grab {8}
Toxic Pollutants {7}	{6}	{6}	{3}	{9}

mg/l = milligrams per liter
NTU = nephelometric turbidity units

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NOTES:

{1} Pollutant concentration levels shall not exceed the effluent limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those effluent limits or are outside those ranges shall be reported to the director as required in section 8(c) of this general permit.

{2} Report. The permittee shall monitor and report the analytical result.

{3} For intermittent discharges, the sample shall be taken once for each discharge. For continuous discharge a sample shall be taken at least once per week.

{4} Oil and Grease shall be measured by EPA Method 1664, Revision A.

{5} The permittee shall use "Test Methods for Evaluating Solid Wastes" (EPA-SW-846-03-03B, November 2004), or "Standard Methods for the Examination of Water and Wastewater" (ISBN 0-87553-047-8, 2005;), or EPA methods 5030/8015, or 5030/8021B, or 5030/8260B, or 602, or 624, or 1624 for the measurement of benzene.

{6} Effluent limitations are the acute water quality standards established in section 11-54-4, for either fresh or saline waters and specific criteria established in section 11-54-5 and 11-54-6 for the classification of the receiving state waters, as applicable. For pollutants which do not have established acute water quality standards or specific criteria, the permittee shall report any detected concentration greater than 0.01 µg/l.

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{7} The permittee shall measure for toxic pollutants, as identified in appendix D of 40 CFR Part 122 or in section 11-54-4 only if they are identified as potential pollutants requiring monitoring in the notice of intent or as identified by the director. The permittee shall measure for the total recoverable portion of all metals.

{8} The pH shall be measured within fifteen minutes of obtaining the grab sample.

{9} The permittee shall measure for cyanide and the volatile fraction of the toxic organic compounds using a grab sample. The permittee shall measure for all other pollutants, as identified in Appendix D of 40 CFR Part 122 or in section 11-54-4 using a composite sample.

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CHAPTER 11-55 APPENDIX A

DEPARTMENT OF HEALTH
STANDARD GENERAL PERMIT CONDITIONS

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Note: All references to Title 40 of the Code of Federal Regulations (40 CFR) are to regulations that are in effect on July 1, 2012 unless otherwise specified. The Clean Water Act (Act) is also known as the Federal Water Pollution Control Act, as amended by the Clean Water Act, and appears at 33 U.S.C. §§1251 to 1387.

The permittee shall comply with the following standard conditions.

1. Basic water quality criteria (section 11-54-4)

   a. The permittee shall not cause or contribute to a violation of the basic water quality criteria specified in section 11-54-4(a) which states:

      "(a) All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including:

         (1) Materials that will settle to form objectionable sludge or bottom deposits;

         (2) Floating debris, oil, grease, scum, or other floating materials;

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(3) Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;

(4) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;

(5) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and

(6) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands."

b. The discharge shall not cause or contribute to a violation of the basic requirements of section 11-54-4(b).

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2. Onshore or offshore construction

The applicable general permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any state waters.

3. Sampling requirements and definitions

(a) Sampling Points

All samples shall be taken at the monitoring points specified in the applicable general permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the director. No discharge is authorized which does not totally pass through the final monitoring point.

(b) Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than plus or minus ten per cent from the true discharge rates throughout the range of expected discharge volumes. Once-

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through condenser cooling water flow which is monitored by pump logs or pump hour meters as specified in the applicable general permit based on the manufacturer's pump curves shall not be subject to this requirement. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references:

(1) "A Guide of Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD catalog No. C13.10:421.) (Also available from National Technical Information Service (NTIS). Order by NTIS No. COM-7510683.)

(2) "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Third Edition, Revised Reprint, 2001, 485 pp. (Available from the U.S. Government Bookstore. Order by Stock No. 024-003-00186-4 and ISBN 0-16-061763-4.) (Also available from National Technical Information Service (NTIS). Order by NTIS No. PB2002-100323.)

(3) "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy

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or microfiche from National Technical Information Service (NTIS), Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)

(4) "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-77, EPA No. 832B81102, September 1981, 149 pp. (Available from the National Technical Information Service (NTIS). Order by NTIS No. PB82-131178.)

(c) Calibration

The permittee shall periodically calibrate and perform maintenance on all monitoring and analytical equipment used to monitor the pollutants discharged under the applicable general permit, at intervals which will ensure the accuracy of measurements, but no less than the manufacturer's recommended intervals or six-month intervals (whichever comes first). Records of calibration shall be kept under section 14.

(d) pH Effluent Limitations Under Continuous Monitoring

If the permittee continuously measures the pH of the effluent under a requirement or option in the applicable general permit, excursions from the range provided in the general permit or as specified in chapter 11-54 are permitted, provided:

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(1) The pH limitation in the general permit is based upon a requirement imposed under 40 CFR Subchapter N, Effluent Guidelines and Standards;

(2) The total time during which the pH values are outside the required range of pH values shall not exceed four hundred forty-six minutes in any calendar month;

(3) No individual excursions from the range of pH values shall exceed sixty minutes; and

(4) For purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of the effluent exceeds the range set forth in the applicable general permit. The number of individual excursions exceeding sixty minutes and the total accumulated excursion time in minutes occurring in any calendar month shall be reported in accordance with the applicable general permit.

(e) Average

As used in the applicable general permit, unless otherwise stated, the term "average" means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For fecal coliform, enterococcus, or *clostridium perfringens*, the "average" shall be the geometric mean. For total coliform, the "average" shall be the median.

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(f) Mass/Day Measurements

(1) The "daily discharge" is the total mass (weight) of a pollutant discharged during a calendar day. The daily discharge shall be determined by using the following equations:

Daily Discharge(lbs/day) = 8.34 x Q x C;

Daily Discharge(kg/day) = 3.785 x Q x C; and

where "C" (in mg/l) is the measured daily concentration of the pollutant and "Q" (in million gallons per day) is the measured effluent flow rate for the same calendar day.

If only one sample is taken during any calendar day, the mass (weight) of pollutant discharged that is calculated from it is the "daily discharge."

(2) The "average monthly discharge" is defined as the total mass of all daily discharges sampled or measured or both during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharges sampled or measured or both during such month. It is, therefore, an arithmetic mean found by adding the weights of the pollutant found each day of the month and then dividing this sum by the number of days. This limitation is identified as "Monthly Average" in

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the applicable general permit and the average monthly discharge value is reported in the "Average" column under "Quantity" on the discharge monitoring report form.

(3) The "average weekly discharge" is defined as the total mass of all daily discharges sampled or measured or both during the calendar week in which daily discharges are sampled or measured or both. It is, therefore, an arithmetic mean found by adding the weights of pollutants found each day of the week and then dividing this sum by the number of days. This limitation is identified as "Weekly Average" in the applicable general permit and the average weekly discharge value is reported in the "Maximum" column under "Quantity" on the discharge monitoring report form.

(4) The "maximum daily discharge" is the highest daily discharge value recorded, sampled, or measured during the reporting period. This limitation is identified as "Daily Maximum" in the applicable general permit and the maximum daily discharge value is reported in the "Maximum" column under "Quantity" on the discharge monitoring report form.

(g) Concentration Measurements

(1) The "daily concentration" is the concentration of a pollutant discharged

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during a calendar day. It is equal to the concentration of a composite sample or in the case of grab samples, it is the arithmetic mean (weighted by flow value) of all samples collected during that calendar day. If only one sample is taken during any calendar day, it represents the "daily concentration."

(2) The "average monthly concentration," other than for fecal coliform, enterococcus, *clostridium perfringens,* or total coliform, is the sum of the daily concentrations sampled or measured or both divided by the number of daily discharges sampled or measured or both during such month (arithmetic mean of the daily concentration values). The average monthly count for fecal coliform, enterococcus, or *clostridium perfringens* is the geometric mean of the counts for samples collected during a calendar month. The average monthly count for total coliform is the median of the counts for samples collected (not less than five discrete samples) during a calendar month. This limitation is identified as "Monthly Average" or "Daily Average" under "Other Limits" in the applicable general permit and the average monthly concentration value is reported under the "Average" column under "Quality" on the discharge monitoring report form.

(3) The "average weekly concentration," other than for fecal coliform,

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enterococcus, or *clostridium perfringens*, or total coliform, is the sum of the concentrations of all daily discharges sampled or measured or both during a calendar week on which daily discharges are sampled and measured divided by the number of daily discharges sampled or measured or both during such week (arithmetic mean of the daily concentration values). The average weekly count for fecal coliform, enterococcus, or *clostridium perfringens* is the geometric mean of the counts for samples collected during a calendar week. The average weekly count for total coliform is the median of the counts for samples collected during a calendar week. This limitation is identified as "Weekly Average" under "Other Limits" in the applicable general permit and the average weekly concentration value is reported under the "Maximum" column under "Quality" on the discharge monitoring report form.

(4) The "maximum daily concentration" is the highest daily concentration value recorded, sampled, or measured during the reporting period. This limitation identified as "Daily Maximum" under "Other Limits" in the applicable general permit and the maximum daily concentration is reported under the "Maximum" column under "Quality" on the discharge monitoring report form.

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(h) The effluent flow expressed as cubic meters per day or million gallons per day (MGD), is the twenty-four-hour average flow averaged monthly. It is the arithmetic mean of the total daily flows recorded during the calendar month. Where monitoring requirements for flow are specified in the applicable general permit, the flow rate values are reported in the "Average" column under "Quantity" on the discharge monitoring report form.

(1) An "instantaneous flow measurement" is a measure of flow taken at the time of sampling, when both the sample and flow will be representative of the total discharge.

(2) Where monitoring requirements for pH, dissolved oxygen or fecal coliform, enterococcus, or *clostridium perfringens* are specified in the applicable general permit, the values are generally reported in the "Quality or Concentration" column on the discharge monitoring report form.

(i) The "arithmetic mean" of any set of values is the summation of the individual values divided by the number of individual values.

(j) The "geometric mean" of any set of values is the Nth root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of

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calculating the geometric mean, values of zero shall be considered to be one.

(k) "Weighted by flow value" means the summation of each concentration times its respective flow divided by the summation of the respective flows.

(l) The "median" of any set of ordered values is the value below and above which there is an equal number of values or which is the arithmetic mean of the two middle values if there is no one middle number.

(m) A calendar day is defined as the period from midnight of one day until midnight of the next day. However, for the purposes of the applicable general permit, any consecutive twenty-four-hour period that reasonably represents the calendar day may be used for sampling.

(n) "Removal efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using the average monthly concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$\text{Removal Efficiency (per cent)} = 100 \times \left(1 - \frac{C_{effluent}}{C_{influent}}\right)$$

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4. Duty to reapply

   If the permittee wishes to continue an activity regulated by the applicable general permit after the expiration of the notice of general permit coverage or in the case of automatic coverage, the expiration of the general permit itself, the permittee shall follow the procedures as specified in sections 11-55-34.08 and 11-55-34.09.

5. Applications (comply with 40 CFR §122.22)

6. Duty to comply (comply with 40 CFR §122.41(a))

7. Need to halt or reduce activity not a defense (comply with 40 CFR §122.41(c))

8. Duty to mitigate (based in part on 40 CFR §122.41(d))

   The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the applicable general permit or applicable law.

9. Proper operation and maintenance (comply with 40 CFR §122.41(e))

10. Permit actions (comply with 40 CFR §122.41(f))

11. Property rights (comply with 40 CFR §122.41(g))

12. Duty to provide information (comply with 40 CFR §122.41(h))

13. Inspection and entry (comply with 40 CFR §122.41(i))

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14. Monitoring and records (based in part on 40 CFR §122.41(j))

    (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    As used in this section, a representative sample means that the content of the sample shall:

    (1) Be identical to the content of the substance sampled at the time of the sampling;

    (2) Accurately represent the monitored item (for example, sampling to monitor final effluent quality shall accurately represent that quality, even though the sampling is done upstream of the discharge point); and

    (3) Accurately represent the monitored item for the monitored time period (for example, sampling to represent monthly average effluent flows shall be taken at times and on days that cover significant variations).
    Representative sampling may include weekends and storm events and may mean taking more samples than the minimum number specified elsewhere in the applicable general permit.
    The burden of proving that sampling or monitoring is representative is on the permittee.

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(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the applicable general permit, and records of all data used to complete the application for the applicable general permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the director at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) the analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of the analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part

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503, unless other test procedures have been specified in the applicable general permit.

(e) The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained by the applicable general permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, the person is subject to a fine of not more than $20,000 per day of violation, or by imprisonment for not more than four years, or both. (Updated under the Water Quality Act of 1987)

15. Signatory requirement (comply with 40 CFR §§122.22 and 122.41(k))

16. Reporting requirements (comply with 40 CFR §122.41(l))

17. Bypass (based in part on 40 CFR §122.41(m))

(a) Definitions

(1) "Bypass" means the intentional diversion of any waste streams from any portion of a treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and

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permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Prohibition of bypass. Every bypass is prohibited, and the director may take enforcement action against a permittee for bypass, except as provided in section 17(c).

(c) Exceptions to bypass prohibition

(1) Bypass not exceeding limitations. A bypass is allowable under this paragraph only if it does not cause any effluent limitation to be exceeded, and only if the bypass is necessary for essential maintenance to assure efficient operation.

(2) Bypass unavoidable to prevent specified harm. A bypass is allowable under this paragraph if:

(A) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up

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equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(C) The permittee submitted notices as required under section 17(d).

(3) Approved anticipated bypass. An anticipated bypass is allowable if the director approves it. The director shall approve the anticipated bypass only if the director receives information sufficient to show compliance with section 17(c)(2), including information on the potential adverse effects with and without the bypass, and information on the search for and the availability of alternatives, whether the permittee ultimately considers the alternatives feasible or not.

(d) Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, the permittee shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall report unanticipated bypasses.

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(A) Reports required by the reporting requirements of the applicable general permit shall be made in accordance with that section. If the permittee questions whether the reporting requirements of the applicable general permit applies, it shall follow the reporting requirements of the applicable general permit;

(B) For all other bypasses, reports shall be made orally within twenty-four hours from the time the permittee becomes aware of the bypass. Written reports may be required on a case-by-case basis.

(e) Burden of proof. In any enforcement proceeding the party seeking to establish that any exception to the bypass prohibition applies has the burden of proof. Proof that effluent limitations were met requires effluent monitoring during the bypass.

18. Upset (based in part on 40 CFR §122.41(n))

(a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment

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facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with the technology based permit effluent limitations if the requirements of section 18(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted within twenty-four hours a notice of any upset which exceeded any effluent limitation in the applicable general permit; and

(4) The permittee complied with any remedial measures required under 40 CFR §122.41(d).

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d. Burden of proof. In any enforcement proceeding, any person seeking to establish the occurrence of an upset has the burden of proof.

19. Existing manufacturing, commercial, mining, and silvicultural dischargers (comply with 40 CFR §122.42(a))

20. Publicly owned treatment works (comply with 40 CFR §122.42(b))

21. Reopener clause (comply with 40 CFR §122.44(c) and 40 CFR §125.123(d)(4))

22. Privately owned treatment works (The following conditions were established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act and 40 CFR §122.44(m))

This section applies only to privately owned treatment works as defined at 40 CFR §122.2.

(a) Materials authorized to be disposed of into the privately owned treatment works and collection system are typical domestic sewage. Unauthorized materials are hazardous waste (as defined at 40 CFR Part 261), motor oil, gasoline, paints, varnishes, solvents, pesticides, fertilizers, industrial wastes, or other materials not generally associated with toilet flushing or personal hygiene, laundry, or food preparation, unless specifically listed under "Authorized Non-domestic Sewer Dischargers" elsewhere in the applicable general permit. The Domestic

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Sewage Exclusion (40 CFR §261.4) does not apply to hazardous wastes mixed with domestic sewage in a sewer leading to a privately owned treatment works.

(b) It is the permittee's responsibility to inform users of the privately owned treatment works and collection system of the prohibition against unauthorized materials and to ensure compliance with the prohibition. The permittee must have the authority and capability to sample all discharges to the collection system, including any from septic haulers or other unsewered dischargers, and shall take and analyze such samples for conventional, toxic, or hazardous pollutants when instructed by the permitting authority or by an EPA or state inspector. The permittee must provide adequate security to prevent unauthorized discharges to the collection system.

(c) Should a user of the privately owned treatment works desire authorization to discharge non-domestic wastes, the permittee shall submit a request for permit modification and an application, under 40 CFR §122.44(m), describing the proposed discharge. The application shall, to the extent possible, be submitted using forms provided by the Administrator, unless another format is requested by the permitting authority. If the privately owned treatment works or collection system user is different from the permittee, and the permittee agrees to allow the non-domestic discharge, the user shall submit

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the application and the permittee shall submit the applicable general permit modification request. The application and request for modification shall be submitted at least six months before authorization to discharge non-domestic wastes to the privately owned treatment works or collection system is desired.

23. Transfers by modification (comply with 40 CFR §122.61(a))

24. Automatic transfers (comply with 40 CFR §122.61(b) and section 11-55-34.08(i)(2))

25. Minor modification of permits (comply with 40 CFR §122.63)

26. Termination of permits (comply with 40 CFR §122.64)

27. Removed substances (under Sections 301 and 405 of the Act and 40 CFR §125.3(g))

    Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner which prevents any pollutant from the materials from entering state waters.

28. Availability of reports (under Section 308 of the Act)

    Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of the applicable general permit shall be available for public inspection at the offices of the director. As required by the Act, permit applications,

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permits, and effluent data shall not be considered confidential.

29. Civil and criminal liability (under Section 309 of the Act)

    Except as provided in the applicable general permit conditions on "Bypass" (section 17) and "Upset" (section 18), nothing in the applicable general permit shall be construed to relieve the permittee from civil or criminal penalties or remedies for noncompliance.

30. Oil and hazardous substance liability (under Section 311 of the Act)

    Nothing in the applicable general permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

31. Federal facility construction (under Section 313(b) of the Act)

    Construction shall not be initiated for facilities for treatment of wastewater at any federal property or facility if alternative methods for wastewater treatment at the property or facility utilizing innovative treatment processes and techniques, including, but not limited to, methods utilizing recycle and reuse techniques and land treatment are not utilized, unless the life cycle cost of the alternative treatment works exceeds the life cycle cost of the most effective alternative by more than fifteen per cent.

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32. State law (under Section 510 of the Act)

    Nothing in the applicable general permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established under any applicable state law or regulation.

33. Severability (under Section 512 of the Act)

    The provisions of the applicable general permit are severable and if any provision of the applicable general permit, or the application of any provision of the applicable general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of the applicable general permit, shall not be affected thereby.

34. Notice of Intent Requirements (comply with section 11-55-34.08)

    The owner or its duly authorized representative shall include the following information in the notice of intent (NOI):

    (a) Legal name(s), street address, contact person's name and position title, and telephone and email address of the owner, operator, except for Appendix C and duly authorized representative, if applicable;

    Note: For a construction activity, the operator is usually the general contractor.

    (b) Ownership status as federal, state, private, public or other entity;

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(c) Name, street address, island, tax map key number(s), contact person's name and position title, and telephone and email address of the facility or project for which the notice of intent is submitted;

(d) Name(s) of the receiving state water(s) that the effluent enters or will enter, the latitude and longitude of each outfall or discharge point to the nearest receiving state water(s), and the classification of the receiving state water(s).

If the effluent initially enters a separate storm water drainage system, the owner or its duly authorized representative shall provide the following information:

(1) Name of the owner of the drainage system; and

(2) Copy of the permit, license, or equivalent written approval granted by the owner(s) of the drainage system(s) allowing the subject discharge to enter their drainage system(s).

(e) Type of general permit required for the proposed discharge;

(f) Quantity of discharge; the source of the discharge; and the period of discharge, i.e., continuous, seasonal, occasional, or emergency;

(g) Topographic map or maps of the area extending at least one mile beyond the property boundaries of the site which clearly show the following:

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(1) Legal boundaries of the site;

(2) Location and an identification number for each of the site's existing and proposed intake and discharge structures; and

(3) Receiving state water(s) or receiving storm water drainage system(s) identified and labeled. If the receiving state water is a wetland, submit a map showing the delineated wetland.

(h) Flow chart or line drawing showing the general route taken by the discharge from the intake or source to the discharge point, except for Appendices B, C, and K. The owner or its duly authorized representative shall show any treatment system(s) or erosion control(s) used or to be used for new discharges. The flow contributed by each source may be estimated if no data is available;

(i) List of existing or pending permits, licenses, or approvals and corresponding file numbers; and

(j) Certifying person's name and position title, company name, and telephone and fax numbers.

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