

Wastewater Permit Users Manual

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**Minnesota Pollution
Control Agency**

Definitions

General Definitions

"Act" means the federal Clean Water Act, as amended, 33 U.S. Code 1251 et seq.
"Agency" means the Minnesota Pollution Control Agency (MPCA).
"Bypass" means an intentional diversion of a waste stream from any portion of the treatment facility.
"CFR" means the Code of Federal Regulations.
"Commissioner" shall mean the commissioner of the Minnesota Pollution Control Agency or a designated representative.
"Discharge" means the conveyance, channeling, runoff, or drainage of waste water, including stormwater and snow melt from a site.
"Disposal System" means a system for disposing of sewage, industrial waste or other wastes, and includes sewer systems and treatment works.
"DMR" means the Discharge Monitoring Report form.
"Duty Officer" means the Minnesota Duty Officer, Department of Public Safety, Division of Emergency Management.
"Emergency Incident" means all emergency bypasses, spills, or any other environmental emergency as described in the MPCA "Emergency Notification Guidance for Wastewater Treatment Facilities."
"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas and concrete, asphalt, or gravel roads.
"Individual Control Mechanism" is a document, such as an agreement or permit that imposes limitations or requirements on an individual industrial user of the POTW.
"ISTS" means Individual Sewage Treatment System.
"MPCA" means the Minnesota Pollution Control Agency, or Minnesota Pollution Control Agency staff as delegated by the Minnesota Pollution Control Agency.
"New Source Discharge" shall mean a discharge not in existence on or before the date the receiving water body was designated an Outstanding Resource Value Waters or, for discharges to trout waters, on or before September 14, 1999.
"NPDES" means National Pollutant Discharge Elimination System which is the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under sections, 307, 318, 402 and 405 of the Clean Water Act, United States Code, title 33, sections 1317, 1328, 1342 and 1345.
"Operator" means a person who owns or leases property to conduct activities on that property.
"Outstanding Resource Value Waters" are waters within the Boundary Waters Canoe Area Wilderness, Voyageur's National Park, and Department of Natural Resources designated scientific and natural areas, wild, scenic, and recreational river segments, Lake Superior, those portions of the Mississippi River from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981, and other waters of the state with high water quality, wilderness characteristics, unique scientific or ecological significance, exceptional recreational value, or other special qualities which warrant stringent protection from pollution.
"Permittee" means the entity identified as Permittee on the cover letter authorizing coverage under a permit.
"Petroleum" means: a. gasoline and fuel oil as defined in Minn. Stat. section 296.01, subdivisions 3 and 4; b. crude oil or a fraction of crude oil that is liquid at a temperature of 60°F and pressure of 14.7 psi absolute; and c. constituents of gasoline and fuel oil under items a. or b. of this part.
"Pollutant" means any sewage, industrial waste, or other wastes, as defined in Minnesota Statutes chapter 115.01, discharged into a disposal system or to waters of the state.

"POTW or Publicly Owned Treatment Works" means a wastewater treatment works owned and operated by a municipality or sanitary district for public use, and the authority operating such a treatment works.
"Release" means any overflow, discharge, spill, or other release of wastewater or materials to the environment.
"SDS" means State Disposal System and generally describes a permit issued by the state of Minnesota that is non-surface water discharging or land application facilities.
"Significant Industrial User (SIU)" means any industrial user that: a. discharges 25,000 gallons per day or more of process wastewater; b. contributes a load of five (5) % or more of the capacity of the POTW; or c. is designated as significant by the Permittee or the MPCA on the basis that the SIU has a reasonable potential to adversely impact the POTW, or the quality of its effluent or residuals.
"Total Toxic Organics or TTO" means the summation of all values greater than 0.01 milligrams per liter (mg/l) for the toxic organics listed in Appendix 1 of this permit and found in the discharge from the Permittee's facility.
"Upset" means an exceptional incident in which the permit discharge limits are unintentionally and temporarily exceeded due to factors beyond the reasonable control of the Permittee.
"Waters of the State" means all streams, lakes, ponds, marshes, wetlands, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

Sampling Definitions

"24-hour Flow Composite Sample" is a composite sample taken over the operating hours of one day, including all clean-up.
"Acute Toxicity Test" is a static renewal test conducted on an exponentially diluted series of effluent. The purpose is to calculate the percent of effluent that causes 50 percent mortality/immobility of aquatic organisms at 48 or 96 hours. An LC50/EC50 (lethal/immobile) concentration less than or equal to 100 percent effluent constitutes a positive for toxicity.
"Calendar Month Average Intervention Limit" is an upper limit that, if exceeded, indicates the need for specified response actions by the Permittee. The "Calendar Month Average Intervention Limit" is calculated by adding all daily values measured during a calendar month and dividing by the number of daily values measured during that month.
"Calendar Month Average" is calculated by adding all daily values measured during a calendar month and dividing by the number of daily values measured during that month. The "Calendar Month Average" limit is an upper limit.
"Calendar Month Flow-Weighted Mean" is the arithmetic mean of all samples collected during one calendar month. To calculate: a. multiply each individual sample taken during the month by its respective individual flow; b. add these calculations; and c. divide by the sum of the flows. The "Calendar Month Flow-Weighted Mean" is an upper limit.
"Calendar Month Geometric Mean" is calculated by multiplying the value of all samples taken during the month by each other, where the number of samples = n, and calculating the nth root of the product. The "Calendar Month Geometric Mean" is an upper limit.
"Calendar Month Maximum" is the highest value of single samples taken throughout the month. The "Calendar Month Maximum" is an upper limit.
"Calendar Month Minimum" is the lowest value of single samples taken throughout the month. The "Calendar Month Minimum" is a lower limit.
"Calendar Month Total Intervention Limit" is an upper limit that, if exceeded, requires the need for specified response actions by the Permittee. The "Calendar Month Total Intervention Limit" is calculated by adding all of the daily values measured during a calendar month.
"Calendar Month Total" is calculated by adding all daily values measured during a calendar month. It is usually expressed in mass or volume units. The "Calendar Month Total" is an upper limit.
"Calendar Month Total" is calculated by adding all daily values measured during a calendar month. It is usually expressed in mass or volume units. The "Calendar Month Total" is an upper limit.
"Calendar Month/Quarter Maximum" is the highest single value in the reporting period. The "Calendar Month/Quarter Maximum" is usually an upper limit.

"Calendar Quarter Average" is calculated by adding all daily values measured during a calendar quarter and dividing by the number of daily values measured during that quarter. The "Calendar Quarter Average" is an upper limit.
"Calendar Quarter Maximum" is the highest value of single samples taken throughout the quarter. The "Calendar Quarter Maximum" is an upper limit.
"Calendar Quarter Minimum" is the lowest value of single samples taken throughout the quarter. The "Calendar Quarter Minimum" is a lower limit.
"Calendar Quarter Total" is calculated by adding all daily values measured during a calendar quarter. It is usually expressed in mass or volume units. The "Calendar Quarter Total" is an upper limit.
"Calendar Year Average Intervention" limit is calculated by adding all sample values measured during a calendar year and dividing by the number of samples measured during that year. The Calendar Year Average Intervention limit is an upper limit that, if exceeded, indicates a need for specified response action by the Permittee.
"Calendar Year Average" is calculated by adding all sample values measured during a calendar year and dividing by the number of samples measured during that year. The "Calendar Year Average" limit is an upper limit.
"Calendar Year To Date Total" is calculated by adding all amounts measured from the first month in the "effective period" to the end date of the reporting period. It is usually expressed in mass or volume units. The "Calendar Year To Date Total" is an upper limit for the entire year, but is reported monthly. When the limit is reached, further applications or discharges are prohibited. P definition is different. All annual mass P limits NOT associated w/12-mo-avg should be CYTD. For each month, multiply total effluent flow (MG) by monthly average effluent P (mg/L) and by 3.78 (conversion factor) to get P in kg/mo. Then add all monthly values from first month of effective period to end date of reporting period.
"Calendar Year Total" is calculated by adding all values measured during a calendar year. It is usually expressed in mass or volume units. The "Calendar Year Total" is an upper limit.
"Composite sample" means collecting two or more samples over a specified period of time in an effort to 4hr, 8hr etc....
"Daily Maximum" for Total Residual Chlorine (TRC) concentration limits means: a. The value of a single sample in a 24-hour period if the concentration of TRC in that sample is 0.038 mg/L or less, or below the Reportable Limit (RL). b. If the concentration of TRC in the first sample is greater than 0.038 mg/L or greater than the RL, reporting the average of two to twelve samples analyzed in a 24-hour period is allowed. The second sample must be taken two hours after the first sample and subsequent samples are to be taken at one-hour intervals thereafter, not to exceed a total of twelve samples in a 24-hour period. Values below the Reportable Limit for TRC are assumed to be zero for averaging purposes only. Whenever daily TRC values are averaged, the 0.038 mg/L limit must be met and the average value must be reported, not < the RL. c. The average value of multiple daily TRC effluent sample analyses must meet the 0.038 mg/L limit to be in compliance.
"Daily Maximum" for Total Residual Oxidant means the maximum measured quantity/quality during a calendar day. The "Daily Maximum" for Total Residual Oxidant is an upper limit.
"Daily Maximum" means the maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day. The "Daily Maximum" is an upper limit.
"Degrees F" shall mean a temperature reading in degrees Fahrenheit.
"Flow Composite" sample type is a combination of individual grab samples taken at periodic intervals over the defined time period. Either samples taken at equal time intervals shall be combined using a volume of each sample that is proportional to the flow that sample represents, or equal volume samples shall be combined that are taken at intervals of equal flow volumes.
"Four Day Average" is calculated by adding the values of samples taken in four (4) consecutive monitoring days and dividing the sum by four (4). The "Four Day Average" is an upper limit.
"Grab" sample type is an individual sample collected from one location at one point in time.
"Instantaneous Maximum Intervention Limit" is the maximum value that, if exceeded by a single sample, the Permittee must perform specified response actions.
"Instantaneous Maximum" is the highest value recorded when continuous monitoring is used or the highest value when only one sample is required. The "Instantaneous Maximum" limit is an upper limit. The highest value recorded is reported.
"Instantaneous Minimum" is the lowest value recorded when continuous monitoring is used or the lowest value when only one sample is required. The "Instantaneous Minimum" is a lower limit. The lowest value recorded is reported.
"Instantaneous" sample type means a measurement, such as for flow, pH or temperature, taken at the time of sampling for chemical characteristics.

"Maximum Calendar Week Average" is calculated by adding the value of all samples for a specific parameter taken within a single week, and dividing by the number of samples taken during the week. The highest of all of the weekly averages calculated in a calendar month shall be reported. The "Maximum Calendar Week Average" is an upper limit.
"Maximum" sample type means the greatest sample value recorded during the designated monitoring period.
"Minimum Calendar Month Average" is calculated by adding all daily values measured during a calendar month and dividing by the number of daily values measured during that month. The "Minimum Calendar Month Average" limit is a lower limit.
"Single Value" is a reported value from a single sample or measurement.
"Twelve-Month Average" is a rolling average of Phosphorus concentrations in wastewater discharges expressed in mg/L. The Twelve-Month Average shall be reported monthly, and is calculated by adding all of the monthly average values during the last twelve months, starting with the monthly average value for the month of the current reporting period, and dividing by twelve. The "Twelve-Month Average" limit is an upper limit.
"Twelve-Month-Total" is a rolling average. To calculate, for each month multiply the total volume of effluent flow (MG) by the monthly average concentration and by a 3.785 conversion factor to get kg/month. Then add all of the monthly values (kg/mo) during the last twelve months, starting with the monthly total for the month of the current reporting period. Facilities with a new phosphorus limit shall, for the first 11 months that the limit is effective, indicate '(NR)<12 months' in place of a value for the 12-month-average until the 12 th month of monitoring.

Land Application Definitions

"Agronomic Rate" means the sewage sludge application rate (dry weight basis) designed to: a. provide the amount of nitrogen which can be utilized by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and b. minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.
"Biosolids" - see "Sewage Sludge."
"Cropping Year" means a year beginning on September 1 of the year prior to the growing season and ending August 31 the year the crop is harvested. For example, the 1994 cropping year began September 1, 1993 and ended August 31, 1994.
"Cumulative Pollutant Loading Rate" means the maximum amount of an inorganic pollutant that can be applied to an area of land.
"Pathogens" means organisms that are capable of producing an infection or disease in a susceptible host
"Exceptional Quality Sewage Sludge" means sewage sludge which has been prepared to meet one of the Class A pathogen reduction requirements in part 7041.1300, subpart 2; the pollutant concentrations in part 7041.1100 subpart 4, item C; and one of the vector attraction/reduction requirements in part 7041.1400 subpart 2, items A to H.
"Sewage Sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes, and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. Sewage sludge that is acceptable and beneficial for recycling on land as a soil conditioner and nutrient source is also known as biosolids.
"Vector Attraction" means the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Stormwater Definitions

<p>"Best Management Practices (BMPs)" means practices to prevent or reduce pollution of the waters of the state, including schedules of activities, prohibitions of practices, and other management practices and also includes treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge, or waste disposal or drainage from material storage, as defined in Minnesota Rules pt. 7001.1020, subp.5. Examples of BMPs can be found in "Protecting Water Quality in Urban Areas," MPCA, 2000, and "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," US EPA, 1992.</p>
<p>"Construction Activity" means a disturbance to the land that results in a Change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into waters of the state. Examples can include clearing, grading, filling and excavating.</p>
<p>"Erosion Control" means methods employed to prevent erosion. Examples include: soil stabilization practices, horizontal slope grading, temporary or permanent cover, and construction phasing.</p>
<p>"Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover (a density of 70 percent cover for unpaved areas and areas not covered by permanent structures) has been established or equivalent permanent stabilization measures have been employed. Examples of vegetative cover practices can be found in Supplemental Specifications to the 1988 Standard Specifications for Construction (Minnesota Department of Transportation, 1991).</p>
<p>"Flood Event" means that the surface elevation of a waterbody has risen to a level that causes the inundation or submersion of areas normally above the Ordinary High Water Level.</p>
<p>"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas and concrete, asphalt, or gravel roads.</p>
<p>"Non-Structural BMPs" refers to practices that will reduce or eliminate pollutants to stormwater and do not require installation of permanent structural devices to treat runoff. Examples of non-structural BMPs include but are not limited to parking lot and street sweeping, employee training, changing material handling practices, installation of silt fence, and minimizing materials exposed to stormwater through inventory reduction, tarping, or moving materials indoors.</p>
<p>"Significant Materials" includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets, finished materials such as metallic products; raw materials used in food processing or production, hazardous substances designated under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge, that have potential to be released with stormwater discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g. the materials solubility, transportability, and toxicity characteristics) to determine the materials pollution potential.</p>
<p>"Storm Event" means a precipitation event (rainfall, snowfall, snowmelt, etc.) that results in surface runoff and is independent of the duration of the event and/or the volume of precipitation.</p>
<p>"Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.</p>
<p>"Structural BMPs" refers to the installation of devices that will reduce or eliminate pollutants to stormwater through installation of permanent structural devices to treat or control runoff. Examples of structural BMPs include but are not limited to installation of stormwater diversion berms or channels; sedimentation basins (retention or detention basins); oil/water separators; grit chambers; roofs, awnings, or buildings to cover significant material.</p>

Dredge Definitions

"Beach Nourishment" means the disposal of dredged material on the beaches or in the water waterward starting at or above the Ordinary High Water Level (OHWL) for the purpose of adding to, replenishing, or preventing the erosion of, beach material.
"Carriage, or Conveyance, Water" means the water portion of the slurry that is pumped from a dredging site to a disposal site.
"Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover (a density of 70 percent cover for unpaved areas and areas not covered by permanent structures) has been established or equivalent permanent stabilization measures have been employed. Examples of vegetative cover practices can be found in Supplemental Specifications to the 1988 Standard Specifications for Construction (Minnesota Department of Transportation, 1991).
"Flood Event" means that the surface elevation of a waterbody has risen to a level that causes the inundation or submersion of areas normally above the Ordinary High Water Level.
"Interstitial, or Pore, Water" means the water that squeezes out of the interstices, or pores, of the sediment as it dewateres.
"Ordinary High Water Level (OHWL)" means the boundary of waterbasins, watercourses, public waters, and public waters wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation Cs from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool. (Minn. Stat. chap. 103G.005 Subd. 14 and MN Rule 6120.2500 Subp. 11)
"Other Wastes" means garbage, municipal refuse, decayed wood, sawdust, shavings, bark, lime, sand, ashes, offal, oil, tar, chemicals, dredged spoil, solid waste, incinerator residue, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, cellar dirt or municipal or agricultural waste, and all other substances not included within the definitions of sewage and industrial waste set forth in Minnesota Statutes chapter 115.01 which may pollute or tend to pollute waters of the state.
"Stabilized" means staked sod, riprap, wood fiber blanket, or other material that prevents erosion from occurring has covered the exposed ground surface. Grass seed is not stabilization.
"Treated Supernatant" means any water, carriage/conveyance or interstitial/pore, that is, or has the potential to be, discharged.
"Unconfined Disposal" means the deposition of dredged material, in water, on the bed of a waterway. (Typically, this activity is not allowed. However, the MPCA would review, and grant or deny approval for, each proposal on its individual merits. For example, beach nourishment is a specific category of unconfined disposal that could also come under the category of beneficial re-use.)

Guide to Completing Your DISCHARGE MONITORING REPORTS (DMRs)

This manual has been developed for use in completing the Minnesota Pollution Control Agency (MPCA) Discharge Monitoring Report (DMR) forms, as required by the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) permit. The Supplemental Report Form (SRF) is also required for dischargers of domestic wastewater.

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SECTION II - HOW TO CALCULATE SAMPLE VALUES

- Quantity (or Loading)
- Concentration
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- Receiving Water Monitoring
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Section 1. UNDERSTANDING THE FORM

MONITORING LOCATIONS

The DMR forms are a reflection of the monitoring locations, limits, and monitoring requirements of the current NPDES/SDS permit. The Discharge Numbers are three character fields identifying specific discharge points and monitoring locations within the facility. These will correspond to specific sampling points detailed in the NPDES permit. Each discharge point and monitoring location will have a separate DMR form. In the upper left corner of the DMR form, under "Station Information," the monitoring location will be identified.

Example: **Station Information:**

SD-002

Surface Discharge, Effluent to Surface Water

MONITORING PERIODS

If the monitoring is only required during certain months of the year (e.g., ground water monitoring required in April, July, and October), the Permittee will only receive DMR forms for the months the monitoring is required. If samples at a monitoring location only need to be taken seasonally, as in the case of most fecal coliform sampling, the parameter will only show up on the forms for the months monitoring is required.

All forms must be submitted for each monitoring period regardless of whether there was activity at the station. Use the 'no discharge', 'no flow', or 'no material generated' box in the upper-right portion of the form for this purpose.

HEADING INFORMATION

The top portion of the form contains identification information such as the permittee name and address, permit number, station number and monitoring period. The station number may or may not relate to the number listed in the permit facility description, depending on when the permit was reissued. In order to match the correct form to the proper discharge location, look to the right of the station number box for a written description of the discharge location. The permittee should verify that all information contained on the pre-printed DMR agrees with the NPDES permit. If you believe that the pre-printed DMR is in error, contact the MPCA. Do not change, line-out or highlight any preprinted items that appear on the DMR.

On the right hand side of the form, below the permittee name/address information, there is a checkbox labeled either "No Discharge," "No Flow," or "No Material Generated." The label will vary with the type of station and the type of facility producing the discharge. If marking the checkbox accurately reflects the facility activity for the monitoring period, and no sampling data is required, the permittee should check this box and submit the form with the proper signatures. No data will be expected in the blank white boxes when the box is checked. Examples of these situations are:

1. Controlled pond discharges that only occur a few months out of the year. The Permittee would check the "No Discharge" box.
2. Industrial facilities such as canning operations that only operate seasonally. The Permittee would check the "No Discharge" box.
3. A monitoring well is dry, and a sample could not be taken. The Permittee would check the "No Discharge" box.
4. A facility that produces solids, followed by landspreading, which only operates three months out of the year. The Permittee would check the "No Material Generated" box.

SAMPLING INFORMATION

The large section of the form printed in gray and white is where the sampling information should be inserted. Listed below are definitions of the terms used in this section.

Parameter - The constituent that is being sampled, such as Total Suspended Solids (TSS). The parameter data is located in the box(es) along the left side column of the form designated as "Parameter". The name of the parameter is printed on the first and possibly second line(s). The five digit number printed on the next line in the same box is for internal MPCA use only.

Sample Value - The actual value or calculation to be reported.

Permit Requirement - Prints the type of value to be reported, such as calendar month average, and the associated limit, if applicable. If there is no numeric limit, this means monitor and report only the limit type printed in the gray box below. Permit limits are pre-printed in the shaded boxes below the corresponding blank white Sample Measurement boxes.

Report - Means no limit applies but monitoring is required to be reported.

Quantity - The information contained in this column is usually a mass calculation of kilograms/day and/or total calculations for flow and precipitation.

Quantity Units - Specifies the reporting units required in the quantity boxes.

Concentration - The information contained in this column is usually a concentration calculation such as milligrams/liter (mg/L) or micrograms/liter (ug/L). Some values to be reported in this column are not true concentration values, such as flow in million gallons per day (mgd).

Concentration Units - Specifies the reporting units required in the concentration boxes.

Frequency of Analysis - The frequency of analysis required by the permit is printed in the gray box. If the actual frequency varies from that indicated in the permit, insert the actual frequency in the white box above the required frequency. If the actual frequency of sampling matches that required by the permit, put a checkmark in the white box.

Sample Type - The sample type required by the permit (grab, 4-hour composite, etc.) is printed in the gray box. If the actual sample type varies from that indicated in the permit, report the actual sample type in the white box above the required sample type. If the actual sample type matches that required by the permit, put a checkmark in the white box.

NOTE: The Quantity and Concentration headers that appear at the top of the form are for guidance only. The gray boxes indicate the actual type of value that is required by the permit for the associated column. In some cases measurements such as monthly totals are required in these columns, and the gray boxes will provide the correct information about the type of sample measurement to be entered in the blank white box above.

WHEN WILL YOU RECEIVE YOUR DISCHARGE MONITORING REPORT FORMS?

Forms are generated for each facility once per year. In addition, if the permit is reissued or modified, or if a facility moves from interim to final limits, a new packet of forms will be sent out to reflect any changes that may have occurred.

When your facility switches to final limits, notify the MPCA immediately in writing. Continue to use the current packet of forms until a new packet is received; any additional samples that are required due to a new permit or new limits can be added in writing to blank spaces on the forms. If new forms are needed and are not received within three weeks of the date they are due, contact the MPCA at (800)657-3864.

The entire packet of forms should be reviewed each month (or quarter for those facilities that monitor quarterly) to ensure all forms due in a particular monitoring period are completed on time.

Failure to submit data on all the forms and/or failure to complete the form in full are violations of the permit.

Forms are due to the MPCA postmarked no later than the 21st day of the month following the end of the monitoring period. Sample measurements must be typed or printed in the open white boxes with blue or black ink. Signatures of both the Principal Executive Officer or Authorized Agent **and** the Chief Operator are required unless a letter is on file at the MPCA authorizing the Operator to sign as the Authorized Agent.

COMPLETING THE DMR

DMR forms will arrive sorted first by station information, and then by month or quarter within each station. Assemble all DMR forms for all stations with required monitoring in the current monitoring period. Enter the sample measurement values in the blank white boxes. **All empty white boxes must be filled.** The Permittee is not required to fill in boxes that have asterisks printed in them. **Only numeric values will be accepted.** Do not enter symbols or words such as "Trace", "None", "NA", "Not applicable", etc., on the DMR. All values below detection limits should be indicated with a less than sign (<) and the reporting limit. (See MPCA Nondetection Policy) Submit all forms even if there is no data to report; the checkbox labeled either "No Discharge," "No Flow," or "No Material Generated" should be used when applicable. If there is some other reason for missing data, note the information on the DMR and attach an explanation.

Make sure the numeric value entered in the blank white box coincides with the limit type (permit requirement) printed in the gray box directly below (calendar month average, calendar month total, etc.) The unit must be the same as the unit indicated in the gray box to the right of the measurement boxes. Do not enter the reporting units, commas or comments, etc. in the Sample Measurement Boxes. The frequency of analysis should be the same or more frequent than that indicated in the gray boxes. If it is the same, place a checkmark in the blank white box to indicate this. If the frequency is anything other than the frequency noted in the gray box, note the frequency in the blank white box. The sample type should be the same as that indicated in the gray box; if it is the same, a checkmark can be used to indicate this. If any other sample type is used, indicate the actual sample type in the blank white box.

When a permit contains both an average and a maximum limit for a parameter, and sampling is required only once in the monitoring period, the **value must be placed in both the average and maximum boxes.** This occurs commonly with pH, and with some other parameters as well.

SUPPLEMENTAL REPORT FORMS (SRF)

The Supplemental Report Forms are daily reporting forms which are required to be submitted along with the DMR forms for all domestic facilities and for some industrial facilities as required by the permit. A domestic facility is one which treats “normal domestic strength waste,” such as municipal wastewater treatment facilities, mobile home parks, state parks, and schools. The form has space for daily sampling results, pond observations, and other operational information. An additional page of the supplemental form is available for those facilities that need additional room for monitoring requirements that are not standard to the first page of the supplemental, and for the facilities that have additional receiving water monitoring requirements. These forms are available to any facility operator for use. The Permittee may submit a computerized facsimile of the supplemental report form, providing all the information from the MPCA form is included in the computerized version. Customized SRFs may also be provided to a permittee for specialized reporting and are required to be submitted with the DMR.

AMENDED DMRs

DMRs submitted to the MPCA with missing stations or data will be considered to be in violation of the permit. To resolve these reporting violations, the facility must submit the DMRs for the missing station(s), and/or amend the DMRs with missing data. A copy of the original submission, with corrections and/or additions should be submitted as soon as the information is available or the omission is discovered. Each addition or correction should be initialed by the person amending the DMR, and the word “AMENDED” should be written at the top of the form.

STABILIZATION PONDS

Stabilization pond facilities with a controlled discharge have the following unique reporting requirements.

1. **Record pond observations** such as pond depth, odors, dike condition, etc., on the back side of the supplemental form.
2. **Quarterly influent samples** will print on the DMR forms for influent waste in the months of March, June, September, and December. The samples *do not have to be taken in those months; they may be taken at any time during the quarter*. The influent quarterly samples for pH, TSS, CBOD and phosphorus may still be taken during any of the three months in the calendar quarter, and must be reported on the **Supplemental Report Form** for the month during which the sample was taken. Quarterly influent sample results must also be reported on the **DMR form** for the last month of each calendar quarter. Take the samples and report as follows:
 - Report quarterly samples taken in January, February, or March on the **March DMR**.
 - Report quarterly samples taken in April, May, or June on the **June DMR**.
 - Report quarterly samples taken in July, August, or September on the **September DMR**.
 - Report quarterly samples taken in October, November, or December on the **December DMR**.
1. **No discharge** should be reported by writing “No Discharge” on the front of the supplemental form, and by checking the “No discharge” box on the first page of the DMR form containing the effluent sampling requirements.
2. **Influent flow** is monitored daily and must be reported monthly. Remember that influent samples are reported on the Waste Stream, Influent Waste station DMR forms.
3. **For discharge events that occur in two consecutive months**, summarize only the discharge samples that occur in the month being reported. The required effluent monitoring should be reported in the month in which the samples were taken. If all of the required effluent samples were taken in one of the months, then the month in which there were no effluent samples taken but a discharge occurred, a note should be written on the SRF indicating that the required samples were reported in the previous month or will be reported on the following month’s DMR form.

An example of this would be if a discharge began the 27th day of the month and ended one or two days into the next month. Effluent samples could be taken at the required frequency of twice per week before the month ended. There would be no effluent samples to report in the new month, but there would still be flow reported from the discharge. A note should then be written on the supplemental stating that the required sampling was done during the previous month.

Section II - HOW TO CALCULATE SAMPLE VALUES

Discharge Monitoring Report (DMR) requirements are printed in the gray boxes labeled "Permit Requirement" and are located to the right of the **PARAMETER** box on the DMR form. If the reporting requirements are not printed in the gray box, refer to your permit for the definitions of minimum, average or maximum. These definitions are also provided in this manual.

All sample measurements must be reported in the same units required in the permit. For example, if the permit requires a sample to be reported in micrograms per liter, do not report in any other unit, such as milligrams per liter. Also, flows must be reported in million gallons (MG) for total flows and million gallons per day (mgd) for average and maximum values. For example, a total flow of 1,560,000 gallons must be reported as 1.56 million gallons (MG), and an average flow of 35,000 gallons per day (gpd) must be reported as .035 million gallons per day (mgd).

SIGNIFICANT FIGURES

Regardless of the measuring device there is always some uncertainty in a measurement. Significant figures include all the digits in a measurement that are known with certainty as well as the last digit which is an approximation.

For any parameter, Sample Measurements shall be reported in the same number of significant digits as the limits or action level for that parameter as set forth in the permit. If the permit does not clarify the number of significant digits, Sample Measurements shall be reported in two significant digits, except in the cases of effluent TSS or BOD where single digit effluents are achieved. In these cases, single digits can be reported.

Rules for significant Figures:

- 1.) All non-zero digits (1-9) are to be counted as significant.
- 2.) All zeros between non-zero digits are always significant. Both 4308 and 40.05 contain four significant digits.
- 3.) For numbers that do not contain decimal points, the trailing zeros may or may not be significant. The number 470,000 may have two to six significant digits.
- 4.) For numbers that do contain decimal points, the trailing zeros are significant. Both .360 and 4.00 have three significant digits.
- 5.) If a number is less than 1, zeros that follow the decimal point and are before a non-zero digit are not significant. Both 0.00253 and .0670 contain three significant digits.

ROUNDING

Rounding may be necessary in order to report in the same number of significant figures as the permit limit. All calculations (i.e. averaging and multiplying are performed prior to any rounding that is done.

Rules for Rounding

- 1.) If the digit being dropped is 1,2,3, or 4, leave the preceding number as it is.
20.3 rounded to the nearest whole number, gives you 20.
- 2.) If the digit being dropped is 5,6,7,8, or 9, increase the preceding digit by one.
26.5 and 26.9, rounded to the nearest whole number, gives you 27 in both cases.

INVALID SAMPLE (INVALID QUALITY CONTROL / LAB ACCIDENT):

There are a number of conditions when a sample or sample result is considered invalid. These include:

- If a sample is subject to a lab accident and a valid analysis cannot be performed,
- The quality control during sample analysis is not within analytical standards,
- Sample preparation results in insufficient dilutions and the result is reported with a greater than symbol >.
(Typically occurs with BOD and coliform analysis)

Invalid sample results are not to be used in performing calculations. When sufficient time remains in the monitoring period, an additional sample can be collected and reported. When not enough time remains in the monitoring period to collect an additional sample, leave the Sample Measurement box blank and attach an explanation of the situation to the DMR. Documentation from the lab and/or a written explanation from the operator must be retained with lab records for inspection.

QUANTITY (or LOADING)

To report quantity (loading) values, use the white boxes under “Quantity” on the DMR forms. For example, if reporting a “calendar month average” Total Suspended Solids (TSS) in kilograms per day (kg/day), report the value in the white “sample value” box above the gray box labeled “CalMoAvg.”

Most quantity or loading values are expressed in kg/day. In some limited cases, the permit requires reporting pounds rather than kilograms. Be careful to verify that you are calculating the correct units as required in your permit on the DMRs. To calculate loading, use the following formula:

$$\text{Loading (in kilograms per day)} = \text{calendar month average concentration (in mg/L)} \times \text{calendar month average flow (mgd)} \times 3.78 \text{ kilograms per gallon}$$

OR

$$\text{Loading (in pounds per day)} = \text{concentration (in mg/L)} \times \text{flow (in million gallons per day)} \times 8.34 \text{ pounds per gallon.}$$

When more than one limit type is required to be reported for a single parameter (e.g., calendar month average and maximum calendar week average), be careful to verify that the limit type (permit requirement) printed in the gray box matches the value reported.

CONCENTRATION

To report concentration values, use the white boxes under “Concentration” on the DMR form.

For example, if a calendar month average is required, that value must be reported in the white “sample value” box above the gray box labeled “CalMoAvg.” The sample measurement reported is the arithmetic mean of all the samples values measured during the monitoring period of one month in length.

MAXIMUM CALENDAR WEEK AVERAGE

When a maximum calendar week average is required, that value must be reported in the corresponding white “sample measurement” box. For permits indicating a sampling frequency of once per week or less, this value will be the high sample for the monitoring period. When a sampling frequency of twice per week or more is required, the sample measurement reported is the highest weekly average of the sample values measured during each week of the monitoring period or the highest single sample in a week if higher.

(e.g., week #1 is 10 mg/l, week #2 is 9 mg/l & 9 mg/l = avg 9 mg/l, week #3 is 6 mg/l & 9 mg/l = 7.5 mg/l, week #4 is 9 mg/l, therefore, since week one with a single value of 10 mg/l is higher than any of the weekly averages or any other week with a single value, this becomes the maximum weekly average value)

PERCENT(%) REMOVAL

To calculate the percent removal you need to use the following formula:

$$\text{Percent Removal (\%)} = \frac{\text{Influent} - \text{Effluent}}{\text{Influent}} \times 100\%$$

where influent = the calendar month average of the influent concentration;
and effluent = the calendar month average of the effluent concentration.

Influent and effluent concentrations are usually expressed in units of milligrams per liter (mg/L).

The average percent removal for the reporting period must be reported in the “concentration” column.

FECAL COLIFORM CALCULATIONS

Results of fecal coliform bacteria sampling should be filled in on the DMR in the row labeled “COLIFORM, FECAL MPN...” If your permit requires only monthly monitoring, write the single value in the blank white box in the proper row.

If you are required to sample more than once per month, report the calendar month *geometric mean* of the fecal coliform results. The calendar month geometric mean is calculated by multiplying the values of all the sample results obtained during the month (the number of samples = n), and taking the nth root of the product. This calculation can be performed with a scientific calculator that has an

$x\sqrt[y]{}$ function or a y^x key. To calculate a geometric mean take the nth root (x) of the product of multiplication of all the individual fecal coliform samples (y) taken during the month.

Below are sample problems for calculating the geometric mean.

Sample 1 - Calculating a geometric mean using a calculator with a y^x button.

Problem: Find the geometric mean of 450, 175, 0, <20

1. Convert all zeros to 1 and drop all < symbols: 450, 175, 1, 20
[TNTC (too numerous to count) values are not acceptable, contact your lab for maximum values]
2. Multiply all of the numbers: $450 \times 175 \times 1 \times 20 = 1,575,000$
3. Divide one by the number of values (n): There are four values; so 1 divided by 4 = 0.25
4. Enter answer from step #2 into calculator - 1,575,000
5. Push button marked y^x or x.
6. Enter answer from step #3 into calculator: 0.25
7. Push '=' key: Answer is 35.43.

Sample 2 - Calculating a geometric mean using a calculator with a $x\sqrt[y]{}$ symbol.

Four fecal coliform samples are take during the month (n = 4). Analytical results = 120, 300, 50, 160.

1. Multiply all sample results together:
 $120 \times 300 \times 50 \times 160 = 2.88^{08}$ (or 288,000,000)
2. Take the 4th root of 2.88^{08}

On the calculator, this is accomplished by:

- a. Calculator display shows 2.88^{08}
- b. Press the $x\sqrt[y]{}$ function key
- c. Press 4
- d. Press =
- e. The geometric mean of the four values will be displayed in the view screen (= 130.27)

$$4\sqrt{288,000,000} = 130.27$$

3. The monthly geometric mean of the four sample results = 130 colonies/100 ml.

Sample 3 - Calculating a geometric mean using a calculator with a $x\sqrt[y]{}$ symbol.

Ten fecal coliform samples are taken during the month (n = 10).
Analytical results = 100, 540, 20, 20, 20,000, 20, 60, 100, 40, 30.

1. Multiply all the sample results together:
 $100 \times 540 \times 20 \times 20 \times 20,000 \times 20 \times 60 \times 100 \times 40 \times 30 = 6.2208^{19}$
(or 62,208,000,000,000,000,000)

2. Take the 10th root of 6.2208^{19}

On the calculator this is accomplished by:

- a. Calculator display shows 6.2208^{19}
- b. Press the $x\sqrt{y}$ function key
- c. Press 10
- d. Press =
- e. The geometric mean of the ten values will be displayed in the view screen (= 95.36)

$$10\sqrt{62,208,000,000,000,000,000} = 95.36$$

3. The geometric mean of the 10 sample results = 95 colonies/100mL.

Total Nitrogen Calculation

The Total Nitrogen (TN) value that should be reported on your DMR is the summation of the Total Kjeldahl Nitrogen (TKN) and Total Nitrite plus Nitrate Nitrogen ($\text{NO}_2 + \text{NO}_3$) analytical values or $\text{TN} = \text{TKN} + (\text{NO}_2 + \text{NO}_3)$.

If the TN limit is required to be reported as a calendar month average the TKN and $\text{NO}_2 + \text{NO}_3$ values to be added together should be the calendar month averages.

FLOW

Flow reporting is required in most permits. The following are typical flow reporting requirements:

1. Monthly or quarterly total flow values in million gallons (MG), reported in the quantity columns of the DMR form.
2. Calendar month average or quarter average flow in million gallons per day (mgd), reported in the concentration columns of the DMR form.
3. Calendar month maximum or quarter maximum flow in million gallons per day (mgd), which is the highest daily value for the month, should be reported in the concentration columns of the DMR form.

The gray boxes beneath the empty white boxes will indicate where the total, average, and maximum values need to be reported. Generally, for domestic (municipal) facilities, influent flow measurement is required, so the flow is reported on the DMR form for the WS, Influent Waste station. Some permits require reporting of effluent flow either instead of or in addition to influent flow monitoring. Effluent flow is reported on the DMR form for the SD, Effluent to Surface Water station. Other station types such as Waste Stream or Land Application stations may also require flow measurements. Stream flows are usually required in units of cubic feet per second (cfs).

To properly record flow values, locate the correct form by checking the description information printed on the upper left portion of the form. When the correct form is located, locate the row labeled "Flow." The **total** flow value will usually be entered into the first empty white box on the quantity side of the DMR form. Verify this by reading the description in the gray box directly underneath it. **Always follow what is indicated by the gray box to decide which value should be entered in the white box above.**

If required, the average daily flow during the month should be reported as the arithmetic average of all the daily flow values recorded during the month. The highest daily flow value recorded during the month should be recorded in the monthly maximum box on the DMR form. Average effluent flows, during a controlled discharge, should be calculated by dividing total monthly flow by the actual number of days discharged.

Section III - RECEIVING WATER MONITORING AND GROUND WATER MONITORING

RECEIVING WATER MONITORING

Receiving water monitoring is required by some permits. It is also called stream monitoring, ambient monitoring, upstream and/or downstream monitoring, or river monitoring. It is either listed on the monitoring requirements page(s) of the permit, or it may be contained in paragraph form in the permit after the monitoring and limits pages, sometimes labeled as “Special Requirements.”

You are required to sample and record all elements required in the permit, including date, time of day, and location sample was taken on the supplemental DMR form. This information should also be summarized and transferred to the corresponding gray and white boxes on the DMR form usually labeled SW, Stream Monitoring.

Samples must be collected in accordance with the permit requirements, usually from mid-stream at mid-depth. Use the “No Flow” checkbox on the form when samples cannot be collected. Record the reason as a comment on the supplemental form (e.g., the stream is dry or frozen, conditions are unsafe for sampling, or sampling is not required due to conditions in the permit).

If sampling frequency is two times per month then samples must be taken at least two weeks apart. Temperature and pH measurements must be made immediately after samples are collected. Calibration and maintenance should be done periodically on any monitoring instruments used to ensure accuracy of measurements.

It is important that pH buffer solutions used to calibrate meters are fresh. pH buffer solutions should have expiration dates listed on bottle and should be used within three to six months after first opening. Buffers may not be used after the expiration date.

GROUND WATER MONITORING

If you are required to report the results of ground water sampling (such as ground water monitoring wells or piezometers), you should have separate forms for each monitoring well in your packet of DMR forms.

Select the corresponding DMR(s) for the appropriate month of sampling. Fill in the blank boxes under the “concentration” column with the sample values from the corresponding lab sheets that were received from the laboratory that did the analysis and any field measurement. Also, fill in the blank “frequency of analysis” and “sample type” boxes with the appropriate information.

Water level information should be reported in the “maximum” blank under the “quantity” column. This requirement will be listed on the form most frequently as GW Elevation Relative to Mean Sea Level. To obtain this elevation, subtract the depth of the water in the well from the top of the casing elevation (which should be referenced to mean sea level). If it is listed as GW Relative to Reference Point, please be sure to determine the “reference point”.

If you were unable to collect a sample from the monitoring well during the sampling period, fill in the “maximum” blanks with the words “no sample.” You should also explain why the sample was not collected in the “comments” section of the Supplemental Report Form (SRF).

TIPS FOR SUCCESSFUL DMR REPORTING

1. Enter data legibly in blue or black ink. Make decimals look like decimals. Do not use commas.
2. Report all data as required by the NPDES permit on the pre-printed DMR.
3. When the DMR requires maximum and minimum or calendar week average and max calendar week average and only one sample is collected during that monitoring period, the same value should be reported in both boxes.
4. Enter data in open boxes only (not shaded boxes or boxes containing asterisks).
5. Do not alter, line out or highlight items appearing on the pre-printed DMRs.
6. Do not enter units or other extraneous information (such as descriptive words or symbols as Trace, Not applicable, None, etc) in sample Measurement value boxes.
7. Make sure the reporting units are the same as those that appear in the permit. Special attention should be given when reporting: flow data; Temperature; and Concentrations. Use consistent units in calculations.
8. Report values that are less than the detection limit by entering "<MDL" where MDL is the numeric value of the Method Detection Limit. Do not enter "Not Detectable", "Non-detectable", "ND", "BDL", etc.
9. For no discharge during the entire monitoring period, check the No Discharge box. Submit all pages marked "No discharge" for all outfalls.
10. Date and sign all pages of the pre-printed DMR prior to submission.
11. For each instance of non-compliance with a permit requirement, provide a written report.

Biosolids Annual Report Requirements

Biosolids Annual Reports are required to be submitted annually by December 31 of the year. Annual report forms are NOT mailed to permittees but are found in the Biosolids Land Application Manual used in the Type IV training courses. If biosolids are not land applied at all or not applied in a given year, the annual report includes that information only. If biosolids are transferred to another facility for treatment or disposal, the report must include how much was transferred, what facility it was transferred to, and the name and phone number of the contact person at the receiving facility.

Note: A report of no landspreading or transfer does not require the use of a form, however, the top half of the first page of an annual report form may be used.

Operator Certification Requirements

A person may not operate a wastewater treatment facility or collection system unless the permittee retains at least one person that:

- ü Is certified in a class equal to or higher than the class of the facility; and
 - ü Has full and active responsibility for the daily on-site operation of the facility, or a portion of the facility (if additional operator(s) with appropriate certification are responsible for the remaining portions).
 - ü Permittees that apply biosolids or industrial by-products to the land, must retain a Type IV certified operator. The number of Type IV operators required is dependent on the number of operators at the facility as follows:
Three or fewer operators: One Type IV certified operator
Four to seven operators: Two Type IV certified operators
Eight or More operators: Three Type IV certified operators
 - ü *Industrial facilities that irrigate wastewater or other wastes are required to have a Type V certified operator*
-

Class A

- Ü Class B certified operator for at least two years ;**and**
 - Ü Eight years operations experience that includes at least two years management experience at a Class A or B facility; **or**
 - Ü Bachelor's degree in engineering, or a physical or biological science, and four years operations experience that includes at least two years management experience at a Class A or B facility
-

Class B

- Ü Class C certified operator for at least one year; **and**
 - Ü Six years operations experience at a Class A, B or C facility; **or**
 - Ü Bachelor's degree in engineering, or a physical or biological science, and two years operations experience at a Class A, B or C facility
-

Class C

- Ü Three years operations experience at a Class A, B, C or D facility; **or**
 - Ü Bachelor's degree in engineering, or a physical or biological science, and one year operations experience at a Class A, B, C or D facility
-

Class D

- Ü One year operations experience at a Class A, B, C or D facility; **or**
 - Ü Satisfactorily completed a postsecondary program of courses in water or wastewater technology at an accredited institution approved by MPCA
-

Land Application Licenses

Type IV

- **High school diploma or equivalent or equivalent experience.**
- **Complete at least nine contact hours of training offered through the agency or other training courses approved by the agency**
- **Have at least six months work experience as a Type IV operator**

Type V

- **Within the tree years before the date of application, complete at least nine contact hours of training courses offered through the agency or other training courses approved by the agency**
- **Have at least one spray season's work experience as a Type V operator**

Direct Responsibility - Have full and active responsibility for the operation of a portion of, or all of a facility

Management - To direct or supervise the operation of a facility or shift operators who make operational decisions or operate facilities without supervision from a supervisor.

Operation - The routine performance of duties at a facility to achieve results that meet existing state laws and rules pertaining to wastewater

Exclusions - A city manager, superintendent of public works, or other administrative official is not eligible to be certified as an operator unless that person's duties include the operation of the system of the facility. Includes maintenance and laboratory personnel, also.

Substitutions for experience

- Ø Collection system or water treatment system operations experience may be substituted for up to 50% of the experience requirement

- Ø 40 contact hours of correspondence or college courses relating to wastewater treatment may be substituted for one month of experience
- Ø Sacramento correspondence = 2.5 months experience for each volume.

Certificate Issuance

- Ø \$23 certification fee
- Ø After receiving passing letter must submit fee within 90 days
- Ø Certificate must be renewed after three years

Certificate Renewal

- Ø \$23 renewal fee
- Ø You should receive renewal notice 1 month prior to expiration date
 - if you don't receive one.....**Call Dianne Navratil @ (800) 657-3864**
- Ø 30 days after expiration date certificate must be reinstated....\$40 fee
- Ø Three years after expiration date.....lose license and must retest

Certificate Renewal

Every three years you need....

- Class A.....32 hours
- Class B.....24 hours
- Class C.....16 hours
- Class D.....8 hours
- Type IV.....9hours
- Type V.....6 hours

Acceptable Training

A, B, C, and D Wastewater

- Ø At least half of renewal hours must be direct **wastewater** related, the other half may be water treatment, safety, management, etc.
- Ø Type IV: Biosolids, industrial land application associated courses only
- Ø Type V
- Ø A list of acceptable training courses for renewal will be published/mailed out....training not on the list will not be automatically approved
- Ø To be considered for renewal hours, you must submit the program or agenda that includes a list of all topics covered with your renewal application

Miscellaneous

- Ø All fees are nonrefundable, the certification program is mandated by the legislature to be self supporting
- Ø If denied a reinstatement or reciprocity....the fee may be used for the exam application fee
- Ø Should a permittee decide to contract with a properly certified operator to meet the certification requirement, a copy of the contract must be submitted to the MPCA. The contract must include the following items:
 1. the certified operator's name and certificate number;
 2. the period covered by the contract and provisions for renewal;
 3. the duties and responsibilities of the certified operator;
 4. the duties and responsibilities of the permittee; and
 5. provisions for notifying the MPCA 30 days in advance of termination if the contract is terminated prior to the expiration date.

In addition, the contract must specify the number of visits that the certified operator will make and the length of each visit. It is recommended that each visit be a minimum of two hours in length and at the following frequency:

Facility Classification	Number of Visits
D	1/month December – February
	1/two weeks March – November
C	1/week
B	2/week
A	3/week

It is your responsibility to keep track of your training hours!



**Check the website for training schedule - <http://www.pca.state.mn.us/water/wwotrain.html>
Useful Math: Formulas/ Conversions/ Calculations**