

DEPARTMENT OF ENVIRONMENTAL QUALITY

SURFACE WATER QUALITY DIVISION

WATER RESOURCES PROTECTION

(by authority conferred on the department of environmental quality by sections 3103 and 3106 of 1994 PA 451, MCL 324.3103 and 324.3106)

Part 30. Water Quality Trading

R 323.3001 Definitions.

Rule 1. As used in this part:

- (a) "Act" means part 31, water resources protection, 1994 PA 451, MCL 324.3101 et seq.
- (b) "Administrator" means the administrator of the United States environmental protection agency.
- (c) "Applicable requirement" means any of the following:
 - (i) A standard of performance, management practice, effluent limitation, total maximum daily load, recordkeeping, monitoring, or reporting requirement established by the clean water act, 40 C.F.R. §25 (2000), 40 C.F.R. §117 (2000), 40 C.F.R. §121 (2000), 40 C.F.R. §122 (2000), 40 C.F.R. §123 (2000), 40 C.F.R. §124 (2000), 40 C.F.R. §125 (2000), 40 C.F.R. §129 (2000), 40 C.F.R. §130 (2000), 40 C.F.R. §131 (2000), 40 C.F.R. §132 (2000), 40 C.F.R. §133 (2000), 40 C.F.R. §135 (2000), 40 C.F.R. §136 (2000), 40 C.F.R. §140 (2000), 40 C.F.R. subchapter n (2000), 40 C.F.R. 471 (2000), 40 C.F.R. subchapter o (2000) or part 31, water resources protection, 1994 PA 451, MCL 324.3101 et seq. and rules promulgated under the act.
 - (ii) A national permit issued or order entered by the department.
 - (iii) A consent judgement entered in, or an order issued by, a court of competent jurisdiction.
 - (iv) A watershed management plan approved by the department pursuant to this part.
 - (v) A plan developed and funded under a grant administered by the department under section 319 of the clean water act.
- (d) "Attainment area" means a waterbody, a receiving water, or watershed where water quality standards are being met.
- (e) "Banked credits" means credits for total phosphorus and total nitrogen that are generated and that have been registered prior to the time period during which they are used or traded under this part.
- (f) "Baseline" means the pollutant-specific point source discharge or nonpoint source loading level below which reductions must be made to generate a credit.
- (g) "Best management practices" means structural, vegetative, or managerial practices that reduce or prevent the detachment, transport, and delivery of point and nonpoint source pollutants to the surface waters.
- (h) "Calendar year" means the time period from January 1 until December 31 inclusive for a given year.
- (i) "Cap" means the combined total allowable pollutant-specific point source discharges and nonpoint source loadings established by a total maximum daily load or specified in a watershed management plan which has been approved under this part.
- (j) "Clean water act" means the federal water pollution control act, commonly referred to as the clean water act, Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-1171, and Public Law 100-4, 33 U.S.C. §1251 et seq.
- (k) "Closed trading" means the exchange of credits among or between point and nonpoint sources in a watershed or receiving water for which a pollutant-specific cap and allocations have been established to achieve or maintain a water quality standard or to implement a watershed management plan approved under this part.
- (l) "Contemporaneous" means that the generation of credits occurs during the same day, week, month, season, calendar year, or other specified time period during which the credits are used to comply with an applicable requirement.
- (m) "Credit" means the pollutant-specific point source discharge reduction or nonpoint source load reduction, minus the water quality contribution, that is generated and entered into the water quality trading registry and which may be used or traded under this part.

(n) "Cross-pollutant trading" means the use of discharge or load reductions generated for one pollutant to be used to compensate for an increase in the discharge or loading of a different pollutant.

(o) "Department" means the Michigan Department of environmental quality.

(p) "Directionality" means an upstream discharge or load reduction to compensate for a downstream use of credits.

(q) "Director" means the director of the department.

(r) "Discharge reduction" means the difference between the baseline and the reduced discharge level that constitutes the surplus pollutant-specific reduction generated by a point source.

(s) "Discount factor" means a trading ratio different than 1:1 that is applied to different sources or different pollutants to provide equivalency or address uncertainty.

(t) "Intra-plant trading" means the generation and use of credits between multiple outfalls discharging into the same receiving water from a single facility that has been issued a national permit.

(u) "Lakewide management plan" means a plan developed and implemented to address critical pollutants pursuant to the Great lakes water quality agreement of 1978, as amended.

(v) "Load allocation" means the portion of a receiving water's loading capacity that is attributed to a nonpoint source or group of nonpoint sources under a total daily maximum load or a watershed management plan approved under this part.

(w) "Loading capacity" means the greatest amount of pollutant loading that a receiving water can receive without violating water quality standards.

(x) "Load reduction" means the difference between the baseline and the reduced loading level that constitutes the surplus pollutant-specific reduction generated by a nonpoint source.

(y) "National permit" means a national pollutant discharge elimination system permit, or equivalent document or requirements, issued by the department to a discharger pursuant to part 31, water resources protection, 1994 PA 451, MCL 324.3101 et seq. for discharges into surface waters, and "permitted" refers to this permit.

(z) "Nonpoint source" means a source of pollutant loading to the surface waters of the state other than a source defined as a point source.

(aa) "Nutrient trading" means the generation and use of total phosphorus or total nitrogen credits among and between point and nonpoint sources.

(bb) "Open trading" means the exchange of credits among or between point and nonpoint sources in a watershed or receiving water for which a total maximum daily load or a pollutant-specific cap and allocations have not been established by an applicable requirement.

(cc) "Person" means an individual, partnership, association, corporation, industry, municipality, state agency, or interstate body.

(dd) "Point source" means a discharge that is released to the surface waters of the state by a discernible, confined, and discrete conveyance, including any of the following from which wastewater is or may be discharged:

(i) A pipe.

(ii) A ditch.

(iii) A channel.

(iv) A tunnel.

(v) A conduit.

(vi) A well.

(vii) A discrete fissure.

(viii) A container.

(ix) A concentrated animal feeding operation.

(x) A vessel or other floating craft.

(ee) "Pollution prevention" means source reduction and environmentally sound on-site or off-site reuse or recycling. Pollution prevention includes equipment or technology modifications, substitution of raw materials, process or procedure modifications and improvements in housekeeping, maintenance, or inventory control. Pollution prevention does not include a practice applied after a waste or wastewater has been generated and does not promote, include, or require incineration. Waste treatment, control, management, or disposal are not considered pollution prevention.

(ff) "Quantifiable" means that the amount, rate, and characteristics of a discharge reduction or increase can be determined or measured through an accurate, reliable, and replicable method, procedure, or set of calculations established by an applicable requirement or approved by the department or the administrator.

- (gg) "Real" means a change that results in a point source discharge or nonpoint source load reduction.
- (hh) "Reasonable further progress" means incremental point source discharge or nonpoint source load reductions to achieve water quality standards or to implement a total maximum daily load established pursuant to section 303(d) of the clean water act.
- (ii) "Reduced discharge level" means the real, surplus, and quantifiable pollutant-specific discharge reduction achieved by a point source.
- (jj) "Reduced loading level" means the real, surplus, and quantifiable pollutant-specific load reduction that is achieved by a nonpoint source.
- (kk) "Remedial action plan" means a plan developed and implemented to address an area of concern pursuant to the Great lakes water quality agreement of 1978, as amended.
- (ll) "Responsible individual" means, for the purposes of signing and certifying as to the truth, accuracy, and completeness of a notice and certification required by this part, any of the following:
- (i) For a corporation, then a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or an authorized representative of that person if the representative is responsible for the overall operation of 1 or more manufacturing, production, or operating facilities.
- (ii) For a partnership or sole proprietorship, then a general partner or the proprietor.
- (iii) For a county or municipality or a state, federal, or other public agency, then either a principal executive officer or ranking elected official. For this purpose, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- (mm) "Source reduction" means any practice which reduces either of the following:
- (i) The amount of any hazardous substance, pollutant, or contaminant entering any wastestream or otherwise released into the environment before recycling, treatment, or disposal.
- (ii) Hazards to public health and environment associated with the release of a substance, pollutant, or contaminant.
- (nn) "Surface waters of the state" means all of the following, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control:
- (i) The Great Lakes and their connecting waters.
- (ii) All inland lakes.
- (iii) Rivers.
- (iv) Streams.
- (v) Impoundments.
- (vi) Open drains.
- (vii) Other surface bodies of water within the confines of the state.
- (oo) "Surplus" means a point source discharge or nonpoint source load reduction greater than that required by an applicable requirement.
- (pp) "Total maximum daily load" means the maximum amount of a specific pollutant that a waterbody can assimilate and still meet applicable water quality standards and which has been established pursuant to section 303(d) of the clean water act or R 323.1207.
- (qq) "Trade" means the purchase, sale, conveyance, or other transfer of a registered credit from one person or source to another person or source under this part.
- (rr) "Trading activities" means all requirements established and all activities regulated by this part.
- (ss) "True-up" means to correct or make whole an insufficient quantity of discharge reductions and credits that are generated and registered, used, or traded.
- (tt) "Unregulated source" means any point or nonpoint source for which performance standards, effluent limitations, work practices, and monitoring requirements have not been established by an applicable requirement.
- (uu) "Use" means the application of a credit to comply with a water quality-based effluent limitation or other applicable requirement or the retirement of a credit to provide a water quality benefit.
- (vv) "Water quality-based effluent limitation" means a discharge limit developed for a national permit that will ensure that the level of water quality to be achieved by the point source complies with all applicable water quality standards.
- (ww) "Water quality standards" means R323.1041 et seq. developed under part 31, water resources protection, 1994 PA 451, MCL 324.3101 to 324.3119.

(xx) "Wasteload allocation" means the pollutant-specific allocation for an individual point source, which ensures that the level of water quality to be achieved by the point source complies with all applicable water quality standards.

(yy) "Watershed" means an area of the land that drains to a common lake, pond, river, stream, or other surface waters of the state delineated and designated as a trading area under this part.

(zz) "Watershed management plan" means a comprehensive water resource plan approved by the department under this part and that includes a cap, point and nonpoint source allocations, responsible parties, management strategies to improve water quality or achieve and maintain water quality standards in a specific receiving water or watershed.

History: 2002 AACS.

R 323.3002 Purpose.

Rule 2. (1) The purpose of this part is to establish a voluntary statewide water quality trading program which has all of the following goals:

(a) Improving water quality and optimizing the costs of achieving and maintaining water quality standards.

(b) Creating economic incentives for voluntary nonpoint source load reductions, point source discharge reductions beyond those required by the clean water act, implementation of pollution prevention programs, wetland restoration and creation, and the development of emerging pollution control technologies.

(c) Facilitating the implementation of total maximum daily loads, urban storm water control programs, and nonpoint source management practices required under the clean water act. Nothing in this part shall be construed to obviate the requirement to develop a total maximum daily load for waters that do not meet water quality standards as required by section 303(d) of the clean water act or to delay implementation of a total maximum daily load that has been approved by the department and the administrator.

(d) Providing incentives for the development of new and more accurate and reliable quantification protocols and procedures.

(e) Providing greater flexibility through community-based, nonregulatory, and performance-driven watershed management planning.

History: 2002 AACS.

R 323.3003 Applicability.

Rule 3. (1) This part shall apply to all persons and sources that participate in water quality trading.

(2) This part shall apply to the generation, registration, use, banking, and trading of credits and all trading activities that occur under this part.

History: 2002 AACS.

R 323.3004 General requirements.

Rule 4. (1) The generation, use, and trading of credits among and between point and nonpoint sources shall occur within the same receiving water or watershed designated under this part.

(2) Credits shall be generated before or contemporaneously with the time they are used or traded.

(3) The generation, use, and trading of credits and all trading activities approved under this part shall be consistent with the following, if applicable:

(a) A total maximum daily load established pursuant to section 303(d) of the clean water act.

(b) A remedial action plan.

(c) A lakewide management plan.

(d) A watershed management plan approved by the department under this part.

(4) Credits used to comply with a daily, weekly, monthly, or seasonal effluent limitation established to achieve or maintain water quality standards in a stream or a lake with a retention time of less than 1 year shall be generated during the same time period for which the effluent limitation applies.

History: 2002 AACS.

R 323.3005 Prohibitions and restrictions.

Rule 5. (1) The use of credits that would cause a violation of water quality standards is prohibited.

(2) Credits generated in one watershed shall not be used or traded in a different watershed. This rule shall not prohibit credits generated in a nonattainment area being used in an attainment area within a watershed designated in a watershed management plan approved by the department under this part.

(3) Trading activities for any bioaccumulative chemical of concern listed below are prohibited:

- (a) Chlordane.
- (b) 4,4'-ddd.
- (c) 4,4'-dde.
- (d) 4,4'-ddt.
- (e) Dieldrin.
- (f) Hexachlorobenzene.
- (g) Hexachlorobutadiene.
- (h) Hexachlorocyclohexanes.
- (i) Alpha-hexachlorocyclohexane.
- (j) Beta-hexachlorocyclohexane.
- (k) Delta-hexachlorocyclohexane.
- (l) Lindane.
- (m) Mercury.
- (n) Mirex.
- (o) Octachlorostyrene.
- (p) Polychlorinated biphenyls (pcbs).
- (q) Pentachlorobenzene.
- (r) Photomirex.
- (s) 2,3,7,8-tcdd.
- (t) 1,2,3,4-tetrachlorobenzene.
- (u) 1,2,4,5-tetrachlorobenzene.
- (v) Toxaphene.

(4) Except as provided under 40 C.F.R. §420.03 (2000), and other types of trades approved by the department and the administrator, credits shall not be used to comply with a technology-based effluent limitation.

(5) Nothing in this part shall be construed to obviate the need to obtain a national permit or a permit modification required by an applicable requirement. A point source is prohibited from participating in trading under this part unless a national permit has first been obtained as required under the clean water act.

(6) Nothing in this part shall be construed to prohibit a municipality or regional sewerage authority from developing and implementing its own pretreatment trading program for the purposes of complying with local limitations and to comply with federal technology-based categorical standards to the extent allowed under federal regulations.

(7) The use of banked credits shall occur in a manner consistent with this part, shall be approved by the department before any such activity occurs, and shall be restricted to the following:

(a) Complying with a 1 milligram per liter water quality-based effluent limitation established under R 323.1060(1).

(b) Complying with a water quality based effluent limitation for a source that discharges into a lake or other water body with a retention time of more than 1 year.

(8) Banked credits shall not be used to comply with a daily, weekly, monthly, or seasonal water quality-based effluent limitation by a source that discharges into a stream or a lake with a retention time of less than 1 year.

History: 2002 AACCS.

R 323.3006 Eligibility requirements for generation of point source discharge and nonpoint source load reductions and credits.

Rule 6. (1) For discharge or load reductions to be generated and registered as credits, all of the following conditions shall be met:

(a) The discharge or load reductions shall be generated after the effective date of this part.
(b) The discharge or load reductions shall be real, surplus, and quantifiable.
(c) The control devices or management practices that have been installed or implemented have been fully and properly maintained from the time they were established and remain so for the time they are registered to generate credits.

(2) Discharge or load reductions to generate credits may be created by any of the following:

(a) Installation or modification of water pollution control equipment.
(b) Operational changes and the modification of a process or process equipment.
(c) Reformulating raw materials or products.
(d) Implementation of pollution prevention programs.
(e) Implementation of energy conservation programs.
(f) Implementation of early discharge or load reductions before a compliance date specified by an applicable requirement defined in R 323.3001(c)(i); but not for early compliance with a schedule resulting from violations of applicable requirements defined in R 323.3001(c)(i).
(g) Implementation of nonpoint source management practices.
(h) Implementation of storm water controls or management practices.
(i) Restoring or creating and maintaining a wetland.
(j) The installation of equipment or implementation management practices at orphan sites of environmental contamination to control discharges to the waters of the state by a person or party that is not responsible for the contamination or liable for response activities under state and federal regulations.
(k) The installation, operation, and maintenance of drainage projects designed to control storm water as part of a county drain improvement project.

(l) Implementation of streambank erosion controls.

(m) Other pollution controls or management practices approved by the department.

(3) Discharge or load reductions required to achieve compliance with a technology-based effluent limitation established by an applicable requirement shall not be eligible to generate credits under this part.

(4) A source that generates discharge or load reductions and credits to be used or traded shall discharge directly or otherwise be connected to the receiving water or watershed in which the credits are used or traded.

(5) Discharge or load reductions made by a source in violation of a monitoring, recordkeeping, or reporting requirement applicable to the specific pollutant for which the discharge or load reduction has been made shall not be eligible to generate credits under this part.

(6) The implementation of management practices or the installation of control structures required to eliminate the discharge of manure or runoff containing manure or other animal wastes from agricultural operations shall not be eligible to generate credits after 5 years from the effective date of this part.

(7) Generally accepted agricultural management practices required to abate a nuisance complaint referred to the department under the Michigan right to farm act, 1981 PA 93, MCL 286.471 et seq., shall not be eligible to generate a discharge reduction credit under this part.

(8) Nonpoint source load reductions which result from implementation of management practices or the installation of control structures under programs administered by the United States department of agriculture, natural resource conservation service, shall be eligible to generate credits in direct proportion to the percent local match and any contribution greater than the local match required under these federal programs.

(9) Nonpoint source load reductions which result from implementation of projects or programs funded by 1998 PA 288, MCL 324.19601 et seq. and §319 of the clean water act shall not be eligible to generate credits under this part.

(10) Nothing in this rule shall be construed to prohibit or restrict a municipality from generating credits by installing controls or implementing management practices under publicly funded projects or programs implemented within the same jurisdiction.

(11) Sources that install control devices or implement management practices to control streambank erosion or storm water or agricultural runoff as part of a pilot project conducted with approval by, or involving the active participation of, the department shall be eligible to generate credits that may be used for trading under this part if all of the following conditions are met:

(a) The control devices have been installed or the management practices implemented within the 18-month period immediately preceding the effective date of this part.

(b) The control devices or management practices have been installed or implemented in a manner that is consistent with all applicable provisions of this part.

(c) All applicable requirements established under this part shall be fully complied with, including the requirements to establish baselines, load reductions and reduced loading levels and the submittal of notices and annual reports.

(d) The notice and certification required under R 323.3019(1) shall be submitted to the department within 6 months of the effective date of this part.

History: 2002 AACS.

R 323.3007 Nutrient trading; contemporaneous upstream reduction requirements; credit use.

Rule 7. (1) Open nutrient trading may occur in an attainment area or other area where a total maximum daily load has not been established and a watershed management plan has not been approved for purposes of trading under this part if either of the following conditions is met:

(a) There is a contemporaneous upstream generation of credits to compensate for a use of credits to comply with a water quality-based effluent limitation or other applicable requirement.

(b) The source using credits to comply with a water quality-based effluent limitation or other applicable requirement discharges to the same receiving water or watershed either upstream or downstream of the source which generates the credits and both of the following conditions are met:

(i) The generation of credits is contemporaneous with the use of credits.

(ii) The sources which generate and use credits are upstream of the site in the receiving water or watershed for which the applicable water quality-based effluent limitation has been established to meet water quality standards.

(2) The use of credits pursuant to subdivisions (a) and (b) of this subrule shall not be construed to constitute a lowering of water quality pursuant to R 323.1098(8)(k).

(3) The use of credits by a point source to increase the discharge of total phosphorus or total nitrogen under the provisions of R 323.3020 shall be limited to a 20% increase above the discharge level authorized in a national permit, unless a greater use of credits is specifically authorized by special conditions in the permit or by a formal permit modification approved by the department in accordance with federal and state permit regulations and the provisions of this part. The 20% increase of total phosphorus and total nitrogen above the discharge level shall be authorized in the point source national permit before the point source can use credits.

History: 2002 AACS.

R 323.3008 Nutrient trading in areas for which a total maximum daily load or a watershed management plan has been established.

Rule 8. (1) Closed nutrient trading may occur within a receiving water or in a watershed where water quality standards are not being met for the pollutant that is being traded if all of the following conditions are met:

(a) A total maximum daily load for the nutrient to be traded has been approved by the department and the administrator pursuant to section 303(d) of the clean water act.

(b) The point sources and nonpoint sources that generate, use, or trade credits shall be located in the same nonattainment area and included in the inventory upon which the total maximum daily load is based.

(c) The nutrient cap, point source waste load allocations and nonpoint source load allocations shall constitute the respective baselines for the generation, use, and trading of credits.

(d) The generation, registration, use, and trading of credits shall be consistent with the total maximum daily load and this part.

(2) Closed nutrient trading may occur within any receiving water or in a watershed for which a watershed management plan has been prepared for the purpose of trading if all of the following conditions are met:

(a) The watershed management plan has been approved by the department pursuant to the provisions of R 323.3023.

(b) The point sources and nonpoint sources that generate, use, and trade credits shall be located in the same receiving water or watershed and included in the inventory upon which the watershed management plan is based.

(c) The nutrient cap and point source wasteload allocations, and nonpoint source load allocations specified in the watershed management plan to achieve or maintain water quality standards shall constitute the respective baselines for the generation and use of credits.

(d) The generation, registration, use, and trading of credits shall be consistent with the approved watershed management plan and this part.

History: 2002 AACS.

R 323.3009 Other types of trading; trading of pollutants other than nutrients; intra-plant trading; cross-pollutant trading; trading under a remedial action or lakewide management plan.

Rule 9. (1) Except for the provisions in R 323.1005(3), nothing in this part shall be construed to prohibit the department from approving other types of water quality-based trades that are not specifically provided for in this part. Trades that are not specifically provided for in this part, including trading of pollutants other than total phosphorus and total nitrogen, intra-plant trading, and cross pollutant trading, must be authorized in national permits.

(2) Trading of pollutants other than total phosphorus and total nitrogen, intra-plant trading, cross pollutant trading, trading under a remedial action or lakewide management plan, and any other types of trades shall occur in a manner consistent with all applicable requirements of this part and shall be approved by the department before any such activity occurs.

(3) A person or source seeking to engage in other types of trades under subrule (2) of this rule shall do either of the following:

(a) Demonstrate that social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).

(b) Show that the use of credits does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9).

(4) Other types of trades that are embodied in or affect a national permit shall be subject to final approval by the United States environmental protection agency.

History: 2002 AACS.

R 323.3010 Baselines; general requirements.

Rule 10. (1) Baselines shall be established by using the most accurate, representative, and reliable process and operational information, flow and monitoring data, discharge and loading data, and records that are available. The baseline and discharge and load reductions shall be calculated using methods and procedures specified by an applicable requirement where they exist.

(2) Unless specified otherwise by an applicable requirement, the baseline for all sources, except storm water sources regulated under a national permit for which a numerical effluent limitation has not been established, shall be established by using the information and data representative of the 3-year period before the date that a change is made to generate a discharge or load reduction. A different time period that is more representative of historical operations and provides more accurate and reliable actual discharge or existing loading data may be used if approved by the department.

(3) The baseline for storm water sources regulated under a national permit for which a numerical effluent limitation has not been established shall be the pollutant-specific loading achieved through implementation of management practices specified in or approved under a national permit at the time a change is made to generate a discharge or load reduction.

(4) Unless specified otherwise by an applicable requirement, baselines for agricultural, industrial, urban, and residential storm water runoff shall be calculated by using the meteorological information and precipitation data for a 10-year period or the period-of-record, whichever is longer. This information and data shall be obtained from the nearest national weather service station unless a different location or source is approved by the department.

History: 2002 AACS.

R 323.3011 Baseline for point sources other than storm water; reduced discharge level; generation of discharge reductions and credits.

Rule 11. (1) The point source baseline shall be the actual or allowed discharge level that complies with the most protective of any of the following:

(a) A water quality-based effluent limitation established by an applicable requirement.

(b) A cap and wasteload allocation specified under a total maximum daily load.

(c) A cap and wasteload allocation specified in a watershed management plan approved by the department under this part.

(d) A cap and wasteload allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) Margins of safety achieved in practice shall be maintained by using the actual discharge flows and concentrations to calculate the baseline under subrule (3) of this rule.

(3) The point source baseline shall be expressed in the pounds of a specific pollutant discharged per day and calculated by using the following equation:

$$B = f \times c \times k$$

where:

B = the baseline

f = flow expressed in million gallons per day (mgd)

c = pollutant concentration expressed in milligrams per liter (mg/l)

k = a unit conversion constant of 8.346 liter pounds per million gallons milligrams.

(4) The reduced discharge level (RDL) which will result after changes or methods and procedures have been implemented to generate discharge reductions shall be calculated by using the following equation:

$$RDL = f_r \times c_r \times k$$

RDL = reduced discharge level

F_r = flow after changes have been made to generate discharge reductions, expressed in million gallons per day (mgd)

C_r = pollutant concentration after changes have been made to generate discharge reductions, expressed in milligrams per liter (mg/l)

k = a unit conversion constant of 8.346 liter pounds per million gallons milligrams.

(5) The quantity of discharge reductions generated shall be determined by subtracting the reduced discharge level calculated under subrule (4) of this rule from the baseline calculated under subrule (3) of this rule.

(6) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of discharge reductions calculated under subrule (5) of this rule minus the water quality contribution required under R 323.3016(1).

(7) The same methods and procedures shall be used to calculate the baseline, reduced discharge level, discharge reductions generated, and credits. The baseline, reduced discharge level, and quantity of discharge reductions generated shall be expressed in the same units.

History: 2002 AACCS.

R 323.3012 Baseline for sources of storm water regulated under a national permit; reduced discharge or loading level; generation of discharge or load reductions and credits.

Rule 12. (1) The baseline shall be the numerical effluent limitation or the pollutant-specific loading achieved after implementation of management practices specified in or approved under a national permit.

(2) The baseline, reduced discharge level, generation of discharge reductions, and credits for storm water sources with numerical effluent limitations specified by a national permit shall be calculated by using R 323.3011(2), (3), (4), (5), (6), and (7).

(3) The baseline, reduced loading level, generation of load reductions, and credits for storm water sources controlled through the implementation of management practices specified by national permit shall be calculated by using R 323.3013(2), (3), (4), (5), and (6).

(4) Monitoring data and actual measurements of load reductions achieved in practice from changes in land use, pollution control facilities, and implementation of management practices shall be used where required by a permit; and, otherwise, may be used where such information is available.

History: 2002 AACCS.

R 323.3013 Baseline for unpermitted nonpoint sources of storm water runoff other than agriculture, reduced loading level, and generation of load reductions and credits.

Rule 13. (1) The storm water runoff baseline shall be either of the following:

(a) For nonpoint sources that are not subject to an applicable requirement, the pollutant-specific loading associated with existing land uses and management practices, if any.

(b) For nonpoint sources that are subject to an applicable requirement, the most protective of any of the following:

(i) A pollutant-specific cap and loading allocation specified in a total maximum daily load.

(ii) A pollutant-specific cap and loading allocation or the management practices specified in watershed management plan approved by the department under this part.

(iii) A pollutant-specific cap and loading allocation or the management practices determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) If not otherwise specified by an applicable requirement, the storm water runoff baseline shall be calculated by using the equations in this subrule.

(a) The pollutant-specific loading factor (ml) shall be computed for each land use (l) within a watershed or drainage area by the following equation 1:

$$M_L = EMC_L \times R_L \times K$$

where:

M_L = pollutant-specific loading factor for land use L (lbs/ac/yr).

EMC_L = event mean concentration of storm water runoff from a specific land use L (mg/l) as specified in table 1 or as approved by the department on a case-by-case basis.

R_L = total average annual storm water runoff from land use L computed from equation 2 (in/yr).

K = 0.2266, a unit conversion constant, for all parameters.

Table 1. Event mean concentrations.

Land use category (non-site specific)	Percent Impervious	TSS (mg/l)	BOD (mg/l)	TP (mg/l)	DP (mg/l)	TKN (mg/l)	NO ₂₊₃ (mg/l)	Pb (ug/l)	Cu (ug/l)	Zn (ug/l)	Cd (ug/l)
Forest/rural open	N/a	51	3	0.11	0.027	0.94	0.80	0.0	0.0	0.0	0.0
Urban open	0.5%	51	3	0.11	0.03	0.94	0.80	14.2	0.0	40.2	0.8
Agricultural	N/a	145	3	0.37	0.09	1.92	4.06	0.0	0.0	0.0	0.0
Low density residential	10.0%	70	38	0.52	0.27	3.32	1.83	56.9	26.2	161.1	3.9
Medium density residential	30.0%	70	38	0.52	0.27	3.32	1.83	56.9	26.2	161.1	3.9
High density residential	N/a	97	14	0.24	0.08	1.17	2.12	40.5	33.0	217.9	3.2
Commercial	90.0%	77	21	0.33	0.17	1.74	1.23	49.3	37.0	156.3	2.7
Industrial	80.0%	149	24	0.32	0.11	2.08	1.89	72.4	58.0	670.8	4.8
Highways	90.0%	141	24	0.43	0.22	1.82	0.83	49.3	37.0	156.3	2.7
Water/wetlands	100.0%	6	4	0.08	0.04	0.79	0.59	11.1	6.5	30.3	0.6

(b) The average annual storm water runoff volume for the pervious and impervious areas in each land use category shall be calculated by multiplying the average annual rainfall volume by a runoff coefficient. The total average annual surface runoff from a specific land use, L, shall be calculated by weighting the pervious and impervious area runoff factors for each land use category by the following equation 2:

$$R_L = [C_P + (C_I - C_P)IMP_L] * I$$

where:

R_L = total average annual surface runoff from land use L (in/yr).

IMP_L = fractional imperviousness of land use L, as specified in Table 1 or as approved by the department on a case-by-case basis.

I = long-term average annual precipitation (in/yr).

C_P = pervious area runoff coefficient of 0.2 or a different runoff coefficient approved by the department.

C_I = impervious area runoff coefficient of 0.95 or a different runoff coefficient approved by the department and, where the total runoff in a watershed shall be the area-weighted sum of R_L for all land uses.

(c) The average total annual load from a watershed or drainage area shall be computed by the following equation 3:

$$\text{Load}_P = \sum M_L * A_L$$

where:

Load_P = total average annual load, expressed in pounds.

M_L = loading factor for land use L (lbs/ac/yr) from equation 1.

A_L = area (acres) for land use L.

(d) The percent storm water load reduction from existing management practices in each subbasin of the watershed or drainage area shall be calculated by the following equation 4:

$$P_{1,SB} = (AC_{1,SB} * Rem_1) \dots \dots (AC_{n,SB} * Rem_n)$$

where:

P_{1,SB} = percent of annual storm water pollutant load captured in subbasin

SB by application of the n management practices on land use L.

AC₁ . . . AC_{n,SB} = fractional area coverage of management practices 1 through n on subbasin SB.

Rem₁ . . . Rem_n = removal efficiency of management practices 1 through n derived from table 2.

Table 2. Annual pollutant removal rates for retention and detention basin storm water management practices.

Pollutant	Pollutant removal rates (%)			
	Extended dry Detention	Wet Detention	Retention	Swales
BOD	30%	30%	90%	30%
COD	30%	30%	90%	30%
TSS	90%	90%	90%	80%
TDS	0%	40%	90%	10%
Total-P	30%	50%	90%	40%
Dissolved-P	0%	70%	90%	10%
TKN	20%	30%	90%	40%
NO ₂ +NO ₃	0%	30%	90%	40%
Lead	80%	80%	90%	75%
Copper	60%	70%	90%	50%

Zinc	50%	50%	90%	50%
Cadmium	80%	80%	90%	65%

(e) The storm water runoff baseline for a watershed or drainage area under a given land use scenario and existing management practices shall be calculated by subtracting the percent storm water runoff load reductions calculated under subdivision (d) of this subrule from the average total annual loading calculated under subdivision (c) of this subrule and summing over all land uses and all subbasins by the following equation 5:

$$MASS = \sum_{SB=1}^N \sum_{I=1}^N M_{L,SB} * A_{L,SB} * (1 - P_{L,SB})$$

where: MASS = annual storm water runoff pollutant-specific loading for the watershed or drainage area, expressed in lbs/yr for a given land use scenario.

(3) Reduced loading levels achieved after making changes in land use or the implementation of new or modified management practices shall be calculated by using the procedure and equations specified in subrule (2)(a), (b), (c), (d), and (e) of this rule.

(4) The quantity of storm water load reductions generated shall be calculated by subtracting the reduced loading levels calculated under subrule (3) of this rule from the storm water runoff baseline calculated under subrule (2) of this rule.

(5) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of storm water load reductions calculated under subrule (4) of this rule minus the water quality contribution required under R 323.3016(2).

(6) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.

(7) Monitoring data and actual measurements of pollutant load reductions achieved in practice from changes in land use and implementation of management practices may be used where such information is available.

History: 2002 AACS.

R 323.3014 Agricultural nonpoint source baseline; reduced loading level; generation of load reductions and credits.

Rule 14. (1) The baseline for agricultural operations shall be the most protective of any of the following:

(a) The pollutant-specific loading from existing agricultural operations that are not subject to an applicable requirement.

(b) The pollutant-specific loading achieved after implementation of management practices established by an applicable requirement.

(c) A pollutant-specific cap and loading allocation specified in a watershed management plan approved by the department under this part.

(d) A pollutant-specific cap and loading allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) The baseline for agricultural operations that are not subject to an applicable requirement shall be established by a plan prepared by a person who is a certified planner under the program administered by the United States department of agriculture, natural resource conservation service.

(3) The plan required under subrule (2) of this rule shall include all of the following:

(a) Documentation of existing agricultural operations and management practices.

(b) Quantification of the pollutant-specific loading from existing operations and management practices.

(c) Identification of operational changes and management practices which may be implemented to reduce loadings.

(d) Quantification of the pollutant-specific load reductions from each operational change and management practice recommended in the plan.

(4) If not specified otherwise by an applicable requirement, the baseline and pollutant-specific reduced loading level for each operational change and management practice recommended in the plan prepared pursuant to subrules (2) and (3) of this rule shall be established by one of the following methods and procedures, as applicable:

(a).For sediment, sediment-borne phosphorus, sediment-borne nitrogen, and concentrated animal feedlot runoff, "pollutants controlled calculation and documentation," Michigan Department of environmental quality, 1999.

(b) For commercial fertilizer application and manure management, methods and procedures approved by the department on a case-by-case basis.

(c)..Alternate methods and procedures or models provided electronically by the department may be used for sediment, sediment-borne phosphorus, sediment-borne nitrogen, concentrated animal feedlot runoff, commercial fertilizer application, and manure management when they become available.

(5) The quantity of load reductions generated shall be determined by subtracting from the baseline calculated under subrule (1) or (2) of this rule, the combined reduced loading level for each operational change, and management practice implemented under the plan as calculated under subrule (4) of this rule.

(6) The baseline, reduced loading levels, and quantity of load reductions generated shall be expressed in pounds of a specific pollutant per year or month.

(7) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of load reductions calculated under subrule (6) of this rule minus the water quality contribution required under R 323.3016(2).

(8) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3015 Streambank erosion nonpoint source baseline; reduced loading level; generation of load reductions and credits.

Rule 15. (1) The baseline for streambank erosion sources shall be one of the following, whichever is applicable and most protective:

(a) The pollutant-specific loading from existing streambank erosion sources that are not subject to an applicable requirement.

(b) The pollutant-specific loading achieved after implementation of management practices established by an applicable requirement.

(c) A pollutant-specific cap and loading allocation specified in watershed management plan approved by the department under this part.

(d) A pollutant-specific cap and loading allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) If not specified otherwise by an applicable requirement, the baseline and pollutant-specific reduced loading level for each operational change and management practice implemented to control streambank erosion shall be established by the most conservative of the following methods:

(a) The use of historical aerial photographs over a period of at not less than 10 years and current aerial photographs representative of the site and approved by the department.

(b) Lateral recession rates calculated in accordance with procedures specified in "pollutants controlled calculation and documentation," Michigan Department of environmental quality, 1999.

(c) Using gully erosion estimates at ½ of the amount calculated as specified in the USDA field office technical guide for Michigan which is adopted by reference in R323.3026.

(d) Other methods or procedures approved by the department.

(3) The quantity of load reductions generated shall be determined by subtracting from the baseline calculated under subrule (1) or (2) of this rule, the reduced loading level for each control installed and management practice implemented to control streambank erosion.

(4) The baseline, reduced loading levels, and quantity of load reductions generated shall be expressed in pounds of a specific pollutant per month or year.

(5) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of load reductions calculated under subrule (3) of this rule minus the water quality contribution required under R 323.3016(2).

(6) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.

History: 2002 AACCS.

R 323.3016 Water quality contribution and uncertainty.

Rule 16. (1) Except for a source of storm water regulated under a national permit, each point source that generates discharge reductions and registers credits under this part shall contribute 10% of the discharge reductions to the department to address uncertainty and to provide a net water quality benefit. This 1-time 10% contribution shall be effective at the time the department issues a notice of completeness for a notice of generation.

(2) Each storm water source regulated under a national permit and each nonpoint source that generates load reductions and registers credits under this part shall contribute 50% of the load reductions to the department to address uncertainty and to provide a net water quality benefit. A source may request approval from the director for a contribution less than 50% but not less than 10%. This 1-time contribution shall be effective at the time the department issues a notice of completeness for a notice of generation.

(3) The 1-time contribution required under subrules (1) and (2) of this rule shall be calculated in the same units and for the same time periods during which the discharge or load reductions are made to generate credits.

History: 2002 AACCS.

R 323.3017 Discount factors applied to the use of credits.

Rule 17. (1) A source that uses credits generated by another source upstream of a wetland, pond, lake, or impoundment located between the sources in an attainment area or a nonattainment area for which a total maximum daily load has not been established shall obtain a quantity of credits 10% greater than the amount required to comply with a water quality-based effluent limitation specified by an applicable requirement. This equivalence factor shall be applied at the time a notice of use is submitted under R 323.3020(1).

(2) A source that uses credits in a nonattainment area for which a total maximum daily load has not been established shall obtain a quantity of credits 10% greater than the amount required to comply with a water quality-based effluent limitation or the loading that would be achieved in practice through implementation of management practices specified by an applicable requirement, whichever is applicable. This water quality factor shall be applied at the time a notice of use is submitted under R 323.3020(1).

(3) Discount factors different than those specified in subrules (1) and (2) of this rule may be established by the department where necessary to achieve and maintain water quality standards or as a requirement for a watershed management plan or other type of trade authorized by the department pursuant to this part.

History: 2002 AACCS.

R 323.3018 Nutrient discharge and load reductions; early reductions and credit life.

Rule 18. (1) Banked credits for total phosphorus and total nitrogen which are entered in the water quality trading registry under R 323.3021(1) may be used or traded for a period of 5 calendar years after the year of generation, subject to the prohibitions, restrictions, and conditions established in this part.

(2) Point source discharge reductions and nonpoint source load reductions of total phosphorus or total nitrogen that are necessary to comply with an applicable requirement defined in R 323.3001(c)(i) and which occur before the final compliance date specified by the applicable requirement defined in R 323.3001(c)(i); excluding early compliance with a schedule resulting from violations of applicable requirements defined in R 323.3001(c)(i), may be registered for use at a later time. These banked credits may be used or traded for a period of 5 calendar years after the year of generation or 1 calendar year after the effective date of final compliance, whichever occurs first, subject to the prohibitions, restrictions, and conditions established in this part.

(3) Credits not used within the credit life specified in subrules (1) and (2) of this rule shall be retired to provide a water quality benefit and shall not be eligible for use under this part.

History: 2002 AACCS.

R 323.3019 Notification requirements for generation of discharge, load reductions, and registration of credits.

Rule 19. (1) A person who generates a discharge or load reduction and wishes to register credits shall provide, to the department, a notice and certification of the discharge or load reduction being generated and the credits being registered.

(2) The notification required by subrule (1) of this rule shall include all of the following information:

(a) The name and location, by street address, zip code, county, and watershed, of the source, process, or operation at which discharge or load reductions have been or will be generated and the location where records are or will be kept. Point sources shall also provide the latitude and longitude coordinates of the outfalls at which discharge reductions are being generated. Unpermitted sources of storm water runoff and other nonpoint sources shall either provide latitude and longitude coordinates or section, township, and range to the nearest one quarter.

(b) The name, street address, and telephone number of the responsible individual providing notice and certification of the discharge or load reductions generated and credits being registered.

(c) The numerical effluent limitation or management practices specified by an applicable requirement, the actual discharge level or existing management practices, and associated loadings that constitutes the baseline, the reduced discharge level, or loading that must be complied with during the time reductions are made to generate credits.

(d) The total pollutant-specific quantity of discharge or load reductions generated and the quantity of credits to be registered, by watershed.

(e) An identification of the source, process, or operation at which discharge or load reductions have or will be generated.

(f) A description of the method or methods used to generate the discharge or load reduction.

(g) The date that the discharge or load reduction will take effect and the period of time that the reduction will remain in effect.

(h) The methods, procedures, and calculations used to determine the baseline, reduced discharge, or loading level, discharge or load reduction generated, and credits registered.

(i) An identification of quantification and monitoring methods and procedures established by an applicable requirement, if any.

(3) The notice required by subrule (2) of this rule shall be accompanied by a certification by the responsible individual of all of the following:

(a) That to the best of the responsible individual's knowledge, the information contained in the notice is true, accurate, and complete.

(b) The discharge or load reductions are real, surplus, and quantifiable, and if the reductions have not already been generated, that the reductions will be generated by the date and for the period of time specified in the notice of generation that has been determined to be complete by the department pursuant to subrule (4) of this rule.

(c) The discharge or load reductions have not been used elsewhere as credits.

(4) The notice and certification required under this rule shall be submitted electronically or by certified mail to the department. The department shall review the notice and certification for completeness and consistency with this part. Within 30 days of receipt of the notice and certification, the department shall make a determination and provide a written response to the person submitting the notice and certification. A determination made by the department shall be considered a final agency decision subject to review by a court of competent jurisdiction under section 631 of 1961 PA 236, MCL 600.631. A determination of completeness and consistency by the department does not constitute an agency certification that the credits are real, surplus, or quantifiable. If the notice and certification include all the information required under subrules (2) and (3) of this rule and the department determines that the generation of credits is consistent with all applicable provisions of this part, then the department shall, within 5 business days, enter the information required by R 323.3021(2) in the water quality trading registry. Immediately upon entry in the water quality trading registry, the information in the notice and certification shall be available to the public, except for information that is determined to be confidential under the provisions of section 3111 of part 31, water resources protection, 1994 PA 451, R 323.2128, and the freedom of information act, 1976 PA 442, MCL 15.231 et seq. If the department determines that the notice and certification do not include all the information required under subrules (2) and (3) of this rule or that the proposed generation of credits is inconsistent with any provision of this part, then the discharge or load reductions are not eligible to generate credits. A determination of incompleteness or inconsistency made by the department under this subrule shall include an explanation of why the determination was made. A determination of incompleteness or inconsistency shall not preclude a person from submitting a corrected or revised notice and certification.

(5) The methods used, operational changes made, or management practices implemented to generate credits for which a complete notice and certification is submitted to the department shall become legally enforceable requirements, upon the effective date of the determination of completeness issued by the department or the date that the discharge or load reductions will be generated as specified in the notice determined to be complete by the department.

(6) Issuance of a notice of credit generation by the department pursuant to subrule (4) of this rule shall constitute departmental notice that a point source is subject to alternate national permit limits in the national permit for the period specified in the notice. The discharge from a source shall be considered by the department to be in compliance if the actual discharge is equal to or less than the baseline specified in the notice minus the quantity of discharge reductions that are generated.

(7) A source which generates credits pursuant to this part shall report to the department the baseline, the quantity of discharge or load reductions, and the credits generated for each pollutant, expressed in pounds per day, week, month, or year. Except for storm water sources without numerical effluent limitations specified by a national permit, point sources shall submit this information to the department on discharge monitoring report forms provided by the department as necessary to be consistent with the effluent limitations, monitoring, and reporting requirements specified in a national permit. The discharge monitoring report forms provided by the department shall include data fields to show the baseline and the quantity of discharge reductions and credits generated for each pollutant expressed in pounds per day, week, month, or year, as necessary to be consistent with the corresponding effluent limitation specified in the national permit. For nonpoint sources and storm water sources subject to a national permit without numerical effluent limitations, a quarterly report shall be submitted to the department on a form provided by the department. The reports shall include all of the following information:

- (a) The name and location of the site.
- (b) The pollutants controlled.
- (c) The control devices installed or management practices implemented and dated completed.
- (d) The lineal feet or acres for which controls or management practices have been completed.
- (e) A calculation of the quantity of each pollutant controlled using the same methods and procedures used to determine the baseline, load reductions, and credits.

History: 2002 AACS.

R 323.3020 Notification requirements for the registration, use, and trading of credits.

Rule 20. (1) A person applying to use or trade credits under the provisions of this part shall provide prior notice to the department. The notice shall include all of the following information:

(a) The name and location, by street address, zip code, county, and watershed, of the source, process, or operation at which credits are to be used or traded. Point sources shall also provide the latitude and longitude coordinates of the outfalls where credits are to be used. Nonpoint sources where credits are to be used shall also provide latitude and longitude coordinates or section, township, and range to the nearest one quarter.

(b) The name, address, and telephone number of the responsible individual providing notice of use or trading of credits.

(c) The numerical effluent limitation or management practices specified by an applicable requirement, the number of credits used to comply with the effluent limitation or the loadings associated with management practices specified by an applicable requirement, and the actual discharge level, management practices, and associated loading that must be complied with during the use of credits.

(d) The pollutant-specific quantity of credits, in pounds per day, week, month, or year, that are used or traded, on a watershed basis.

(e) A description of the source, process, or operation at which the credits are to be used.

(f) An identification of all applicable requirements to be complied with through the use of credits and the methods and procedures used to quantify loading and to determine compliance with each applicable requirement.

(g) The effective dates of use of the credits and calculations demonstrating compliance through the use of credits.

(h) A copy of the notice of generation required under R 323.3019(1) for the credits to be traded or used.

(2) The notice required by subrule (1) of this rule shall be accompanied by a certification by the responsible individual, that the information in the notice is true, accurate, and complete and that the source, process, or operation shall be operated in compliance with all applicable requirements and the conditions and requirements for the use of credits under this part.

(3) The notice and certification required under this rule shall be submitted electronically or by certified mail to the department. The department shall review the notice and certification for completeness and consistency with this part. The department shall enter the proposed notice of use in the registry within 3 business days of receipt. Within 30 days of receipt of the notice and certification, the department shall make a determination as to whether the notice and certification are complete and the proposed use is consistent with all applicable provisions of this part, and provide a written response to the person submitting the notice and certification. A determination made by the department shall be considered a final agency decision subject to review by a court of competent jurisdiction under section 631 of 600.631 1961 PA 236, MCL. If the notice and certification include all the information required under subrules (1) and (2) of this rule and the department determines that the proposed use of credits is consistent with all applicable provisions of this part, then the department shall, within 5 business days, enter the information required by R 323.3021(2) in the water quality trading registry. Immediately upon entry in the water quality trading registry, the information in the notice and certification shall be available to the public, except for information that is determined to be confidential under the provisions of section 3111 of part 31, water resources protection, 1994 PA 451, R 323.2128, and the freedom of information act, 1976 PA 442, MCL 15.231 et seq.

(4) The department shall not issue a determination of completeness and consistency for a notice and certification that does not provide all the information required under subrules (1) and (2) of this rule or for a proposed use of credits that the department determines would violate water quality standards, or is inconsistent with any other applicable provision of this part. If the department determines the notice and certification are incomplete or the department determines the proposed use of credits is not consistent with water quality standards, or other provisions of this part, then the proposed use of credits shall not occur. The determination made by the department under this rule shall explain why the determination of incompleteness and inconsistency was made. A determination of incompleteness or inconsistency with the provisions of this part by the department shall not preclude a person applying to use credits from submitting a revised notice and certification to correct the inconsistencies identified by the department.

(5) The methods used, and operational changes made, to use credits for which a notice and certification are determined to be complete by the department shall become legally enforceable

operating requirements, effective on the date the department issues a notice of completeness, or the time period that is specified in the notice of use determined to be complete by the department.

(6) A person who purchases, trades, or uses credits under this part shall include the price paid for the credits in the notice required by subrule (1) of this rule, or by separate written notice to the department within 7 business days of the purchase, trade, or use.

(7) A person who has registered the use of credits with the department shall be allowed a period of time, not to exceed 60 days, commencing with the end of the use period specified in the notice of use to amend the notice of use and to submit a notice and certification pursuant to R 323.3019(1) to register any unused credits in excess of the quantity needed for the uses specified in the original notice of use.

(8) Issuance of a notice for use of credits by the department pursuant to subrule (3) of this rule shall constitute departmental notice that a point source is subject to alternate national permit limits for the period specified in the notice. The discharge from a source shall be considered by the department to be in compliance if the actual discharge is equal to or less than the water quality-based effluent limitation specified in the national permit plus the credits achieved by the source or sources that generate the credits used by the source expressed in pounds per day, week, month, or year, and minus any discount factor applied to the use of credits under R323.2019 as necessary to be consistent with the corresponding effluent limitation specified in a national permit.

(9) A source which uses credits pursuant to this part shall report to the department the number of credits used for each pollutant, expressed in pounds per day, week, month, or year. For point sources, this information shall be submitted to the department through discharge monitoring reports provided by the department as necessary to be consistent with the corresponding effluent limitation specified in a national permit. The discharge monitoring report forms provided by the department shall include data fields to show the quantity of credits used for each pollutant, expressed in pounds per day, month, or year as necessary to be consistent with the corresponding effluent limitation specified in a national permit. For nonpoint sources, an annual report shall be submitted to the department on a form provided by the department.

History: 2002 AACCS.

R 323.3021 Water quality trading registry.

Rule 21. (1) The department shall establish and maintain a water quality trading registry for all of the following purposes:

- (a) Registering discharge and load reductions that are generated under this part.
 - (b) Registering and tracking the generation, use, and trading of credits.
 - (c) Registering the discharge and load reductions that are contributed to the state for retirement as a water quality contribution under R 323.3016(1) and (2).
 - (d) Providing real time public access to information on the water quality trading program.
- (2) The water quality trading registry shall contain all the information required by R 323.3019(2) and R 323.3020(1).
- (3) The water quality trading registry shall be updated daily by the department.
 - (4) The department shall make all of the following information contained in the water quality trading registry available to the public through daily updates to an electronic bulletin board:
 - (a) The name and location, by address, county, and receiving water or watershed, of the sources, processes, and operations at which discharge or load reductions have been or will be generated.
 - (b) A brief description of the source, process, or operations at which discharge or load reductions and credits have been or will be generated.
 - (c) The numerical effluent limitation or management practices specified by an applicable requirement, the actual discharge level or existing management practices, and associated loadings that constitute the baseline, the reduced discharge level, or loading that must be complied with during the time reductions are made to generate credits.
 - (d) The pollutant-specific quantity of credits, in pounds per day, week, month, or year that have been registered.
 - (e) A brief description of the method or methods used, or to be used, to generate discharge or load reductions and credits.
 - (f) The effective date and the life of credits that have been or will be generated.

(g) Identification of the methods and procedures used to quantify the generation of discharge or load reductions, and the use of credits to comply with applicable requirements.

(h) The name and location, by address, county, and receiving water or watershed, of the source, process, and operations at which credits are being, or will be, used.

(i) A description of the source, process, or operations at which credits are, or will be, used.

(j) The numerical effluent limitation or management practices specified by an applicable requirement, the number of credits used to comply with the effluent limitation or the loadings associated with management practices specified by an applicable requirement, and the actual discharge level, management practices, and associated loading that must be complied with during the use of credits.

(k) The pollutant-specific quantity of credits used, in pounds per day, week, month, or year on a watershed basis.

(l) The effective date and period of time during which credits will be used.

(m) An identification of the applicable requirement that credits are being or will be used to comply with.

(n) The net water quality benefit, by pollutant, for each watershed where trading occurs.

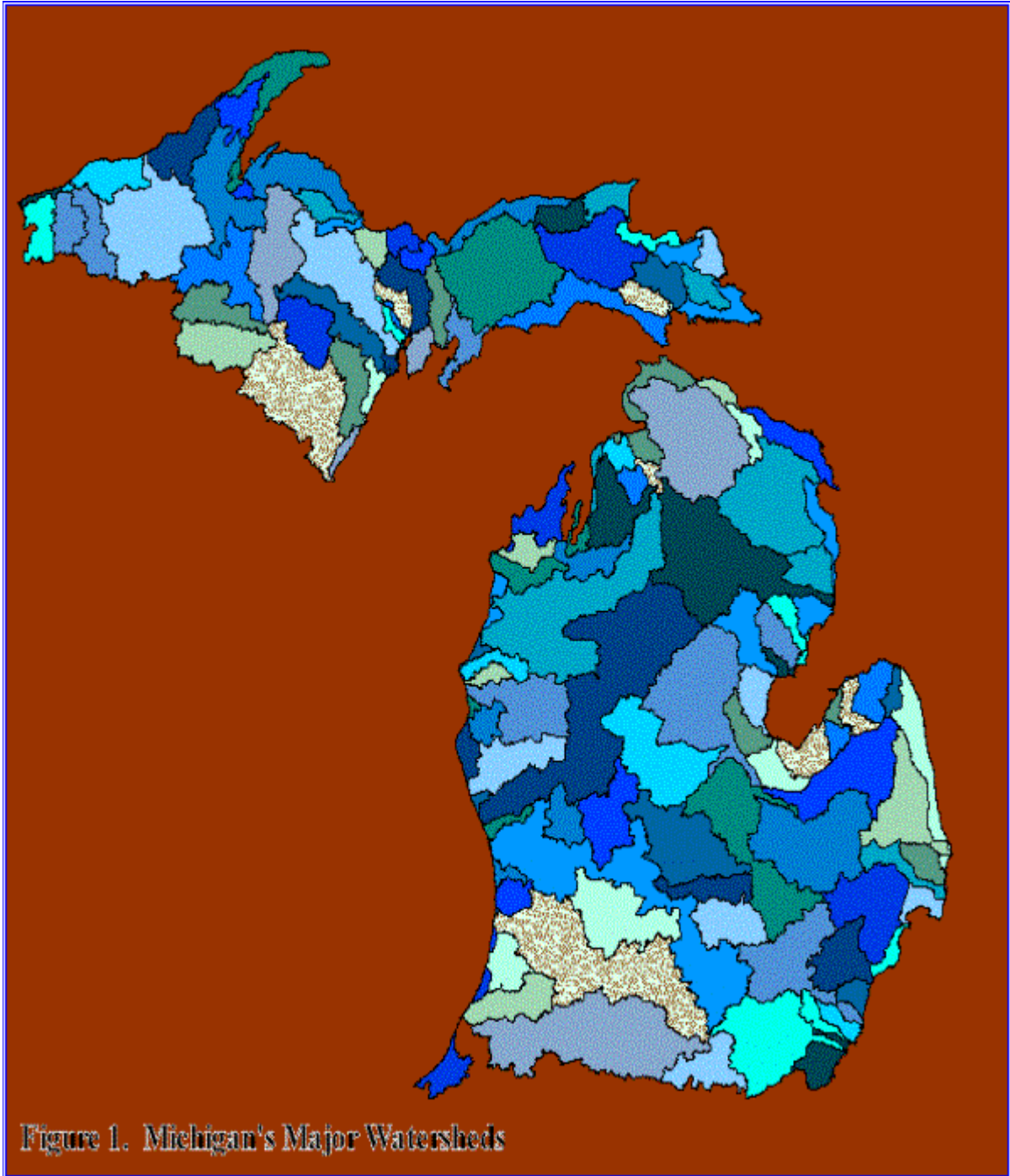
(5) The responsible individual who certified the generation or use of credits shall notify the department of any data entry errors and necessary corrections to the information posted on the electronic bulletin board within 10 business days of the receipt of a determination of completeness from the department. The department shall promptly correct any data entry errors on the electronic bulletin board.

History: 2002 AACS.

R 323.3022 Delineation of watersheds for purposes of water quality trading.

Rule 22. (1) A watershed in which trading occurs under this part shall be delineated by one of the following methods, whichever is applicable:

(a) For open nutrient trading, the watersheds shall be delineated by the department's map of Michigan's major watersheds (figure 1). This map may be obtained electronically from the department's web page or from the department's land and water management division.



(b) For closed nutrient trading in areas for which a total maximum daily load has been established, the watersheds shall be delineated as described in the section 303(d) of the clean water act list prepared by the department and approved by the administrator.

(c) For closed nutrient trading in areas for which the department has approved a watershed management plan under this part, the watershed shall be the surface water and area identified and delineated in the plan.

(d) For other types of trades approved by the department under this part, the trading area for the specific pollutant or pollutants to be traded shall be established on a case-by-case basis.

History: 2002 AACCS.

R 323.3023 Watershed management plans for water quality trading; submittal; approval.

Rule 23. (1) Water quality trading under this part may occur under any of the following plans that include all the information required in subrule (2) of this rule:

(a) A plan approved by the department and the administrator for implementation of a total maximum daily load developed under section 303(d) of the clean water act.

(b) A remedial action plan or lakewide management plan that has been determined by the department to be consistent with water quality standards.

(c) A watershed management plan developed under a grant awarded by the department under section 319 of the clean water act and implemented with other sources of funding.

(d) A watershed-based storm water management program or a storm water pollution prevention initiative approved by the department under a national permit.

(e) A watershed-based storm water management program submitted under a voluntary national permit issued by the department.

(f) A nonpoint source watershed management plan developed under a grant awarded by the department under the clean Michigan initiative, 1998 PA 287, MCL 324.8801 et seq. and implemented with other sources of funding.

(2) In addition to the plan content and specifications established by an applicable requirement, each plan listed in subrule (1) of this rule shall also include all of the following information for the purpose of water quality trading:

(a) An identification and statement of the purpose of the plan.

(b) An identification and delineation of the boundaries of the receiving water or watershed for which the plan has been prepared and where trading may occur.

(c) A pollutant-specific inventory of point and nonpoint sources that may engage in trading in the plan area.

(d) A pollutant-specific cap for the receiving water or watershed that includes all the point and nonpoint sources that may engage in trading in the plan area and that is consistent with achieving and maintaining water quality standards.

(e) Point and nonpoint source baseline allocations or management practices for all the sources that may generate, use, or trade credits in the plan area.

(f) Either a demonstration that the use of credits under the plan does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9) or a demonstration that social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).

(3) Plans listed under subrule (1) of this rule shall be approved by the department for the purposes of trading before any trading activity occurs under the plan and this part.

(4) In addition to the plans listed under subrule (1) of this rule, any person may submit to the department for approval a comprehensive watershed management plan to conduct water quality trading for any of the following purposes:

(a) Implementing programs or projects to improve water quality and enhance aquatic habitat.

(b) Reestablishing or creating wetlands or floodplains.

(c) Encouraging environmentally sound land use practices.

(d) Accommodating growth and economic development.

(e) Creating nature conservancies, parks, and natural areas.

(f) Other projects or programs included in a plan determined by the department to be consistent with water quality standards.

(5) Watershed management plans submitted pursuant to the department under subrule (4) of this rule may be prepared by any of the following entities:

(a) Any person living in the plan area.

(b) Any municipality in the area for which the plan is prepared.

(c) Any watershed council or other organization authorized to prepare and submit a plan on behalf of those affected in the plan area.

(6) Watershed management plans prepared under subrule (4) of this rule shall be based on the most complete, accurate, and reliable data and information available. The plans shall include all of the following information:

- (a) A statement of the purpose of the plan.
- (b) An identification and delineation of the boundaries of the receiving water or watershed for which the plan has been prepared and where trading may occur.
- (c) A description of current and projected land use activities within the area for which the plan is prepared.
- (d) An assessment of existing water quality and comparison to water quality standards for the receiving waters or watershed for which the plan is prepared.
- (e) A pollutant-specific inventory of point and nonpoint sources in the plan area for the pollutant proposed to be traded.
- (f) An identification of goals and priorities for implementing the plan.
- (g) Specific activities, management options, and a schedule for implementation of the plan.
- (h) An identification of those persons, organizations, and agencies responsible for implementation of the plan.
- (i) A pollutant-specific cap that is consistent with achieving and maintaining water quality standards in the receiving water or watershed and that includes all point and nonpoint sources that may engage in trading.
- (j) Point and nonpoint source baseline allocations or management practices for the generation and use of credits by all sources that may engage in trading in the plan area.
- (k) Either a demonstration that the use of credits does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9) or a demonstration that the social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).
- (l) A program to periodically assess the effectiveness of, and make revisions to, the plan.
- (m) A process for stakeholder involvement throughout the development, implementation, and revision of the plan.
- (n) A written agreement, and all approvals as may be required by law, from each person that is affected by or may engage in trading under the plan.

(7) The department shall review and approve plans for the purposes of trading that are consistent with this part, comply with applicable federal and state regulations, and which provide reasonable assurances that water quality will be achieved and maintained.

(8) Before approving a watershed management plan submitted under subrule (1) or (4) of this rule, the department shall provide public notice and a 30-day comment period on the watershed management plan and the department's proposed action to approve the plan. The department shall hold a public hearing if the department determines that a sufficient public controversy exists or that additional information is necessary under subrule (2) or (6) of this rule. The department shall consider all comments received during the comment period and the public hearing, if held, before taking final action to approve the plan.

(9) Approval or disapproval of the watershed management plan by the department shall be final.

(10) A watershed management plan and revisions to the plan, approved by the department, shall be effective for a period of not more than 5 years. The plan and revisions to the plan shall be binding for the purposes of trading on the department and the parties to the plan, unless the plan is withdrawn.

History: 2002 AACCS.

R 323.3024 Program evaluation.

Rule 24. (1) The department shall conduct an evaluation of the water quality trading program established under this part to assess the environmental and economic performance of the program. The first evaluation shall be conducted 3 years after the effective date of this part. The first evaluation shall include all trading activity that occurs statewide. Thereafter, watershed-specific evaluations shall be conducted every 5 years, or more frequently if deemed necessary by the department, in a receiving water or watershed where trading occurs. These watershed-specific evaluations shall be conducted during the same basin year that ambient monitoring and permitting cycles for national permits are conducted by the department. The evaluations shall include all of the following information:

(a) Identification of the receiving water or watershed where trading has occurred. The identification shall include a delineation of the trading area, the number and mix of point and nonpoint sources in the trading area, and the status of water quality in the trading area.

(b) Ambient monitoring conducted by the department to quantify actual nonpoint source load reductions and assess water quality in a receiving water or watershed where trading has occurred. The department may include monitoring data and information conducted by other agencies, institutions, organizations, or persons where such monitoring has been conducted in accordance with procedures outlined in 40 C.F.R. §136 (2000), which are adopted by reference in R323.3027, or in accordance with other procedures approved by the department.

(c) The type and number of trades, by pollutant, for each watershed where trading occurs.

(d) The quantity of credits that have been traded.

(e) The quantity of discharge or load reductions that have been retired.

(f) A comparison of the cost of reducing pollutant discharges and loadings through trading to the cost of achieving equivalent reductions without trading, where adequate information for point and nonpoint sources is available.

(g) The price paid for credits that are used or traded, by pollutant.

(h) The costs incurred by the department to administer, monitor, and enforce the program.

(i) The transaction costs incurred by point and nonpoint sources that participate in the program where such information is available.

(2) The department shall evaluate the information provided under subrule (1) of this rule to make the following determinations:

(a) Whether the program is consistent with achieving and maintaining water quality standards in the receiving waters or watersheds where trading has occurred.

(b) Whether water quality trading has resulted in a net reduction in the loadings of pollutants from point and nonpoint sources that have engaged in trading.

(c) Whether the program has achieved voluntary and early reductions of pollutant discharges and loadings from point and nonpoint sources and whether the program has resulted in the development of emerging pollution control technology or new or improved methods and procedures for the quantification of point and nonpoint source discharges.

(d) Whether the program has caused any localized adverse effects to the public health, safety, welfare, or environment.

(e) Whether monitoring, recordkeeping, reporting, and enforcement provisions of the program have resulted in a sufficiently high level of accountability and compliance.

(3) The department shall prepare and make available to the public a report of the program evaluation conducted pursuant to subrules (1) and (2) of this rule. The report shall include the findings of the evaluation and any proposed program modifications deemed necessary by the department to assure all of the following:

(a) Trading occurs in a manner that is consistent with water quality standards.

(b) Localized adverse impacts to the public health, safety, welfare, or environment do not occur as a result of the use of credits.

(c) Trading results in a net water quality improvement.

(d) To improve the environmental or economic performance of the program.

(4) The department shall provide a public notice and a 30-day comment period and opportunity for public hearing before finalizing the findings contained in the report and any proposed program modifications pursuant to subrule (3) of this rule. The department shall hold a public hearing if the department determines that a sufficient public controversy exists or if additional information is desired before action by the department. The department shall consider all comments received during the comment period and public hearing, if held, before finalizing the findings contained in the report and any proposed program modifications.

(5) The department shall, after public notice, comment, and opportunity for hearing, modify the program as necessary to achieve the purposes established in R 323.3002.

History: 2002 AACS.

Rule 25. (1) Notwithstanding another person's liability, negligence, or false representation, a person or source that uses credits under this part shall be solely responsible to assure that any source, process, equipment, property, and operation under his or her ownership or control is in compliance with all applicable discharge standards and effluent limitations. A person or source that generates discharge or load reductions and registers credits that are traded or used under this part shall be strictly liable for assuring that the reductions are real, surplus, quantifiable, and equal to the quantity of credits that are registered.

(2) A person or source at any time may provide written notice to the department that the quantity of discharge or load reductions actually generated or the quantity of credits used or traded are not real, surplus, quantifiable, or are insufficient for the purpose they are registered. A person or source that provides a notice of insufficient reductions or credits without first having been notified by the department shall be provided a reconciliation period of not more than 30 days to true-up the insufficient reductions or credits if all of the following conditions are met:

(a) The notice of insufficient reductions or credits is submitted by certified mail to the department within 7 days of the discovery that the reductions or credits are insufficient or are not real, surplus, or quantifiable.

(b) The notice of insufficient reductions or credits submitted pursuant to subrule (2)(a) of this rule shall include all of the following information:

(i) A detailed description and explanation of how, and the date when, the insufficient reductions or credits were discovered.

(ii) A statement of the corrective actions taken or to be taken, and the time when the actions were completed or a schedule describing when the actions will be taken and completed.

(iii) A revised notice and certification of discharge or load reduction generation or credit use, whichever is applicable.

(iv) Certification by a responsible individual that, to the best of the individual's knowledge, the information in the notice of insufficient reductions or credits is true, accurate, and complete.

(c) Upon submitting the notice of insufficient reductions or credits, the person submitting the notice shall also do either of the following, as applicable:

(i) If insufficient credits are registered and have been traded or are being used, then the person or source submitting the notice shall, within 30 days, implement and register discharge or load reductions or obtain credits from another person or source to true-up the quantity of discharge or load reductions or credits that were insufficient or were not real, surplus, or quantifiable.

(ii) If the credits have not been used or traded, then the person or source submitting the notice of insufficient reductions shall contemporaneously submit either of the following:

(A) A revised notice of generation of discharge or load reductions.

(B) A written request for the department to withdraw the credits from the water quality trading registry.

(3) If the department finds, without being provided notice pursuant to subrule (2) of this rule, that a person or source has registered a quantity of reductions that are not real, surplus, or quantifiable, or that the quantity of reductions and resulting credits is less than the quantity that have been used or traded then, the person or source who generated the insufficient reductions and registered credits shall generate or obtain, and donate credits to the department in an amount equal to treble the number of insufficient reductions and credits that are not real, surplus, or quantifiable. Discharge and load reductions generated and credits donated to the department under this subrule shall be retired to provide a water quality benefit.

(4) A person or source that is granted a reconciliation period under subrule (2) of this rule and who complies with the requirements of subrule (2) of this rule and has not violated other provisions of this part shall be considered to be in compliance with this part.

(5) If the department determines that a person or source has violated the provisions of the act or a provision of a permit, order, rule, or stipulation of the department, then the department may take appropriate enforcement action as provided under the act and this part. In any such enforcement proceeding, a person or source that generates reductions and registers credits shall have the burden of proof that the reductions generated and credits registered are real, surplus, quantifiable, and sufficient. A person who uses credits under this part shall have the burden of proof of due diligence to comply with all applicable discharge standards and effluent limitations established by an applicable requirement and to comply with the requirements of this part.

(6) Notwithstanding other provisions of this rule, a source that uses credits that are later determined not to be real, surplus, quantifiable, or sufficient shall have a reconciliation period of 90 days to true-up

the quantity of credits that were determined not to be real, surplus, quantifiable, or sufficient. The reconciliation period shall begin on the date of discovery by the source or the date of a written notification from the department, whichever is first. A source or person that knows, or should have known, that the credits used were not real, surplus, quantifiable, and sufficient shall not be entitled to the reconciliation period provided under this subrule.

History: 2002 AACCS.

R 323.3026 Availability of documents

Rule 26 (1) The following documents referenced in this part are adopted by reference and are available for inspection at, and may be obtained at the cost as of the time of adoption of these rules of 5 cents per page and a labor rate of \$19.78 per hour from, the Lansing office of the Department of environmental quality, 525 Allegan Street, P.O. Box 30273, Lansing, Michigan 48909-7773:

- (a) "Pollutants Controlled Calculation and Documentation," Michigan Department of environmental quality, 1999.
- (b) The United States Department of Agriculture, Natural Resource Conservation Service, Field Office Technical Guide for Michigan, Section I-c. Water Erosion Prediction, 1982.
- (c) Great Lakes Water Quality Agreement of 1978, as amended.

History: 2002 AACCS.

R 323.3027 Availability of federal regulations:

Rule 27 (1) The following sections of the code of federal regulations referenced in this part are adopted by reference and are available for inspection at, and may be obtained from, the Lansing office of the Department of environmental quality, 525 Allegan Street, P.O. Box 30273, Lansing, Michigan 48909-7773 at the cost as of the time of adoption of these rules of 5 cents per page and a labor rate of \$19.78 per hour. Copies may also be obtained via the internet at <http://www.access.gpo.gov/nara> or from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The costs for orders from the government printing office as of the time of adoption of these rules are as follows:

- (a) 40 C.F.R. 25 (2000), public participation requirements for RCRA, safe drinking water act and clean water act. \$54.00.
- (b) 40 C.F.R. 117 (2000), determination of reportable quantities for hazardous substances. \$38.00.
- (c) 40 C.F.R. 121 (2000), state certification of activities requiring a federal license or permit. \$38.00.
- (d) 40 C.F.R. 122 (2000), EPA administered permit programs: the national pollutant discharge elimination system. \$38.00
- (e) 40 C.F.R. 123 (2000), state program requirements. \$38.00.
- (f) 40 C.F.R. 124 (2000), procedures for decisionmaking. \$38.00.
- (g) 40 C.F.R. 125 (2000), criteria and standards for the national pollutant discharge elimination system. \$38.00.
- (h) 40 C.F.R. 129 (2000), toxic pollutant effluent standards. \$38.00.
- (i) 40 C.F.R. 130 (2000), water quality planning and management. \$38.00.
- (j) 40 C.F.R. 131 (2000), water quality standards. \$38.00.
- (k) 40 C.F.R. 132 (2000), water quality guidance for the Great Lakes system. \$38.00.
- (l) 40 C.F.R. 133 (2000), secondary treatment regulation. \$38.00.
- (m) 40 C.F.R. 135 (2000), prior notice of citizen suits. \$38.00.
- (n) 40 C.F.R. 136 (2000), guidelines establishing test procedures for the analysis of pollutants. \$55.00.
- (o) 40 C.F.R. 140 (2000), marine sanitation device standard. \$55.00.
- (p) 40 C.F.R. 401-424 (2000), subchapter n - effluent guidelines and standards. \$51.00.
- (q) 40 C.F.R. 471 (2000), nonferrous metals forming and metal powders point source category. \$55.00.
- (r) 40 C.F.R. 501-503 (2000), subchapter o - sewage sludge. \$55.00.

History: 2002 AACCS.