TITLE 327 WATER POLLUTION CONTROL DIVISION

Final Rule
LSA Document #13-290(F)

DIGEST

Amends 327 IAC 2-1-3, 327 IAC 2-1-6, 327 IAC 2-1-9, 327 IAC 2-1-10, 327 IAC 2-1-11, 327 IAC 2-1.5-5, 327 IAC 2-1.5-18, 327 IAC 2-1.5-19, 327 IAC 2-6.1-5, 327 IAC 15-2-6, 327 IAC 15-13-5, 327 IAC 15-13-7, and 327 IAC 17-2-4 concerning exceptional use waters as required by IC 13-18-3-2 (Public Law 78-2009) and clarifies special designations of waters. Effective 30 days after filing with the Publisher.

HISTORY

First Notice of Comment Period: July 3, 2013, Indiana Register (DIN: 20130703-IR-327130290FNA).
Second Notice of Comment Period: October 23, 2013, Indiana Register (DIN: 20131023-IR-327130290SNA).
Notice of First Hearing: October 23, 2013, Indiana Register (DIN: 20131023-IR-327130290PHA).
Change in Notice of Public Hearing: January 29, 2014, Indiana Register (DIN: 20140129-IR-327130290CHA)
Date of First Hearing: April 9, 2014.
Proposed Rule: May 7, 2014, Indiana Register (DIN: 20140507-IR-327130290PRA).
Notice of Public Hearing: May 7, 2014, Indiana Register (DIN: 20140507-IR-327130290PHA).
Change in Notice of Public Hearing: June 4, 2014, Indiana Register (DIN: 20140604-IR-327130290CHA)
Date of Second Public Hearing: September 10, 2014.

327 IAC 2-1-3; 327 IAC 2-1-6; 327 IAC 2-1-9; 327 IAC 2-1-10; 327 IAC 2-1-11; 327 IAC 2-1.5-5; 327 IAC 2-1.5-18; 327 IAC 2-1.5-19; 327 IAC 2-6.1-5; 327 IAC 15-2-6; 327 IAC 15-13-5; 327 IAC 15-13-7; 327 IAC 17-2-4

SECTION 1. 327 IAC 2-1-3 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1-3 Surface water use designations; multiple uses

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4

Sec. 3. (a) The following water uses are designated by the ~~water pollution control~~ **environmental rules** board:
(1) Except as provided in subsection (c), surface waters of the state are designated for full body contact recreation as provided in section 6(d) of this rule.
(2) All waters, except as described in subdivision (5), will be capable of supporting:
(A) a well-balanced, warm water aquatic community; and
(B) where natural temperatures will permit, put-and-take trout fishing.
All waters capable of supporting the natural reproduction of trout as of February 17, 1977, shall be so maintained.
(3) All waters that are used for public or industrial water supply must meet the standards for those uses at the points where the water is withdrawn. This use designation and its corresponding water quality standards are not to be construed as imposing a user restriction on those exercising or desiring to exercise the use.
(4) All waters that are used for agricultural purposes must, as a minimum, meet the standards established in section 6(a) of this rule.
(5) All waters in which naturally poor physical characteristics (including lack of sufficient flow), naturally poor chemical quality, or irreversible man-induced conditions, which came into existence before January 1, 1983, and having been established by use attainability analysis, public comment period, and hearing:
(A) may qualify to be classified for limited use; and
(B) must be evaluated for restoration and upgrading at each triennial review of this rule.
Specific waters of the state designated for limited use are listed in section 11(a) of this rule.
~~(6) All waters that:~~
~~(A) provide unusual aquatic habitat;~~
~~(B) are an integral feature of an area of exceptional natural beauty or character; or~~
~~(C) support unique assemblages of aquatic organisms:~~
~~may be classified for exceptional use. Specific waters of the state designated for exceptional use are listed in section 11(b) of this rule.~~

(b) Where multiple uses have been designated for a body of water, the most protective of all simultaneously applicable standards will apply.

(c) A CSO wet weather limited use designation is established as a subcategory of the recreational use designation established under subsection (a). This subcategory shall be applied in accordance with section 3.1 of this rule.

(Water Pollution Control Division; 327 IAC 2-1-3; filed Sep 24, 1987, 3:00 p.m.: 11 IR 580; filed Feb 1, 1990, 4:30 p.m.: 13 IR 1019; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1348; filed Sep 6, 2007, 12:25 p.m.: 20071003-IR-327050218FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 2. 327 IAC 2-1-6 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1-6 Minimum surface water quality standards

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-11-2-258; IC 13-18-4; IC 13-30-2-1; IC 14-22-9

Sec. 6. (a) The following are minimum surface water quality conditions:
(1) All surface waters at all times and at all places, including waters within the mixing zone, shall meet the minimum conditions of being free from substances, materials, floating debris, oil, or scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:
(A) Will settle to form putrescent or otherwise objectionable deposits.
(B) Are in amounts sufficient to be unsightly or deleterious.
(C) Produce:
(i) color;
(ii) visible oil sheen;
(iii) odor; or
(iv) other conditions;
in such degree as to create a nuisance.
(D) Are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such degree as to:
(i) create a nuisance;
(ii) be unsightly; or
(iii) otherwise impair the designated uses.
(E) Are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill, aquatic life, other animals, plants, or humans. To assure protection of aquatic life, concentrations of toxic substances shall not exceed the final acute value (FAV = 2 (AAC)) in the undiluted discharge or the acute aquatic criterion (AAC) outside the zone of initial dilution or, if applicable, the zone of discharge-induced mixing:
(i) for certain substances, an AAC is established and set forth in subdivision (3), Table 6-1, subdivision (3), Table 6-2 (which table incorporates subdivision (4), Table 6-3), and subdivision (5);
(ii) for substances for which an AAC is not specified in subdivision (3), Table 6-1, subdivision (3), Table 6-2, or subdivision (5), an AAC can be calculated by the commissioner using the procedures in section 8.2 of this rule; and
(iii) the AAC determined under item (i) or (ii) may be modified on a site-specific basis to reflect local conditions in accordance with section 8.9 of this rule.
This clause shall not apply to the chemical control of plants and animals when that control is performed in compliance with approval conditions specified by the Indiana department of natural resources as provided by IC 14-22-9.
(2) At all times, all surface waters outside of mixing zones shall be free of substances in concentrations that on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants. To assure protection against the adverse effects identified in this subdivision, the following requirements are established:
(A) A toxic substance or pollutant shall not be present in such waters in concentrations that exceed the most stringent of the following continuous criterion concentrations (CCCs):
(i) A chronic aquatic criterion (CAC) to protect aquatic life from chronic toxic effects.
(ii) A terrestrial life cycle safe concentration (TLSC) to protect terrestrial organisms from toxic effects that may result from the consumption of aquatic organisms or water from the waterbody.
(iii) A human life cycle safe concentration (HLSC) to protect human health from toxic effects that may result from the consumption of aquatic organisms or drinking water from the waterbody.
(iv) For carcinogenic substances, a criterion to protect human health from unacceptable cancer risk of

greater than one (1) additional occurrence of cancer per one hundred thousand (100,000) population.

(B) For certain substances, one (1) or more of the CCCs identified in clause (A) are established and set forth in subdivision (3), Table 6-1, subdivision (3), Table 6-2 (which table incorporates subdivision (4), Table 6-3), and subdivision (5).

(C) For substances for which one (1) or more of the CCCs identified in clause (A) are not specified in subdivision (3), Table 6-1, subdivision (3), Table 6-2, or subdivision (5), such criterion or criteria may be calculated by the commissioner using the corresponding procedures prescribed by sections 8.3 through 8.6 of this rule.

(D) A CCC determined under clause (B) or (C) may be modified on a site-specific basis to reflect local conditions in accordance with section 8.9 of this rule.

(E) The CAC and TLSC for a substance apply in all surface waters outside a mixing zone for a discharge of that substance. Similarly, in waters where a public water system intake is not present or is unaffected by the discharge of a substance, the HLSC and the carcinogenic criterion for that substance based on consumption of organisms from the waterbody and only incidental ingestion of water shall apply to all surface waters outside the mixing zone for a discharge of that substance. In surface waters where a public water system intake is present, the HLSC and the carcinogenic criterion for a substance based on consumption of organisms and potable water from the waterbody shall apply at the point of the public water system intake.

(3) The following establishes surface water quality criteria for specific substances:

Table 6-1
Surface Water Quality Criteria for Specific Substances

AAC (Maximum)		CCC		
		Outside of Mixing Zone		Point of Water Intake
Substances		Aquatic Life (CAC) (4-Day Average)	Human Health (30-Day Average)	Human Health (30-Day Average)
Metals (µg/l)				
(Total recoverable)				
Antimony			45,000 (T)	146 (T)
Arsenic (III)	#	#	0.175 (C)	0.022 (C)
Barium				1,000 (D)
Beryllium			1.17 (C)	0.068 (C)
Cadmium	#	#		10 (D)
Chromium (III)	#	#	3,433,000 (T)	170,000 (T)
Chromium (VI)	#	#		50 (D)
Copper	#	#		
Lead	#	#		50 (D)
Mercury$	2.4	0.012	0.15 (T)	0.14 (T)
Nickel	#	#	100 (T)	13.4 (T)
Selenium	130*	35		10 (D)
Silver	#			50 (D)
Thallium			48 (T)	13 (T)
Zinc	#	#		
Organics (µg/l)				
Acrolein			780 (T)	320 (T)
Acrylonitrile			6.5 (C)	0.58 (C)
Aldrin$	1.5*		0.00079 (C)	0.00074 (C)
Benzene			400 (C)	6.6 (C)
Benzidine			0.0053 (C)	0.0012 (C)
Carbon Tetrachloride			69.4 (C)	4.0 (C)
Chlordane$	1.2*	0.0043	0.0048 (C)	0.0046 (C)
Chlorinated Benzenes				
Monochlorobenzene				488 (T)
1,2,4,5-Tetrachlorobenzene $			48 (T)	38 (T)
Pentachlorobenzene $			85 (T)	74 (T)
Hexachlorbenzene$			0.0074 (C)	0.0072 (C)
Chlorinated Ethanes				

1,2-dichloroethane			2,430 (C)	9.4 (C)
1,1,1-trichloroethane			1,030,000 (T)	18,400 (T)
1,1,2-trichloroethane			418 (C)	6.0 (C)
1,1,2,2-tetrachloroethane			107 (C)	1.7 (C)
Hexachloroethane			87.4 (C)	19 (C)
Chlorinated Phenols				
2,4,5-trichlorophenol				2,600 (T)
2,4,6-trichlorophenol			36 (C)	12 (C)
Chloroalkyl Ethers				
bis(2-chloroisopropyl) ether			4,360 (T)	34.7 (T)
bis(chloromethyl) ether			0.018 (C)	0.000038 (C)
bis(2-chloroethyl) ether			13.6 (C)	0.3 (C)
Chloroform			157 (C)	1.9 (C)
Chlorpyrifos	0.083	0.041		
DDT$	0.55*	0.0010	0.00024 (C)	0.00024 (C)
Dichlorobenzenes			2,600 (T)	400 (T)
Dichlorobenzidine			0.2 (C)	0.1 (C)
1,1-dichloroethylene			18.5 (C)	0.33 (C)
2,4-dichlorophenol				3,090 (T)
Dichloropropenes			14,100 (T)	87 (T)
Dieldrin$	1.3*	0.0019	0.00076 (C)	0.00071 (C)
2,4-dinitrotoluene			91 (C)	1.1 (C)
Dioxin (2,3,7,8-TCDD)$			0.0000001 (C)	0.0000001 (C)
1,2-diphenylhydrazine			5.6 (C)	0.422 (C)
Endosulfan	0.11*	0.056	159 (T)	74 (T)
Endrin$	0.09*	0.0023		1.0 (D)
Ethylbenzene			3,280 (T)	1,400 (T)
Fluoranthene			54 (T)	42 (T)
Halomethanes			157 (C)	1.9 (C)
Heptachlor$	0.26*	0.0038	0.0028 (C)	0.0028 (C)
Hexachlorobutadiene$			500 (C)	4.47 (C)
Hexachlorocyclohexane (HCH)				
alpha HCH$			0.31 (C)	0.09 (C)
beta HCH$			0.55 (C)	0.16 (C)
gamma HCH (Lindane)$	1.0*	0.080	0.63 (C)	0.19 (C)
Technical HCH$			0.41 (C)	0.12 (C)
Hexachlorocyclopentadiene				206 (T)
Isophorone			520,000 (T)	5,200 (T)
Nitrobenzene				19,800 (T)
Nitrophenols				
4,6-dinitro-o-cresol			765 (T)	13.4 (T)
Dinitrophenol			14,300 (T)	70 (T)
Nitrosamines				
N-nitrosodiethylamine			12.4 (C)	0.008 (C)
N-nitrosodimethylamine			160 (C)	0.014 (C)
N-nitrosodibutylamine			5.9 (C)	0.064 (C)
N-nitrosodiphenylamine			161 (C)	49 (C)
N-nitrosopyrrolidine			919 (C)	0.16 (C)
Parathion	0.065	0.013		
Pentachlorophenol	$e^{(1.005\ [pH]-4.830)}$	$e^{(1.005\ [pH]-5.290)}$		1,000 (T)
Phenol				3,500 (T)
Phthalate Esters				
Dimethyl phthalate			2,900,000 (T)	313,000 (T)
Diethyl phthalate			1,800,000 (T)	350,000 (T)
Dibutyl phthalate			154,000 (T)	34,000 (T)
Di-2-ethylhexyl phthalate			50,000 (T)	15,000 (T)

Polychlorinated Biphenyls (PCBs)$		0.014	0.00079 (C)	0.00079 (C)
Carcinogenic Polynuclear Aromatic Hydrocarbons (PAHs)			0.31 (C)	0.028 (C)
Tetrachloroethylene			88.5 (C)	8 (C)
Toluene			424,000 (T)	14,300 (T)
Toxaphene$	0.73	0.0002	0.0073 (C)	0.0071 (C)
Trichloroethylene			807 (C)	27 (C)
Vinyl Chloride			5,246 (C)	20 (C)
Other Substances				
Asbestos (fibers/liter)				300,000 (C)
Chloride (mg/l)	**	**		
Chlorine (Total Residual) (µg/l)	19	11		
Chlorine[a] (mg/l) (intermittent, total residual)		0.2		
Cyanide (Free) (µg/l)	22	5.2		
Cyanide (Total) (µg/l)				200 (D)
Nitrate-N + Nitrite-N (mg/l)				10 (D)
Nitrite-N (mg/l)				1.0 (D)

Fluoride shall not exceed two (2.0) mg/l in all surface waters outside of the mixing zone except the Ohio River and Interstate Wabash River where it shall not exceed one (1.0) mg/l outside of the mixing zone.

Sulfate shall not exceed the criteria established in subdivision (6) in all surface waters outside of the mixing zone.

#The AAC and CAC for this substance are established in Table 6-2.

*One-half (1/2) of the final acute value (FAV) as calculated by procedures developed by U.S. EPA in 1980. This value would correspond to acute aquatic values calculated using IDEM procedures or U.S. EPA procedures developed in 1985 in which the calculated FAV is divided by two (2) to reduce acute toxicity.

**The AAC and CAC for this substance are established in subdivision (5).

T derived from threshold toxicity.

C derived from nonthreshold cancer risk.

D derived from drinking water standards, equal to or less than threshold toxicity.

$This substance is a bioaccumulative chemical of concern.

[a]To be considered an intermittent discharge, total residual chlorine shall not be detected in the discharge for a period of more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours.

Table 6-2

Surface Water Quality Criteria for Specific Substances

Substances	AAC (Maximum) (µg/l)	AAC Conversion Factors	CAC (4-Day Average) (µg/l)	CAC Conversion Factors
Metals (dissolved)[1]				
Arsenic (III)	WER[2](360)	1.000	WER[2](190)	1.000
Cadmium	WER[2](e$^{(1.128 [\ln(hardness)]-3.828)}$)	1.136672-[(ln hardness) (0.041838)]	WER[2](e$^{(0.7852 [\ln(hardness)]-3.490)}$)	1.101672-[(ln hardness) (0.041838)]
Chromium (III)	WER[2](e$^{(0.819 [\ln(hardness)]+3.688)}$)	0.316	WER[2](e$^{(0.8190 [\ln(hardness)]+1.561)}$)	0.860
Chromium (VI)	WER[2](16)	0.982	WER[2](11)	0.962
Copper	WER[2](e$^{(0.9422 [\ln(hardness)]-1.464)}$)	0.960	WER[2](e$^{(0.8545 [\ln(hardness)]-1.465)}$)	0.960
Lead	WER[2](e$^{(1.273 [\ln(hardness)]-1.460)}$)	1.46203-[(ln hardness) (0.145712)]	WER[2](e$^{(1.273 [\ln(hardness)]-4.705)}$)	1.46203-[(ln hardness) (0.145712)]

Nickel	WER[2](e(0.8460 [ln(hardness)]+3.3612))	0.998	WER[2](e(0.8460 [ln(hardness)]+1.1645))	0.997
Silver	WER[2](e(1.72 [ln(hardness)]-6.52)/2[3])	0.85		
Zinc	WER[2](e(0.8473 [ln(hardness)]+0.8604))	0.978	WER[2](e(0.8473 [ln(hardness)]+0.7614))	0.986

[1] The AAC and CAC columns of this table contain total recoverable metals criteria (numeric and hardness-based). The criterion for the dissolved metal is calculated by multiplying the appropriate conversion factor by the AAC or CAC. This dissolved AAC or CAC shall be rounded to two (2) significant digits, except when the criteria are used as intermediate values in a calculation, such as in the calculation of water quality-based effluent limitations (WQBELs).

[2] A value of one (1) shall be used for the water-effect ratio (WER) unless an alternate value is established under section 8.9 of this rule.

[3] One-half (1/2) of the FAV as calculated by procedures developed by U.S. EPA in 1980. This value would correspond to acute aquatic values calculated using IDEM procedures or U.S. EPA procedures developed in 1985 in which the calculated FAV is divided by two (2) to reduce acute toxicity.

(4) The following establishes dissolved AAC and CAC for certain metals at selected hardness values calculated from the equations and conversion factors in subdivision (3), Table 6-2 and using a value of one (1) for the WER:

Table 6-3

Metals Concentrations in Micrograms Per Liter; Hardness in Milligrams Per Liter $CaCO_3$[1]

	Arsenic (III)		Cadmium		Chromium (III)		Chromium (VI)		Copper		Lead		Nickel		Silver		Zinc	
Hardness	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC	AAC	CAC
50	360	190	1.7	0.62	310	100	16	11	8.9	6.3	30	1.2	790	87	0.52	–	64	58
100	360	190	3.7	1.0	550	180	16	11	17	11	65	2.5	1400	160	1.7	–	110	100
150	360	190	5.7	1.4	760	250	16	11	25	16	100	3.9	2000	220	3.5	–	160	150
200	360	190	7.8	1.7	970	310	16	11	33	21	140	5.3	2500	280	5.7	–	210	190
250	360	190	10	2.0	1200	380	16	11	40	25	170	6.7	3100	340	8.3	–	250	230
300	360	190	12	2.3	1300	440	16	11	48	29	210	8.1	3600	400	11	–	290	270
350	360	190	14	2.6	1500	500	16	11	55	33	240	9.5	4100	450	15	–	330	300
400	360	190	17	2.9	1700	550	16	11	63	37	280	11	4600	510	19	–	370	340
450	360	190	19	3.1	1900	610	16	11	70	41	320	12	5100	560	23	–	410	370
500	360	190	21	3.4	2100	670	16	11	78	45	350	14	5500	610	27	–	450	410

[1] The dissolved metals criteria in this table have been rounded to two (2) significant digits in accordance with subdivision (3), Table 6-2. The equations and conversion factors in subdivision (3), Table 6-2 shall be used instead of the criteria in this table when dissolved metals criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs.

(5) The following establishes surface water quality criteria for chloride for protection of aquatic life:

(A) The following provides the AAC for chloride as a function of hardness (in mg/l as $CaCO_3$) and sulfate (in mg/l) in surface waters:

$$C = 287.8\ (\text{hardness})^{0.205797}\ (\text{sulfate})^{-0.07452}$$

Where: C = chloride AAC (maximum) in mg/l.

(B) The following provides the CAC for chloride as a function of hardness (in mg/l as $CaCO_3$) and sulfate (in mg/l) in surface waters:

$$C = 177.87\ (\text{hardness})^{0.205797}\ (\text{sulfate})^{-0.07452}$$

Where: C = chloride CAC (4-day average) in mg/l.

(C) The following applies to the AAC and CAC for chloride provided in this subdivision:

(i) Chloride criteria may only be established based on a sulfate concentration greater than the water quality criterion for sulfate, as established under subdivision (6), where the water quality criterion for sulfate has been modified on a site-specific basis in accordance with either the variance provisions under section 8.8

of this rule or the site-specific criteria provisions under section 8.9 of this rule.

(ii) The AAC and CAC for chloride calculated from the equations in this subdivision shall be rounded to the nearest whole numbers, except when the criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs.

(D) The following establishes the AAC for chloride in mg/l at selected concentrations of hardness and sulfate, with the understanding that the equation in clause (A) shall be used instead of the criteria in this clause when chloride criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs:

	Hardness (mg/l)									
Sulfate (mg/l)	50	100	150	200	250	300	350	400	450	500
15	526	607	660	700	733	761	785	807	827	845
20	515	594	646	685	717	745	769	790	809	827
25	506	584	635	674	705	732	756	777	796	813
50	481	555	603	640	670	695	718	738	756	773
100	457	527	573	608	636	660	682	701	718	734
150	443	511	556	589	617	641	661	680	697	712
200	434	500	544	577	604	627	647	665	682	697
250	427	492	535	567	594	617	637	654	671	685
300	421	485	528	560	586	609	628	646	661	676
350	416	480	522	553	579	602	621	638	654	668
400	412	475	516	548	574	596	615	632	647	662
450	408	471	512	543	569	590	609	626	642	656
500	405	467	508	539	564	586	605	622	637	651

(E) The following establishes the CAC for chloride in mg/l at selected concentrations of hardness and sulfate, with the understanding that the equation in clause (B) shall be used instead of the criteria in this clause when chloride criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs:

	Hardness (mg/l)									
Sulfate (mg/l)	50	100	150	200	250	300	350	400	450	500
15	325	375	408	433	453	470	485	499	511	522
20	318	367	399	423	443	460	475	488	500	511
25	313	361	392	416	436	453	467	480	492	503
50	297	343	373	395	414	430	444	456	467	477
100	282	326	354	375	393	408	421	433	444	453
150	274	316	343	364	381	396	409	420	430	440
200	268	309	336	357	373	388	400	411	421	431
250	264	304	331	351	367	381	394	404	414	423
300	260	300	326	346	362	376	388	399	409	418
350	257	297	322	342	358	372	384	394	404	413
400	255	294	319	339	355	368	380	391	400	409
450	252	291	316	336	351	365	377	387	397	405
500	250	289	314	333	349	362	374	384	394	402

(6) The following establishes surface water quality criteria for sulfate that shall not be exceeded in all surface waters outside of the mixing zone:

(A) The following provides surface water quality criteria for sulfate in mg/l for the specified ranges of hardness (in mg/l as $CaCO_3$) or chloride (in mg/l), or both:

(i) If the hardness concentration of surface waters is greater than or equal to one hundred (100) mg/l but less than or equal to five hundred (500) mg/l, and if the chloride concentration of surface waters is greater than or equal to five (5) mg/l but less than twenty-five (25) mg/l, then:

$$C = [-57.478 + 5.79\ (\text{hardness}) + 54.163\ (\text{chloride})] \times 0.65$$

Where: C = sulfate criterion in mg/l.

(ii) If the hardness concentration of surface waters is greater than or equal to one hundred (100) mg/l but less than or equal to five hundred (500) mg/l, and if the chloride concentration of surface waters is greater than or equal to twenty-five (25) mg/l but less than or equal to five hundred (500) mg/l, then:

$$C = [1276.7 + 5.508\ (\text{hardness}) - 1.457\ (\text{chloride})] \times 0.65$$

Where: C = sulfate criterion in mg/l.

(iii) If the hardness concentration of surface waters is less than one hundred (100) mg/l and the chloride

concentration of surface waters is less than or equal to five hundred (500) mg/l, the sulfate criterion is five hundred (500) mg/l.

(iv) If the hardness concentration of surface waters is greater than five hundred (500) mg/l and the chloride concentration of surface waters is greater than or equal to five (5) mg/l, but less than or equal to five hundred (500) mg/l, the sulfate criterion shall be calculated using a hardness concentration of five hundred (500) mg/l and the equation in item (i) or (ii) that applies to the chloride concentration.

(v) If the chloride concentration of surface waters is less than five (5) mg/l, the sulfate criterion is five hundred (500) mg/l.

(B) The following applies to the surface water quality criteria for sulfate provided in clause (A):

(i) Sulfate criteria may only be established based on a chloride concentration greater than the CAC for chloride established under subdivision (5) where the CAC for chloride has been modified on a site-specific basis in accordance with either the variance provisions under section 8.8 of this rule or the site-specific criteria provisions under section 8.9 of this rule.

(ii) The surface water quality criteria for sulfate calculated from equations in clause (A) shall be rounded to the nearest whole numbers, except when the criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs.

(C) The following establishes surface water quality criteria for sulfate in mg/l at selected concentrations of hardness and chloride, with the understanding that the equations in clause (A) shall be used instead of the criteria in this clause when sulfate criteria are used as intermediate values in a calculation, such as in the calculation of WQBELs:

	Hardness (mg/l)										
Chloride (mg/l)	<100	100	150	200	250	300	350	400	450	500	>500
<5	500	500	500	500	500	500	500	500	500	500	500
5	500	515	703	891	1,080	1,268	1,456	1,644	1,832	2,020	2,020
10	500	691	879	1,067	1,256	1,444	1,632	1,820	2,008	2,196	2,196
15	500	867	1,055	1,243	1,432	1,620	1,808	1,996	2,184	2,372	2,372
20	500	1,043	1,231	1,419	1,608	1,796	1,984	2,172	2,360	2,549	2,549
25	500	1,164	1,343	1,522	1,701	1,880	2,059	2,238	2,417	2,596	2,596
50	500	1,141	1,320	1,499	1,678	1,857	2,036	2,215	2,394	2,573	2,573
100	500	1,093	1,272	1,451	1,630	1,809	1,988	2,167	2,346	2,525	2,525
150	500	1,046	1,225	1,404	1,583	1,762	1,941	2,120	2,299	2,478	2,478
200	500	998	1,177	1,356	1,535	1,715	1,894	2,073	2,252	2,431	2,431
250	500	951	1,130	1,309	1,488	1,667	1,846	2,025	2,204	2,383	2,383

(b) This subsection establishes minimum surface water quality for aquatic life. In addition to subsection (a), subdivisions (1) through (5) are established to ensure conditions necessary for the maintenance of a well-balanced aquatic community. The following are applicable at any point in the waters outside of the mixing zone:

(1) There shall be no substances that:

(A) impart unpalatable flavor to food fish; or

(B) result in offensive odors in the vicinity of the water.

(2) No pH values below six (6.0) or above nine (9.0), except daily fluctuations that:

(A) exceed pH nine (9.0); and

(B) are correlated with photosynthetic activity;

shall be permitted.

(3) Concentrations of dissolved oxygen shall:

(A) average at least five (5.0) milligrams per liter per calendar day; and

(B) not be less than four (4.0) milligrams per liter at any time.

(4) The following are conditions for temperature:

(A) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

(B) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.

(C) The maximum temperature rise at any time or place above natural temperatures shall not exceed:

(i) five (5) degrees Fahrenheit (two and eight-tenths (2.8) degrees Celsius) in streams; and

(ii) three (3) degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius) in lakes and reservoirs.

(D) Water temperatures shall not exceed the maximum limits in the following table during more than one percent (1%) of the hours in the twelve (12) month period ending with any month. At no time shall the water temperature at such locations exceed the maximum limits in the following table by more than three (3)

degrees Fahrenheit (one and seven-tenths (1.7) degrees Celsius):

Table 6-4

	Ohio River Main Stem °F(°C)	Other Indiana Streams °F(°C)
January	50 (10.0)	50 (10.0)
February	50 (10.0)	50 (10.0)
March	60 (15.6)	60 (15.6)
April	70 (21.1)	70 (21.1)
May	80 (26.7)	80 (26.7)
June	87 (30.6)	90 (32.2)
July	89 (31.7)	90 (32.2)
August	89 (31.7)	90 (32.2)
September	87 (30.7)	90 (32.2)
October	78 (25.6)	78 (25.5)
November	70 (21.1)	70 (21.1)
December	57 (14.0)	57 (14.0)

(5) The following criteria will be used to regulate ammonia:

(A) Except for waters covered in clause (B), at all times, all surface waters outside of mixing zones shall be free of substances in concentrations that, on the basis of available scientific data, are believed to be sufficient to:

(i) injure;

(ii) be chronically toxic to; or

(iii) be carcinogenic, mutagenic, or teratogenic to;

humans, animals, aquatic life, or plants.

(B) For those waters listed in subsection (c), the following ammonia criteria will apply outside the mixing zone:

Maximum Ammonia Concentrations

(Unionized Ammonia as N)***

(mg/l)

	Temperature (°C)						
pH	0	5	10	15	20	25	30
6.5	0.0075	0.0106	0.0150	0.0211	0.0299	0.0299	0.0299
6.6	0.0092	0.0130	0.0183	0.0259	0.0365	0.0365	0.0365
6.7	0.0112	0.0158	0.0223	0.0315	0.0444	0.0444	0.0444
6.8	0.0135	0.0190	0.0269	0.0380	0.0536	0.0536	0.0536
6.9	0.0161	0.0228	0.0322	0.0454	0.0642	0.0642	0.0642
7.0	0.0191	0.0270	0.0381	0.0539	0.0761	0.0761	0.0761
7.1	0.0244	0.0316	0.0447	0.0631	0.0892	0.0892	0.0892
7.2	0.0260	0.0367	0.0518	0.0732	0.1034	0.1034	0.1034
7.3	0.0297	0.0420	0.0593	0.0837	0.1183	0.1183	0.1183
7.4	0.0336	0.0474	0.0669	0.0946	0.1336	0.1336	0.1336
7.5	0.0374	0.0528	0.0746	0.1054	0.1489	0.1489	0.1489
7.6	0.0411	0.0581	0.0821	0.1160	0.1638	0.1638	0.1638
7.7	0.0447	0.0631	0.0892	0.1260	0.1780	0.1780	0.1780
7.8	0.0480	0.0678	0.0958	0.1353	0.1911	0.1911	0.1911
7.9	0.0510	0.0720	0.1017	0.1437	0.2030	0.2030	0.2030
8.0	0.0536	0.0758	0.1070	0.1512	0.2135	0.2135	0.2135
8.1	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.2	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.3	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.4	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.5	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.6	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.7	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.8	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
8.9	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137
9.0	0.0537	0.0758	0.1071	0.1513	0.2137	0.2137	0.2137

***To calculate total ammonia, divide the number in the table by the value determined by: $1/(10^{pK_a - pH} + 1)$.

Where: pK_a = 0.09018 + (2729.92/(T + 273.2))
pH = pH of water
T = °C

24-Hour Average Ammonia Concentrations
(Unionized Ammonia as N)***
(mg/l)
Temperature (°C)

pH	0	5	10	15	20	25	30
6.5	0.0005	0.0008	0.0011	0.0015	0.0015	0.0015	0.0015
6.6	0.0007	0.0010	0.0014	0.0019	0.0019	0.0019	0.0019
6.7	0.0009	0.0012	0.0017	0.0024	0.0024	0.0024	0.0024
6.8	0.0011	0.0015	0.0022	0.0031	0.0031	0.0031	0.0031
6.9	0.0014	0.0019	0.0027	0.0038	0.0038	0.0038	0.0038
7.0	0.0017	0.0024	0.0034	0.0048	0.0048	0.0048	0.0048
7.1	0.0022	0.0031	0.0043	0.0061	0.0061	0.0061	0.0061
7.2	0.0027	0.0038	0.0054	0.0077	0.0077	0.0077	0.0077
7.3	0.0034	0.0048	0.0068	0.0097	0.0097	0.0097	0.0097
7.4	0.0043	0.0061	0.0086	0.0122	0.0122	0.0122	0.0122
7.5	0.0054	0.0077	0.0108	0.0153	0.0153	0.0153	0.0153
7.6	0.0068	0.0097	0.0136	0.0193	0.0193	0.0193	0.0193
7.7	0.0086	0.0122	0.0172	0.0242	0.0242	0.0242	0.0242
7.8	0.0092	0.0130	0.0184	0.0260	0.0260	0.0260	0.0260
7.9	0.0098	0.0138	0.0196	0.0276	0.0276	0.0276	0.0276
8.0	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.1	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.2	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.3	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.4	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.5	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.6	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.7	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.8	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
8.9	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294
9.0	0.0103	0.0146	0.0206	0.0294	0.0294	0.0294	0.0294

***To calculate total ammonia, divide the number in the table by the value determined by: $1/(10^{pK_a - pH} + 1)$.

Where: pK_a = 0.09018 + (2729.92/(T + 273.2))
pH = pH of water
T = °C

(c) This subsection establishes surface water quality for cold-water fish. In addition to subsections (a) and (b), the following criteria are established to ensure conditions necessary for the maintenance of a well-balanced, cold-water fish community and are applicable at any point in the waters outside of the mixing zone:

(1) Waters:
(A) designated as salmonid waters; and
(B) that shall be protected for cold-water fish;
are those waters designated by the Indiana department of natural resources for put-and-take trout fishing.

(2) In the waters listed in subdivision (1), dissolved oxygen concentrations shall not be less than:
(A) six (6.0) milligrams per liter at any time; and
(B) seven (7.0) milligrams per liter in areas where spawning occurs during the spawning season and in areas used for imprinting during the time salmonids are being imprinted.

(3) In those waters listed in subdivision (1), the maximum temperature rise above natural shall not exceed two (2) degrees Fahrenheit (one and one-tenth (1.1) degrees Celsius) at any time or place and, unless due to

natural causes, the temperature shall not exceed the following:
(A) Seventy (70) degrees Fahrenheit (twenty-one and one-tenth (21.1) degrees Celsius) at any time.
(B) Sixty-five (65) degrees Fahrenheit (eighteen and three-tenths (18.3) degrees Celsius) during spawning and imprinting periods.

(d) This subsection establishes bacteriological quality for recreational uses during the recreational season as follows:
(1) The recreational season is defined as the months of April through October, inclusive.
(2) In addition to subsection (a), the criteria in this subsection are to be used to do the following:
(A) Evaluate waters for full body contact recreational uses.
(B) Establish wastewater treatment requirements.
(C) Establish effluent limits during the recreational season.
(3) For full body contact recreational uses, E. coli bacteria shall not exceed the following:
(A) One hundred twenty-five (125) per one hundred (100) milliliters as a geometric mean based on not less than five (5) samples equally spaced over a thirty (30) day period.
(B) Two hundred thirty-five (235) per one hundred (100) milliliters in any one (1) sample in a thirty (30) day period, except that in cases where there are at least ten (10) samples at a given site, up to ten percent (10%) of the samples may exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters where the:
(i) E. coli exceedances are incidental and attributable solely to E. coli resulting from the discharge of treated wastewater from a wastewater treatment plant as defined at IC 13-11-2-258; and
(ii) criterion in clause (A) is met.
However, a single sample shall be used for making beach notification and closure decisions.
If a geometric mean cannot be calculated because five (5) equally spaced samples are not available, then the criterion stated in clause (B) must be met.
(4) For demonstrating compliance with wastewater treatment requirements, sanitary wastewater dischargers shall ensure the following:
(A) The concentration of E. coli in the undiluted discharge does not exceed one hundred twenty-five (125) cfu or MPN per one hundred (100) milliliters as a geometric mean of the effluent samples taken in a calendar month.
(B) Not more than ten percent (10%) of all samples when not less than ten (10) samples are taken and analyzed for E. coli in a calendar month exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters as a daily maximum. Under this clause, the calculation of ten percent (10%) of the samples taken shall be limited to the lowest whole number result.
(5) Effluent limits to implement the criteria in subdivision (3) during the recreational season shall be established in NPDES permits by incorporating the following that are to be applied to the undiluted discharge:
(A) The concentration of E. coli in the undiluted discharge shall not exceed one hundred twenty-five (125) cfu or MPN per one hundred (100) milliliters as a geometric mean of the effluent samples taken in a calendar month.
(B) Not more than ten percent (10%) of all samples in a calendar month exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters as a daily maximum. Under this clause, the calculation of ten percent (10%) of the samples taken shall be limited to the lowest whole number result.

(e) This subsection establishes surface water quality for public water supply. In addition to subsections (a) and (d), the following criteria are established to protect the surface water quality at the point at which water is withdrawn for treatment for public supply:
(1) The coliform bacteria group shall not exceed the following:
(A) Five thousand (5,000) per one hundred (100) milliliters as a monthly average value (either MPN or MF count).
(B) Five thousand (5,000) per one hundred (100) milliliters in more than twenty percent (20%) of the samples examined during any month.
(C) Twenty thousand (20,000) per one hundred (100) milliliters in more than five percent (5%) of the samples examined during any month.
(2) Taste and odor producing substances, other than naturally occurring, shall not interfere with the production of a finished water by conventional treatment consisting of the following:
(A) Coagulation.
(B) Sedimentation.
(C) Filtration.
(D) Disinfection.
(3) The concentrations of either chloride or sulfate shall not exceed two hundred fifty (250) milligrams per liter

unless due to naturally occurring sources.
(4) The concentration of dissolved solids shall not exceed seven hundred fifty (750) milligrams per liter unless due to naturally occurring sources. A specific conductance of one thousand two hundred (1,200) micromhos per centimeter (at twenty-five (25) degrees Celsius) may be considered equivalent to a dissolved solids concentration of seven hundred fifty (750) milligrams per liter.
(5) Surface waters shall be considered acceptable for public water supply if radium-226 and strontium-90 are present in amounts not exceeding three (3) and ten (10) picocuries per liter, respectively. In the known absence of strontium-90 and alpha emitters, the water supply is acceptable when the gross beta concentrations do not exceed one thousand (1,000) picocuries per liter.
(6) Chemical constituents in the waters shall not be present in such levels as to prevent, after conventional treatment, meeting the drinking water standards contained in 327 IAC 8-2, due to other than natural causes.

(f) This subsection establishes surface water quality for industrial water supply. In addition to subsection (a), the criterion to ensure protection of water quality at the point at which water is withdrawn for use (either with or without treatment) for industrial cooling and processing is that, other than from naturally occurring sources, the dissolved solids shall not exceed seven hundred fifty (750) milligrams per liter at any time. A specific conductance of one thousand two hundred (1,200) micromhos per centimeter (at twenty-five (25) degrees Celsius) may be considered equivalent to a dissolved solids concentration of seven hundred fifty (750) milligrams per liter.

(g) This subsection establishes surface water quality for agricultural uses. The criteria to ensure water quality conditions necessary for agricultural use are the same as those in subsection (a).

(h) This subsection establishes surface water quality for limited uses. The quality of waters classified for limited uses under section 3(a)(5) of this rule shall, at a minimum, meet the following criteria:
(1) The criteria contained in subsection (a).
(2) The criteria contained in subsection (d).
(3) The criteria contained in subsection (f), where applicable.
(4) The waters must be aerobic at all times.
(5) Notwithstanding subdivisions (1) through (4), the quality of a limited use stream at the point where it becomes physically or chemically capable of supporting a higher use or at its interface with a higher use water segment shall meet the criteria that are applicable to the higher use water.

~~(i) This subsection establishes surface water quality for exceptional uses. Waters classified for exceptional uses warrant extraordinary protection. Unless criteria are otherwise specified on a case-by-case basis, the quality of all waters designated for exceptional use shall be maintained without degradation.~~

(Water Pollution Control Division; 327 IAC 2-1-6; filed Sep 24, 1987, 3:00 p.m.: 11 IR 581; filed Feb 1, 1990, 4:30 p.m.: 13 IR 1020; errata, 13 IR 1861; errata filed Jul 6, 1990, 5:00 p.m.: 13 IR 2003; filed Feb 26, 1993, 5:00 p.m.: 16 IR 1725; errata filed May 7, 1993, 4:00 p.m.: 16 IR 2189; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1348; errata filed Aug 11, 1997, 4:15 p.m.: 20 IR 3376; filed Feb 14, 2005, 10:05 a.m.: 28 IR 2047; errata filed Apr 6, 2006, 2:48 p.m.: 29 IR 2546; errata, 29 IR 3027; filed Mar 18, 2008, 2:26 p.m.: 20080416-IR-327060573FRA; filed May 22, 2008, 10:40 a.m.: 20080618-IR-327070185FRA; filed Jul 9, 2012, 2:54 p.m.: 20120808-IR-327110320FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 3. 327 IAC 2-1-9 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1-9 Definitions

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-11-2-265; IC 13-18-3-2; IC 13-18-4

Sec. 9. In addition to the definitions contained in IC 13-11-2, ~~and 327 IAC 1,~~ the following definitions apply throughout this title:
(1) "Acceptable daily intake" or "ADI" represents the maximum amount of a substance that if ingested daily for a lifetime results in no adverse effects to humans.
(2) "Acute aquatic criterion" or "AAC" means the highest concentration of chemical that if met instream will protect the aquatic life present from mortality or other irreversible effects due to short term exposure. The AAC is equal to one-half (1/2) the final acute value (FAV).
(3) "Acute toxicity" means concurrent and delayed adverse effects that result from an acute exposure and

occur within any short observation period, which begins when the exposure begins, may extend beyond the exposure period, and usually does not constitute a substantial portion of the life span of the organism.
(4) "Adverse effect" means any deleterious effect to organisms due to exposure to a substance. The term includes effects that are or may become debilitating, harmful, or toxic to the normal functions of the organism, but does not include nonharmful effects, such as tissue discoloration alone or the induction of enzymes involved in the metabolism of the substance.
(5) "Bioaccumulative chemical of concern" or "BCC" refers to the following substances:

Table 9-1
Bioaccumulative Chemicals of Concern

CAS Number	Substance
309002	Aldrin
57749	Chlordane
72548	4,4'-DDD; p,p'-DDD; 4,4'-TDE; p,p'-TDE
72559	4,4'-DDE; p,p'-DDE
50293	4,4'-DDT; p,p'-DDT
60571	Dieldrin
72208	Endrin
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene; hexachloro-1,3-butadiene
608731	Hexachlorocyclohexanes; BHCs
319846	alpha-Hexachlorocyclohexane; alpha-BHC
319857	beta-Hexachlorocyclohexane; beta-BHC
319868	delta-Hexachlorocyclohexane; delta-BHC
58899	Lindane; gamma-Hexachlorocyclohexane; gamma-BHC
7439976	Mercury
2385855	Mirex
29082744	Octachlorostyrene
1336363	PCBs; polychlorinated biphenyls
608935	Pentachlorobenzene
39801144	Photomirex
1746016	2,3,7,8-TCDD; dioxin
634662	1,2,3,4-Tetrachlorobenzene
95943	1,2,4,5-Tetrachlorobenzene
8001352	Toxaphene

(6) "Bioconcentration" means the net accumulation of a substance by an aquatic organism as a result of uptake directly from the ambient water through gill membranes or other external body surfaces.
(7) "Bioconcentration factor" or "BCF" means the ratio (in liters per kilogram) of a substance's concentration in tissue of an aquatic organism to its concentration in the ambient water, in situations where the organism is exposed through the water only and the ratio does not change substantially over time.
(8) "Carcinogen" means a chemical that causes an increased incidence of benign or malignant neoplasms, or a substantial decrease in the latency period between exposure and onset of neoplasms through oral or dermal exposure, or through inhalation exposure when the cancer occurs at nonrespiratory sites in at least one (1) mammalian species or man through epidemiological studies or clinical studies, or both.
(9) "Chronic aquatic criterion" or "CAC" means the highest concentration of chemical that if met instream will protect the aquatic life present from toxic effects due to long term exposure, for example, adverse effects on growth and reproduction.
(10) "Chronic toxicity" means concurrent and delayed adverse effects that occur only as a result of a chronic exposure.
(11) "Coliform bacteria" means all the aerobic and facultatively anaerobic, gram-negative, nonsporeforming bacilli that produce acid and gas from the fermentation of lactose.
(12) "Community" means a general collective term to describe the varieties of aquatic species and associated organisms living together in a waterbody.
(13) "Criteria conversion factors" refers to the conversion factors that are multiplied by acute and chronic aquatic criteria developed using toxicological data in the form of total recoverable metal to express the criteria in the form of dissolved metal. The conversion factor for a particular metal and criterion is the fraction of the metal corresponding to an estimate of the percent of the total recoverable metal that was dissolved in the aquatic toxicity tests that were most important in the derivation of the criterion for the metal.

(14) "Criterion" means a definite numerical value or narrative statement promulgated by the ~~water pollution control~~ **environmental rules** board to maintain or enhance water quality to provide for and fully protect designated uses of the waters of the state.
(15) "Discharge-induced mixing" or "DIM" means mixing initiated by the use of submerged, high rate diffuser outfall structures (or the functional equivalent) that provide turbulent initial mixing and will minimize organism exposure time.
(16) "Effluent" means a wastewater discharge from a point source to the waters of the state.
(17) "Endangered or threatened species" includes those species that are listed as endangered or threatened under Section 4 of the Endangered Species Act (ESA) **except as specifically provided for in 327 IAC 2-1.3.**
(18) "ESA" means the Endangered Species Act (ESA), 16 U.S.C. 1531 et seq.
~~(19) "Exceptional use water" means any water designated as an exceptional use water by the water pollution control board, regardless of when the designation occurred.~~
~~(20)~~ **(19)** "Final acute value" or "FAV" means:
(A) a calculated estimate of the concentration of a test material such that ninety-five percent (95%) of the genera (with which acceptable acute toxicity tests have been conducted on the material) have higher genus mean acute values (GMAVs); or
(B) the species mean acute value (SMAV) of an important or critical species, if the SMAV is lower than the calculated estimate.
~~(21)~~ **(20)** "Full body contact" means direct contact with the water to the point of complete submergence.
~~(22)~~ **(21)** "Genus mean acute value" or "GMAV" means the geometric mean of the SMAVs for the genus.
~~(23)~~ **(22)** "Genus mean chronic value" or "GMCV" means the geometric mean of the SMCVs for the genus.
~~(24)~~ **(23)** "Geometric mean" means the Nth root of the product of N quantities. Alternatively, the geometric mean can be calculated by adding the logarithms of the N numbers, dividing the sum by N, and taking the antilog of the quotient.
~~(25)~~ **(24)** "Great Lakes system" has the meaning set forth in 327 IAC 2-1.5-2(44).
~~(26)~~ **(25)** "Ground water" means water located below the ground surface in interconnected voids and pore spaces in the zone of saturation.
~~(27)~~ **(26)** "Human life cycle safe concentration" or "HLSC" is the highest concentration of a chemical to which a human is exposed continuously for a lifetime and that results in no observable adverse effects to a human and its progeny.
~~(28)~~ **(27)** "Indigenous" means, generally, an organism native to and growing and reproducing in a particular region. For purposes of this rule, the term also includes historically nonnative species introduced by the Indiana department of natural resources as part of a program of wildlife management whether such species reproduce or not.
~~(29)~~ **(28)** "LC_{50}" refers to a statistically or graphically estimated concentration that is expected to be lethal to fifty percent (50%) of a group of organisms under specified conditions.
~~(30)~~ **(29)** "LD_{50}" means the median lethal dose of a chemical, which is the amount of a test material per body weight that, when administered, results in fifty percent (50%) mortality to the organisms during a specified time period.
~~(31)~~ **(30)** "Life cycle safe concentration" means the highest concentration of a chemical to which an organism is exposed continuously for a lifetime and that results in no observable adverse effects to the organism and its progeny.
~~(32)~~ **(31)** "Lowest observable adverse effect level" or "LOAEL" means the lowest tested dose or concentration of a substance that resulted in an observed adverse effect in exposed test organisms when all higher doses or concentrations resulted in the same or more severe effects.
~~(33)~~ **(32)** "MATC" means the maximum acceptable toxicant concentration obtained by calculating the geometric mean of the lower and upper chronic limits from a chronic test. A lower chronic limit is the highest tested concentration that did not cause the occurrence of a specified adverse effect. An upper chronic limit is the lowest tested concentration that did cause the occurrence of a specified adverse effect and above which all tested concentrations caused such an occurrence.
~~(34)~~ **(33)** "Maximum contaminant level" or "MCL" means the maximum permissible level of a contaminant in water that is delivered to the free-flowing outlet of the ultimate user of a public water system.
~~(35)~~ **(34)** "Mixing zone" means an area contiguous to a discharge where the discharged wastewater mixes with the receiving water. Where the quality of the effluent is lower than that of the receiving water, it may not be possible to attain within the mixing zone all beneficial uses attained outside the zone. The mixing zone should not be considered a place where effluents are treated.
~~(36)~~ **(35)** "Nonthreshold mechanism" means a process that results in some possible effect no matter what level is present. There is no level that may not produce an effect.
~~(37)~~ **(36)** "No observed adverse effect level" or "NOAEL" is the highest tested dose or concentration of a substance that resulted in no observed adverse effect in exposed test organisms where higher doses or concentrations resulted in an adverse effect.

~~(38)~~ **(37)** "Occur at the site" includes the species, genera, families, orders, classes, and phyla that:

(A) are usually present at the site;

(B) are present at the site only seasonally due to migration;

(C) are present intermittently because they periodically return to or extend their ranges into the site;

(D) were present at the site in the past, are not currently present at the site due to degraded conditions, and are expected to return to the site when conditions improve; or

(E) are present in nearby bodies of water, are not currently present at the site due to degraded conditions, and are expected to be present at the site when conditions improve.

The taxa that occur at the site cannot be determined merely by sampling downstream and upstream of the site at one (1) point in time. The term does not include taxa that were once present at the site but cannot exist at the site now due to permanent physical alteration of the habitat at the site, for example, alterations resulting from dams.

~~(39)~~ **(38)** "Octanol-water partition coefficient" or "K_{OW}" means the ratio of the concentration of a substance in the n-octanol phase to its concentration in the aqueous phase in an equilibrated two-phase octanol-water system. For log K_{OW}, the log of the octanol-water partition coefficient is a base ten (10) logarithm.

~~(40)~~ **(39)** "Outstanding national resource water" means a water designated as such by the general assembly after recommendations by the ~~water pollution control~~ **environmental rules** board and the environmental quality service council under IC 13-18-3-2(o) and IC 13-18-3-2(p). The designation must describe the quality of the outstanding national resource water to serve as the benchmark of the water quality that shall be maintained and protected. Waters that may be considered for designation as outstanding national resource waters include waterbodies that are recognized as:

(A) important because of protection through official action, such as:

(i) federal or state law;

(ii) presidential or secretarial action;

(iii) international treaty; or

(iv) interstate compact;

(B) having exceptional recreational significance;

(C) having exceptional ecological significance;

(D) having other special environmental, recreational, or ecological attributes; or

(E) waters with respect to which designation as an outstanding national resource water is reasonably necessary for protection of other waterbodies designated as outstanding national resource waters.

~~(41)~~ **(40)** "Outstanding state resource water" means any water designated as such by the ~~water pollution control~~ **environmental rules** board regardless of when the designation occurred or occurs. Waters that may be considered for designation as outstanding state resource waters include waterbodies that have unique or special ecological, recreational, or aesthetic significance.

~~(42)~~ **(41)** "Persistent substance" means a chemical that is long-lived in soil, aquatic environments, and animal and plant tissues and is not readily broken down by biological or physiochemical processes.

~~(43)~~ **(42)** "Point source" means the following:

(A) Any discernible, confined, and discrete conveyance, including, but not limited to, any of the following from which pollutants are or may be discharged:

(i) Pipe.

(ii) Ditch.

(iii) Channel.

(iv) Tunnel.

(v) Conduit.

(vi) Well.

(vii) Discrete fissure.

(viii) Container.

(ix) Rolling stock.

(x) Concentrated animal feeding operation.

(xi) Landfill leachate collection system.

(xii) Vessel.

(xiii) Other floating craft.

(B) The term does not include return flows from irrigated agriculture or agricultural storm run-off. See 327 IAC 5-2-4(a)(4) for other exclusions.

~~(44)~~ **(43)** "Policy" means a statement of administrative practice or decision making guidelines to be followed or implemented to the maximum extent feasible with respect to an identified problematic situation but to be less than strictly enforceable in contrast to a standard or rule of law.

~~(45)~~ **(44)** "Public water supply" means a source of water for a public water system.

~~(46)~~ **(45)** "Public water system" has the meaning set forth in 42 U.S.C. 300f.

~~(47)~~ **(46)** "Risk" means the probability that a substance, when released to the environment, will cause an

adverse effect in exposed humans or other living organisms.
~~(48)~~ **(47)** "Risk assessment" means the analytical process used to determine the level of risk.
~~(49)~~ **(48)** "Species mean acute value" or "SMAV" means the geometric mean of the results of all acceptable flow-through acute toxicity tests (for which the concentrations of the test material were measured) with the most sensitive tested life stage of the species. For a species for which no such result is available for the most sensitive tested life stage, the SMAV is the geometric mean of the results of all acceptable acute toxicity tests with the most sensitive tested life stage.
~~(50)~~ **(49)** "Species mean chronic value" or "SMCV" means the geometric mean of the results of all acceptable life-cycle and partial life-cycle toxicity tests with the species; for a species of fish for which no such result is available, the SMCV is the geometric mean of all acceptable early life-stage tests.
~~(51)~~ **(50)** "Steady-state" means an equilibrium condition has been achieved in the body burden of a substance in an organism. Steady-state is assumed when the rate of loss of a substance matches its rate of uptake.
~~(52)~~ **(51)** "Surface waters of the state" or "surface water" has the meaning set forth in IC 13-11-2-265, except that the term does not include underground waters with the exception of the following:
(A) The underground portion of the Lost River and its underground tributaries.
(B) Any other underground stream that supports fish or other higher aquatic life forms and its underground tributaries.
~~(53)~~ **(52)** "Terrestrial life cycle safe concentration" or "TLSC" is the highest concentration of chemical to which wildlife is exposed continuously for a lifetime and that results in no observable adverse effects to wildlife and its progeny.
~~(54)~~ **(53)** "Threshold mechanism" means a process that results in some effect if a certain level is exceeded, but that produces no effect below that level.
~~(55)~~ **(54)** "Toxic substances" means substances that are or may become harmful to:
(A) aquatic life;
(B) humans;
(C) other animals;
(D) plants; or
(E) food chains;
when present in sufficient concentrations or combinations. Toxic substances include, but are not limited to, those pollutants identified as toxic under Section 307(a)(1) of the Clean Water Act.
~~(56)~~ **(55)** "Variance" means a deviation from a water quality standard.
~~(57)~~ **(56)** "Water-effect ratio" or "WER" means the ratio that is computed as a specific pollutant's acute or chronic toxicity endpoint measured in water from the site covered by the criterion, divided by the respective acute or chronic toxicity endpoint in laboratory dilution water.
~~(58)~~ **(57)** "Waters of the state" has the meaning set forth in IC 13-11-2-265.
~~(59)~~ **(58)** "Water use designations" means a use of the waters of the state as established by this rule, including, but not limited to, the following:
(A) Industrial water supply.
(B) Agricultural use.
(C) Public water supply.
(D) Full body contact.
(E) Aquatic life.
(F) Limited use.
~~(G) Exceptional use.~~
~~(60)~~ **(59)** "Well-balanced aquatic community" means an aquatic community that:
(A) is diverse in species composition;
(B) contains several different trophic levels; and
(C) is not composed mainly of pollution tolerant species.
~~(61)~~ **(60)** "Zone of initial dilution" or "ZID" means the area of the receiving water directly after the end of the pipe where an instantaneous volume of water gives up to a one-to-one (1:1) dilution of the discharge.

(Water Pollution Control Division; 327 IAC 2-1-9; filed Sep 24, 1987, 3:00 p.m.: 11 IR 584; filed Feb 1, 1990, 4:30 p.m.: 13 IR 1041; errata filed Jul 6, 1990, 5:00 p.m.: 13 IR 2004; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1360; errata filed Aug 11, 1997, 4:15 p.m.: 20 IR 3376; filed Feb 14, 2005, 10:05 a.m.: 28 IR 2060; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 4. 327 IAC 2-1-10 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1-10 Proposals for limited use designation or outstanding state resource water classification

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3

Affected: IC 13-18-3-2; IC 13-18-4

Sec. 10. (a) Except as provided in subsection (c), a person who wishes to propose that a particular body of the waters of the state be considered by the commissioner for limited use ~~or exceptional use classification~~ **designation** must submit to the commissioner a written proposal identifying the waterbody, ~~and the proposed classification,~~ stating the rationale for the proposal, and including any other supporting documentation. After receiving the commissioner's recommendation on a proposal, if the board determines that a waterbody is appropriate for ~~reclassification~~ **redesignation** for limited use ~~or exceptional use,~~ it will **direct the commissioner to** initiate a rulemaking ~~for that purpose.~~ **to include the waterbody as a limited use water under section 11(a) of this rule.**

(b) The commissioner will consider ~~factors such as~~ the factors listed in subdivisions (1) and (2) in making recommendations to the board with regard to proposals for the ~~reclassification~~ **redesignation** of a waterbody for limited use. ~~or exceptional use.~~ These factors are listed as guidelines to provide some insight into the way the commissioner's recommendations may be made but are not intended to be all encompassing. ~~Irrespective of these factors,~~ The commissioner's recommendations generally will be case-by-case determinations based on professional judgment after on-site evaluations. The commissioner will consider factors relating to the following:

(1) Limited use designations such as any of the following:
(A) The waterway has a Q(7),(10) low flow upstream of any existing or proposed discharge of one-tenth (0.1) cubic feet per second or less.
(B) Suitable habitat to support a well-balanced fish community is severely limited or absent.
(C) The waterway is affected by irreversible conditions, natural or man-induced, that:
(i) came into existence before January 1, 1983;
(ii) are not practicably controllable; and
(iii) prevent establishment of a well-balanced fish community.
(D) The waterbody has no unique or exceptional features.
(E) Potential or existing uses made of the waterbody by people in the immediate area would not be adversely affected by a limited use designation.

~~(2) Exceptional use designations such as any of the following:~~
~~(A) The presence of any of the following:~~
~~(i) A unique or exceptional habitat or species in the waterbody.~~
~~(ii) A rare or endangered species in the waterbody.~~
~~(iii) Exceptional aesthetic quality in the immediate environs of the waterbody.~~
~~(B) The waterbody:~~
~~(i) is within the boundaries of or flows through a designated natural area, nature preserve, or state or national park or forest;~~
~~(ii) supports an excellent sports fishery; or~~
~~(iii) possesses exceptional quality.~~
~~(C) Intensive recreational use is made of the waterbody.~~

(2) The waterbody has been evaluated by a use attainability analysis.

(c) A person seeking to obtain a CSO wet weather limited use subcategory designation shall do so in accordance with section 3.1 of this rule.

(d) All waters that are designated as a limited use water under section 11(a) of this rule must be evaluated for restoration and upgrading at each triennial review of this rule.

(e) Outstanding state resource water classifications shall be in accordance with IC 13-18-3-2(f) through IC 13-18-3-2(j) and may include, but are not limited to, factors such as any of the following:

(1) The presence of any of the following:
(A) A unique or exceptional habitat or species in the waterbody.
(B) A rare or endangered species in the waterbody.
(C) Exceptional aesthetic quality in the immediate environs of the waterbody.

(2) The waterbody:
(A) is within the boundaries of or flows through a designated natural area, nature preserve, or state or national park or forest;
(B) supports an excellent sports fishery; or
(C) possesses exceptional quality.

(3) Intensive recreational use is made of the waterbody.

(4) Designation as a natural, scenic, or recreational waterbody by the Indiana department of natural resources.

(Water Pollution Control Division; 327 IAC 2-1-10; filed Sep 24, 1987, 3:00 p.m.: 11 IR 585; filed Sep 6, 2007, 12:25 p.m.: 20071003-IR-327050218FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 5. 327 IAC 2-1-11 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1-11 Limited use and outstanding state resource waters

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4

Sec. 11. (a) The following waters of the state are designated for limited use pursuant to section 3(a)(5) of this rule:

(1) Prides Creek in Pike County upstream from its confluence with White River.
(2) Redkey Run and Halfway Creek in Jay County from the Redkey STP to two (2) miles downstream.
(3) Kentland STP receiving stream along NYC railroad upstream from its confluence with Montgomery Ditch in Newton County.
(4) Buck Creek in Sullivan County from the Sullivan South STP to two and one-fourth (2.25) miles downstream.
(5) Arbogast Ditch upstream from its confluence with West Fork of White River in Randolph County.
(6) Jefferson Ditch in Grant County from the Upland STP to its confluence with Lake Branch.
(7) Vinson Drain and Mud Creek in Madison County from the Summitville STP to the confluence of Mud Creek and Star Creek.
(8) Ackerman Branch and Mill Creek in Dubois County to the confluence of Mill Creek and Little Creek.
(9) North Prong of Stotts Creek in Johnson County from the Bargersville STP to one and one-fourth (1.25) miles downstream.
(10) An unnamed tributary of Four Mile Creek in Greene County from the Lyons STP to its confluence with Four Mile Creek.
(11) An unnamed stream in Dubois County, which is the outlet of Huntingburg City Lake, from the City Lake Dam downstream to its confluence with Ell Creek.
(12) Leavell Ditch in Tipton County upstream from its confluence with Buck Creek.
(13) Buck Creek in Tipton County upstream from its confluence with Cicero Creek.
(14) Schlatter Ditch which becomes Bacon Prairie Creek in Tipton County upstream from a point one (1) mile upstream of the confluence of Bacon Prairie Creek and Cicero Creek.
(15) An unnamed ditch in Posey County flowing north out of the town of Cynthiana along the Chicago and Eastern Illinois Railroad then west along the Posey-Gibson County Line to its confluence with Black River.
(16) Laughery Creek in Ripley county from the Napoleon STP to a point three (3.0) miles downstream. (County Road 300 West Extended.)
(17) An unnamed tributary and Hurricane Creek in Gibson County from the Haubstadt STP to the confluence of Hurricane Creek and the West Fork of Pigeon Creek.
(18) Plasterers Creek in Martin County from the Loogootee STP downstream to the confluence with Friends Creek.
(19) Montgomery Ditch and Black River in Gibson County from the Owensville STP to the Antioch Road Bridge.
(20) Brewer Ditch in Johnson County from the Whiteland STP to the County Road 250 N bridge.
(21) An unnamed tributary of Little Otter Creek in Ripley County from the Holton STP to its confluence with Little Otter Creek.
(22) The Silverthorn Branch of Wildcat Creek in Clinton County from the Rossville STP to its confluence with the Middle Fork of Wildcat Creek.
(23) An unnamed tributary of the West Fork of White River in Randolph County from the Farmland STP to its confluence with the West Fork of White River.
(24) Hawk Run and Blackhawk Creek in Dubois and Spencer counties from the Schuler Packing Company discharge downstream to the Anderson River.
(25) Spring Creek in Vigo County from the Hercules, Inc., outfall downstream to the Wabash River.
(26) Little Buck Creek in Henry County to its confluence with Hillside Brook.
(27) Francis Dutro Ditch in Blackford County from the Blackford Canning Company discharge downstream to its confluence with Prairie Creek.
(28) The unnamed ditch receiving the Sperry Rubber Company discharge and Richland Creek in Franklin County from the confluence of the unnamed tributary downstream to the Whitewater River.

(29) Eight Mile Creek in Wells County to the confluence of Eight Mile Creek and Maple Creek.
(30) Hoffman Ditch in St. Joseph County upstream from its confluence with Yellow River.

(b) The following waters of the state **in addition to the waters listed at 327 IAC 2-1.3-3(d) and 327 IAC 2-1.5-19(b)** are ~~designated for exceptional use under section 3(a)(6) of this rule:~~ **classified as outstanding state resource waters:**
(1) Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River.
(2) Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek.
(3) Fall Creek in Warren County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek.
(4) Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek.
(5) Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve.
(6) Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River.
(7) Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek.
(8) The small tributary to Bear Creek in Fountain County within the Portland Arch Nature Preserve which enters Bear Creek at the sharpest bend and has formed the small natural bridge called Portland Arch.
(9) Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River.
(10) The South Fork of Blue River in Washington County from the Horner's Chapel Road bridge downstream to its confluence with Blue River.
(11) Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.

(Water Pollution Control Division; 327 IAC 2-1-11; filed Sep 24, 1987, 3:00 p.m.: 11 IR 585; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1362; errata filed Aug 11, 1997, 4:15 p.m.: 20 IR 3376; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 6. 327 IAC 2-1.5-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1.5-5 Surface water use designations; multiple uses

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4; IC 13-30-2-1

Sec. 5. (a) The following water uses are designated by the board:
(1) Except as provided in subsection (c), surface waters of the state within the Great Lakes system are designated for full-body contact recreation.
(2) All surface waters, except as described in subdivision (7), shall be capable of supporting a well-balanced, warm water aquatic community.
(3) Where natural temperatures will permit, surface waters shall be capable of supporting put-and-take trout fishing. All waters capable of supporting the natural reproduction of trout shall be so maintained. The following waters are designated as salmonid waters and shall be capable of supporting a salmonid fishery:
(A) Trail Creek and its tributaries downstream to Lake Michigan.
(B) East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch.
(C) Salt Creek above its confluence with the Little Calumet River.
(D) Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan.
(E) The Galena River and its tributaries in LaPorte County.
(F) The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line.
(G) The Indiana portion of the open waters of Lake Michigan.
(H) Those waters designated by the Indiana department of natural resources for put-and-take trout fishing.
(4) All surface waters used for public water supply are designated as a public water supply. This use designation and its corresponding water quality criteria are not to be construed as imposing a user restriction on those exercising or desiring to exercise the use.

(5) All surface waters used for industrial water supply are designated as an industrial water supply. This use designation and its corresponding water quality criteria are not to be construed as imposing a user restriction on those exercising or desiring to exercise the use.
(6) All surface waters used for agricultural purposes are designated as an agricultural use water.
(7) Limited use waters are designated under section 19(a) of this rule pursuant to section 18 of this rule. All waters that are designated as a limited use water under section 19(a) of this rule must be evaluated for restoration and upgrading at each triennial review of this rule.
~~(8) Outstanding state resource waters are designated under section 19(b) of this rule pursuant to section 18 of this rule.~~

(b) Where multiple uses have been designated for a body of water, the most protective of all simultaneously applicable standards will apply.

(c) A CSO wet weather limited use designation is established as a subcategory of the recreational use designation established under subsection (a). This subcategory shall be applied in accordance with 327 IAC 2-1-3.1.

(Water Pollution Control Division; 327 IAC 2-1.5-5; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1369; filed Sep 6, 2007, 12:25 p.m.: 20071003-IR-327050218FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 7. 327 IAC 2-1.5-18 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1.5-18 Designation of a waterbody as a limited use water or classification as an outstanding state resource water

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-3-2; IC 13-18-4

Sec. 18. (a) Except as provided in subsection (f), a person who wishes to propose that a waterbody within the Great Lakes system be considered by the commissioner for designation as a limited use ~~or outstanding state resource~~ water shall submit to the commissioner a written proposal:
(1) identifying the waterbody and ~~the proposed designation~~ stating the rationale for the proposal; and
(2) including any other supporting documentation.

(b) The commissioner shall evaluate the proposal **for limited use water redesignation** considering the following:
(1) Waters that meet the following conditions may be considered for designation as a limited use water:
(A) Waters that have:
(i) naturally poor physical characteristics (that is, suitable habitat to support a well-balanced fish community is severely limited or absent) including lack of sufficient flow ($Q_{7,10}$ low flow upstream of any existing or proposed discharge of one-tenth (0.1) cubic foot per second or less);
(ii) naturally poor chemical quality;
(iii) irreversible man-induced conditions that came into existence before January 1, 1983; and
(iv) no unique or exceptional features.
(B) No potential or existing uses made of the waterbody by people in the immediate area would be adversely affected by a limited use designation.
~~(C)~~ **(2)** The waterbody has been evaluated by a use attainability analysis.
~~(2) Factors that relate to outstanding state resource water designations may include, but are not limited to, the following:~~
~~(A) The presence of any of the following:~~
~~(i) A unique or exceptional habitat or species in the waterbody.~~
~~(ii) A rare or endangered species in the waterbody.~~
~~(iii) Exceptional aesthetic quality in the immediate environs of the waterbody.~~
~~(B) The waterbody:~~
~~(i) is within the boundaries of or flows through a designated natural area, nature preserve, or state or national park or forest;~~
~~(ii) supports an excellent sports fishery; or~~
~~(iii) possesses exceptional quality.~~
~~(C) Intensive recreational use is made of the waterbody.~~

~~(D) Designation as a natural, scenic, or recreational waterbody by the Indiana department of natural resources.~~

~~Irrespective of these factors, the commissioner's evaluation will generally be a case-by-case determination using information obtained from an on-site evaluation. If appropriate, the commissioner shall consult with the Indiana department of natural resources concerning the designation of a waterbody as an outstanding state resource water.~~

(c) After completion of the evaluation under subsection (b), if the commissioner determines that ~~reclassification~~ **redesignation** of the waterbody is appropriate, the commissioner shall initiate a rulemaking to include the waterbody ~~either~~ as a limited use water ~~or an outstanding state resource water~~ under section ~~19~~ **19(a)** of this rule.

(d) All waters that are designated as a limited use water under section 19(a) of this rule must be evaluated for restoration and upgrading at each triennial review of this rule.

~~(e) The department shall initiate a special designations rulemaking in accordance with the following:~~

~~(1) The special designations rulemaking shall be initiated for the following purposes:~~

~~(A) Determining the following:~~

~~(i) Whether any other designations in addition to:~~

~~(AA) outstanding state resource waters;~~

~~(BB) high quality waters;~~

~~(CC) limited use waters; and~~

~~(DD) outstanding national resource waters;~~

~~should be established.~~

~~(ii) The appropriate factors to consider in designating a waterbody.~~

~~(B) Identifying a list of waterbodies for each special designation.~~

~~(C) Specifying antidegradation implementation procedures for any other newly established designation that is in addition to those specified at 327 IAC 2-1.3.~~

~~(2) Before the presentation of proposed rules on special designations to the board, the department shall consult with:~~

~~(A) other state and federal agencies; and~~

~~(B) interested persons within Indiana;~~

~~as appropriate. The department shall provide information to the public on the history, intent, and importance of the current outstanding state resource water designation and the list of outstanding state resource waters.~~

~~(3) The department shall seek comment, as part of the second notice on special designations, on the following:~~

~~(A) Adding waterbodies to the list of outstanding national resource waters.~~

~~(B) The specific antidegradation implementation procedures included in 327 IAC 2-1.3-3 for outstanding state resource waters.~~

~~(C) Procedures for addressing increases not included in the specific exceptions listed in 327 IAC 2-1.3-4.~~

~~(4) The following statement shall be included in the second notice and shall be used as a guide during the special designation rulemaking, "The antidegradation implementation procedures for outstanding state resource waters in 327 IAC 2-1.3-3 are intended only to assure that a specific process exists to address proposed changes pending the completion of the special designation rulemaking. The board does not consider the specific procedures listed in 327 IAC 2-1.3-3 as a final policy statement or as binding on the board in the special designation rulemaking.".~~

(e) Factors that relate to outstanding state resource water classifications shall be in accordance with IC 13-18-3-2(f) through IC 13-18-3-2(j) and may include, but are not limited to, the following:

(1) The presence of any of the following:

(A) A unique or exceptional habitat or species in the waterbody.

(B) A rare or endangered species in the waterbody.

(C) Exceptional aesthetic quality in the immediate environs of the waterbody.

(2) The waterbody:

(A) is within the boundaries of or flows through a designated natural area, nature preserve, or state or national park or forest;

(B) supports an excellent sports fishery; or

(C) possesses exceptional quality.

(3) Intensive recreational use is made of the waterbody.

(4) Designation as a natural, scenic, or recreational waterbody by the Indiana department of natural

resources.

(f) A person seeking to obtain a CSO wet weather limited use subcategory designation shall do so in accordance with 327 IAC 2-1-3.1.

(Water Pollution Control Division; 327 IAC 2-1.5-18; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1410; errata filed Aug 11, 1997, 4:15 p.m.: 20 IR 3378; filed Sep 6, 2007, 12:25 p.m.: 20071003-IR-327050218FRA; filed May 29, 2012, 3:19 p.m.: 20120627-IR-327080764FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 8. 327 IAC 2-1.5-19 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-1.5-19 Limited use waters and outstanding state resource waters

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4

Sec. 19. (a) The following waters within the Great Lakes system are designated for limited use:
~~(1) Hoffman Ditch in St. Joseph County upstream from its confluence with Yellow River.~~
~~(2)~~ **(1)** Berlin Court Ditch in Elkhart County from the Nappanee sewage treatment plant to two (2) miles downstream.
~~(3)~~ **(2)** An unnamed tributary and Werntz Ditch in Elkhart County from the Wakarusa STP to the confluence of Werntz Ditch and Baugo Creek.
~~(4)~~ **(3)** Hilkey Ditch in DeKalb County from the County Line Cheese Company outfall to North County Line Road one and one-half (1.5) miles downstream.
~~(5)~~ **(4)** Hindman Ditch in DeKalb County from the Ralph Sechler Company outfall downstream to its confluence with Bear Creek.

(b) **In addition to the waters of the state listed at 327 IAC 2-1-11(b) and 327 IAC 2-1.3-3(d),** the following waters ~~within the Great Lakes system~~ are ~~designated~~ **classified** as ~~an~~ outstanding state resource ~~water:~~ **waters:**
(1) Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to its confluence with the St. Joseph River.
(2) The Indiana portion of the open waters of Lake Michigan.
(3) All waters incorporated in the Indiana Dunes National Lakeshore.

(Water Pollution Control Division; 327 IAC 2-1.5-19; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1411; errata filed Aug 11, 1997, 4:15 p.m.: 20 IR 3378; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 9. 327 IAC 2-6.1-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 2-6.1-5 Reportable spills; facility

Authority: IC 13-14-8-7
Affected: IC 13-11-2; IC 13-18-1; IC 13-18-3; IC 13-18-8; IC 13-18-17

Sec. 5. The following spills from a facility must be reported:
(1) Spills that damage the waters of the state so as to cause death or acute injury or illness to humans or animals.
(2) Spills from a facility that has been notified in writing by a water utility that it is located in a delineated public water supply wellhead protection area as approved by the department under 327 IAC 8-4.1 that are **spills of:**
(A) ~~spills of~~ hazardous substances or extremely hazardous substances when the amount spilled exceeds one hundred (100) pounds or the reportable quantity, whichever is less;
(B) ~~spills of~~ petroleum when the amount spilled exceeds fifty-five (55) gallons; or
(C) ~~spills of~~ objectionable substances as defined in section 4(11) of this rule.
(3) Spills that damage waters of the state and that **are located:**
(A) ~~are located~~ within fifty (50) feet of a known private drinking water well located beyond the facility property boundary; or
(B) ~~are located~~ within one hundred (100) yards of:
(i) any high quality water ~~designated~~ **classified** as an outstanding state resource ~~pursuant to 327 IAC 2-1-2(3),~~ **water listed in 327 IAC 2-1-11(b), 327 IAC 2-1.3-3(d), or 327 IAC 2-1.5-19(b),** excluding Lake Michigan;
~~(ii) any water designated as exceptional use pursuant to 327 IAC 2-13(a)(6) and 327 IAC 2-1-11(b);~~

~~(iii)~~ **(ii)** any water designated as capable of supporting a salmonid fishery pursuant to 327 IAC 2-1-6(c)(1) **or 327 IAC 2-1.5-5(a)(3),** except Lake Michigan; or

~~(iv)~~ **(iii)** any water that is a fish hatchery, fish and wildlife area, nature preserve, or recreational water owned by the department of natural resources or the federal government.

(4) For any spill ~~which~~ **that** does not meet the criteria in subdivisions (1) through (3), the following must be reported:

(A) Spills to surface waters **that include one (1) or more of the following:**

(i) ~~spills of~~ Hazardous substances or extremely hazardous substances when the amount spilled exceeds one hundred (100) pounds or the reportable quantity, whichever is less.

(ii) ~~spills of~~ Petroleum of such quantity as to cause a sheen upon the waters. ~~or~~

(iii) ~~spills of~~ Objectionable substances as defined in section 4(11) of this rule.

(B) Spills to soil beyond the facility boundary **that include one (1) or more of the following:**

(i) ~~spills of~~ Hazardous substances or extremely hazardous substances when the amount spilled exceeds one hundred (100) pounds or the reportable quantity, whichever is less.

(ii) ~~spills of~~ Petroleum when the amount spilled exceeds fifty-five (55) gallons. ~~or~~

(iii) ~~spills of~~ Objectionable substances as defined in section 4(11) of this rule.

(C) Spills to soil within the facility boundary **that include one (1) or more of the following:**

(i) ~~spills of~~ Hazardous substances or extremely hazardous substances when the amount spilled exceeds the reportable quantity.

(ii) ~~spills of~~ Petroleum when the spilled amount exceeds one thousand (1,000) gallons. ~~or~~

(iii) ~~spills of~~ Objectionable substances as defined in section 4(11) of this rule.

(5) Any spill for which a spill response has not been done.

(Water Pollution Control Division; 327 IAC 2-6.1-5; filed Feb 25, 1997, 1:00 p.m.: 20 IR 1732; errata filed Mar 7, 1997, 2:25 p.m.: 20 IR 1738; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 10. 327 IAC 15-2-6 IS AMENDED TO READ AS FOLLOWS:

327 IAC 15-2-6 Exclusions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3
Affected: IC 13-11-2-149.5; IC 13-11-2-149.6; IC 13-18-4

Sec. 6. (a) Except as provided in subsection (b), an individual NPDES permit issued under 327 IAC 5 is required for a discharge:

(1) to a receiving ~~stream~~ **water** identified as an:

(A) outstanding state resource water; ~~an exceptional use water,~~ or ~~an~~

(B) outstanding national resource water;

as defined under ~~327 IAC 2-1-11(b), 327 IAC 2-1.3-2, or 327 IAC 2-1.3-3(d);~~ **IC 13-11-2-149.6 or IC 13-11-2-149.5, respectively;** or

(2) that would significantly lower the water quality as defined under 327 IAC 2-1.3-2(50) of such a water downstream of the point source discharge.

(b) A discharge to an outstanding national resource water **or** outstanding state resource water ~~or exceptional use water~~ may be permitted under 327 IAC 15-5, 327 IAC 15-6, or 327 IAC 15-13 if the commissioner determines the discharge will not significantly lower the water quality as defined under 327 IAC 2-1.3-2(50) of such a water downstream of that point source discharge.

(Water Pollution Control Division; 327 IAC 15-2-6; filed Aug 31, 1992, 5:00 p.m.: 16 IR 17; filed Jan 14, 1997, 12:00 p.m.: 20 IR 1476; filed Oct 27, 2003, 10:15 a.m.: 27 IR 830; filed May 29, 2012, 3:19 p.m.: 20120627-IR-327080764FRA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 11. 327 IAC 15-13-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 15-13-5 Definitions

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-3-2
Affected: IC 13-11-2; IC 13-18-4; IC 13-20-10; IC 14-32

Sec. 5. For purposes of this rule, the following definitions apply:
(1) "Best management practice" or "BMP" means any structural or nonstructural control measure utilized to improve the quality and, as appropriate, reduce the quantity of storm water run-off. The term includes schedules of activities, prohibitions of practice, treatment requirements, operation and maintenance procedures, use of containment facilities, land use planning, policy techniques, and other management practices.
(2) "Buffer strip" means an existing, variable width strip of vegetated land intended to protect water quality and terrestrial and aquatic habitat in an adjacent resource or area.
(3) "Canine park" means a designated public location where dogs are restricted and animal waste may accumulate. For the purposes of this rule, the term does not include kennels, municipal dog impoundments, or humane society buildings.
(4) "Class V injection well" means a type of well, which typically has a depth greater than its largest surface dimension, emplaces fluids into the subsurface, and does not meet the definitions of Class I through Class IV wells as defined under 40 CFR 146.5. While the term includes the specific examples described in 40 CFR 144.81, septic systems that serve more than one (1) single-family dwelling or provide service for nondomestic waste, dug wells, bored wells, improved sinkholes, french drains, infiltration sumps, and infiltration galleries, it does not include surface impoundments, trenches, or ditches that are wider than they are deep.
(5) "Combined sewer" means a sewer that is designed, constructed, and used to receive and transport combined sewage.
(6) "Combined sewer operational plan" or "CSOOP" means a plan that contains the minimum technology controls applicable to, and requirements for operation and maintenance of, a combined sewer system:
(A) before;
(B) during; and
(C) upon completion of;
the implementation of a long term control plan.
(7) "Commissioner" refers to the commissioner of the department of environmental management.
(8) "Constructed wetland" means a manmade shallow pool that creates growing conditions suitable for wetland vegetation and is designed to maximize pollutant removal.
(9) "Contiguity" means an entity's proximity to a designated MS4 area in such a way that it allows for direct discharges of storm water run-off into the regulated MS4 conveyance.
(10) "Conveyance" means any structural process for transferring storm water between at least two (2) points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadways.
(11) "Daily user population" means a population for an entity that is present at that location on a daily basis.
(12) "Dechlorinated swimming pool discharge" means chlorinated water that has either sat idle for seven (7) days following chlorination prior to discharge to the MS4 conveyance or, by analysis, does not contain detectable concentrations (less than five-hundredths (0.05) milligram per liter) of chlorinated residual.
(13) "Department" refers to the department of environmental management.
(14) "Detention basin" means a type of storage practice used to detain or slow storm water run-off and then release it through a positive outlet.
(15) "Disposal" means the:
(A) discharge;
(B) deposit;
(C) injection;
(D) spilling;
(E) leaking; or
(F) placing;
of any solid waste or hazardous waste into or on any land or water so that the solid waste or hazardous waste, or any constituent of the waste, may enter the environment, be emitted into the air, or be discharged into any waters, including ground waters.
(16) "Dry well" means a type of infiltration practice that allows storm water run-off to flow directly into the ground via a bored or otherwise excavated opening in the ground surface.
(17) "Filter strip" means a type of vegetative practice used to filter storm water run-off through the use of planted or existing vegetation near disturbed or impervious surfaces.
(18) "Floatable" means any solid waste that, due to its physical characteristics, will float on the surface of water. For the purposes of this rule, the term does not include naturally occurring floatables, such as leaves or tree limbs.
(19) "Flood plain" means the area adjoining a river, stream, or lake that is inundated by the base flood as determined by 312 IAC 10.
(20) "Floodway" means the channel of a river or stream and those portions of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the peak flow from the base flood as

determined by 312 IAC 10.

(21) "Full-time equivalent enrollment" means a college or university enrollment of undergraduate students currently taking fifteen (15) credit hours of course work and graduate or professional students currently taking twelve (12) credit hours of course work. Each respective fifteen (15) or twelve (12) credit hours of course work equals one (1) full-time equivalent.

(22) "Garbage" means all putrescible animal solid, vegetable solid, and semisolid wastes resulting from the:

(A) processing;
(B) handling;
(C) preparation;
(D) cooking;
(E) serving; or
(F) consumption;

of food or food materials.

(23) "General permit rule boundary" means an area based upon existing geographic or political boundaries indicating the area within which an MS4 conveyance affected by this rule is located.

(24) "Grass swale" means a type of vegetative practice used to filter storm water run-off via a vegetated, shallow-channel conveyance.

(25) "Ground water" means such accumulations of underground water, natural or artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state. The term does not include manmade underground storage or conveyance structures.

(26) "Household hazardous waste" or "HHW" means solid waste generated by households that:

(A) is ignitable, as defined under 40 CFR 261.21;
(B) is toxic, as defined under 40 CFR 261.24;
(C) is reactive, as defined under 40 CFR 261.23;
(D) is corrosive, as defined under 40 CFR 261.22; or
(E) otherwise poses a threat to human health or the environment.

(27) "Hydrologic unit code" or "HUC" means a numeric United States Geological Survey code that corresponds to a watershed area. Each area also has a text description associated with the numeric code.

(28) "Illicit discharge" means any discharge to an MS4 conveyance that is not composed entirely of storm water, except naturally occurring floatables, such as leaves or tree limbs. Sources of illicit discharges include sanitary wastewater, septic tank effluent, car wash wastewater, oil disposal, radiator flushing disposal, laundry wastewater, roadway accident spillage, and household hazardous wastes.

(29) "Impervious surface" means any surface that prevents storm water to readily infiltrate into the soils.

(30) "Individual NPDES permit" means an NPDES permit issued to one (1) MS4 operator that contains requirements specific to that MS4 conveyance.

(31) "Infiltration basin or trench" means a type of infiltration practice used to filter storm water run-off into soils via the use of installed structures with porous material.

(32) "Infiltration gallery" means a type of infiltration practice used to filter storm water run-off into soils that utilizes one (1) or more vertical pipes leading to a horizontal, perforated pipe laid within a trench, often backfilled with gravel or some other permeable material.

(33) "Infiltration practices" means any structural BMP designed to facilitate the percolation of run-off through the soil to ground water. Examples include infiltration basins or trenches, dry wells, and porous pavement.

(34) "Initial receiving water" means a water that is the direct recipient of a discharge from an MS4 area after the discharge passes through another MS4 conveyance.

(35) "Larger common plan of development or sale" means a plan, undertaken by a single developer or a group of developers acting in concert, to offer lots for sale or lease; where such land is contiguous, or is known, designed, purchased, or advertised as a common unit or by a common name, such land shall be presumed as being offered for sale or lease as part of a larger common plan. The term also includes phased construction by a single entity for its own use.

(36) "Legally binding agreement" means a written, enforceable legal document used to describe responsibilities between joint permittees or other entities.

(37) "Load allocation" means the portion of a receiving waterbody's loading capacity that is attributed either to one (1) of its existing or future nonpoint sources of pollution or to natural background sources.

(38) "Long term control plan" or "LTCP" means a plan that is:

(A) consistent with the federal Combined Sewer Overflow Control Policy (59 FR 18688); and
(B) developed in accordance with the recommendations set forth in Combined Sewer Overflows Guidance for Long-Term Control Plan (EPA 832B95002).

(39) "Minimum control measure" or "MCM" refers to the following minimum measures required by this rule:

(A) Public education and outreach.
(B) Public participation and involvement.
(C) Illicit discharge detection and elimination.

(D) Construction site run-off control.
(E) Postconstruction run-off control.
(F) Pollution prevention and good housekeeping.

(40) "MS4 area" means a land area comprising one (1) or more places that receives coverage under one (1) NPDES storm water permit regulated by this rule or 327 IAC 5-4-6(a)(4) and 327 IAC 5-4-6(a)(5).

(41) "MS4 entity" means a public or private body that owns, operates, or maintains a storm water conveyance system, including a transportation agency operated by that body. The term can also include federal, state, city, town, county, district, association, or township public bodies and privately owned universities, colleges, or storm water utilities. For the purposes of this rule, the term does not include non-MS4 entity-owned shopping malls, office parks, apartment complexes, golf courses, churches, or hotels.

(42) "MS4 operator" means the person responsible for development, implementation, or enforcement of the MCMs for a designated MS4 area.

(43) "Municipal separate storm sewer system" or "MS4" means a conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains, that is:

(A) owned or operated by a:

(i) federal, state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over storm water, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges into waters of the state; or

(ii) privately owned storm water utility, hospital, university, or college having jurisdiction over storm water that discharges into waters of the state;

(B) designed or used for collecting or conveying storm water;
(C) not a combined sewer; and
(D) not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

(44) "Municipal, state, federal, or institutional refueling area" means an operating gasoline or diesel fueling area whose primary function is to provide fuel to either municipal, state, federal, or institutional equipment or vehicles.

(45) "Mutual drain" means a drainage system that:

(A) is located on two (2) or more tracts of land that are under different ownership;
(B) was established by the mutual consent of all the owners; and
(C) was not established under or made subject to any drainage statute.

(46) "Nonpoint source" means a source of water pollution that does not meet the definition of point source. The term includes in-place pollutants, direct wet and dry deposition, ground water inflow, and overland run-off.

(47) "Notice of deficiency letter" or "NOD letter" means a written notification from the department indicating an MS4 entity's deficiencies in its NOI letter or SWQMP submittals.

(48) "Notice of intent letter" or "NOI letter" means a written notification indicating an MS4 entity's intention to comply with the terms of this rule in lieu of applying for an individual NPDES permit and includes information as required under sections 6 and 9 of this rule. It is the application for obtaining permit coverage under this rule.

(49) "Notice of sufficiency letter" or "NOS letter" means a written notification from the department indicating that an MS4 entity has sufficiently provided the required information in its NOI letter or SWQMP submittals.

(50) "Notice of termination letter" or "NOT letter" means a written notification from the department indicating that an MS4 entity has met the conditions to terminate its permit coverage under this rule.

(51) "Open space" means any land area devoid of any disturbed or impervious surfaces created by industrial, commercial, residential, agricultural, or other manmade activities.

(52) "Outfall" means a point source discharge via a conveyance of storm water run-off into a water of the state.

(53) "Outfall scouring" means the deterioration of a stream bed or lake bed from an outfall discharge to an extent that the excessive settling of solid material results and aquatic habitat is diminished.

(54) "Point source" means any discernible, confined, and discrete conveyance, including a pipe, ditch, channel, tunnel, conduit, well, or discrete fissure.

(55) "Pollutant of concern" means any pollutant that has been documented via analytical data as a cause of impairment in any waterbody, or to another MS4, to which the MS4 discharges.

(56) "Porous pavement" means a type of infiltration practice to improve the quality and reduce the quantity of storm water run-off via the use of manmade, pervious pavement which allows run-off to percolate through the pavement and into underlying soils.

(57) "Private drain" means a drainage system that:

(A) is located on land owned by one (1) person or by two (2) or more persons jointly; and
(B) was not established under or made subject to any drainage statute.

(58) "Programmatic indicator" means any data collected by an MS4 entity that is used to indicate

implementation of one (1) or more minimum control measures.
(59) "Qualified professional" means an individual who is trained and experienced in storm water treatment techniques and related fields as may be demonstrated by state registration, professional certification, experience, or completion of coursework that enable the individual to make sound, professional judgments regarding storm water control or treatment and monitoring, pollutant fate and transport, and drainage planning.
(60) "Rain garden" means a vegetative practice used to alter impervious surfaces, such as roofs, into pervious surfaces for absorption and treatment of rainfall.
(61) "Receiving stream" or "receiving water" means a waterbody that receives a discharge from an outfall. The term does not include private drains, unnamed conveyances, retention and detention basins, or constructed wetlands used as treatment.
(62) "Redevelopment" means alterations of a property that change a site or building in such a way that there is disturbance of one (1) acre or more of land. The term does not include such activities as exterior remodeling.
(63) "Responsible individual" means the person responsible for development, implementation, or enforcement of the MCMs for a designated MS4 entity.
(64) "Retail gasoline outlet" means an operating gasoline or diesel fueling facility whose primary function is the resale of fuels. The term applies to facilities that create five thousand (5,000) or more square feet of impervious surfaces or generate an average daily traffic count of one hundred (100) vehicles per one thousand (1,000) square feet of land area.
(65) "Retention basin" means a type of storage practice, that has no positive outlet, used to retain storm water run-off for an indefinite amount of time. Run-off from this type of basin is removed only by infiltration through a porous bottom or by evaporation.
(66) "Riparian habitat" means a land area adjacent to a waterbody that supports animal and plant life associated with that waterbody.
(67) "Riparian zone" means a land area adjacent to a waterbody that is directly associated with that waterbody.
(68) "Sand" means mineral material with a size range between two (2) and one-sixteenth ($^{1}/_{16}$) millimeter diameter.
(69) "Sedimentation" means the settling and accumulation of unconsolidated material carried by storm water run-off.
(70) "Sensitive area" means a waterbody identified as needing priority protection or remediation based on:
(A) having ~~threatened or~~ endangered **or threatened** species or their habitat;
(B) usage as a public surface water supply intake;
(C) usage for full body contact recreation, such as bathing beaches; or
(D) ~~exceptional use classification as found in 327 IAC 2-1-11(b),~~ outstanding state resource water classification as found in ~~327 IAC 2-1-2(3)~~ **327 IAC 2-1-11(b), 327 IAC 2-1.3-3(d),** and 327 IAC 2-1.5-19(b).
(71) "Significant contributor of pollutants" means an MS4 entity or industrial facility that contributes pollutants into an MS4 conveyance in such a quantity or quality and to such a degree that it impacts the receiving MS4 operator's ability to comply with applicable state or federal law.
(72) "Soil and water conservation district" or "SWCD" means a political subdivision established under IC 14-32.
(73) "Solid waste" means any garbage, refuse, sludge for a waste treatment plant, sludge from a water supply treatment plant, sludge from an air pollution control facility, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. The term does not include:
(A) solid or dissolved material in:
(i) domestic sewage; or
(ii) irrigation return flows or industrial discharges;
that are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act Amendments (33 U.S.C. 1342);
(B) source, special nuclear, or byproduct material (as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);
(C) manures or crop residues returned to the soil at the point of generation as fertilizers or soil conditioners as part of a total farm operation; or
(D) vegetative matter at composting facilities registered under IC 13-20-10.
(74) "Spill" means the unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of petroleum, hazardous substances, extremely hazardous substances, or objectionable substances. The term does not include releases to impervious surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.
(75) "Standard Industrial Classification code" or "SIC code" means the four (4) digit code applicable to a particular industrial activity in accordance with the Standard Industrial Classification Manual published by the Office of Management and Budget of the Executive Office of the President of the United States.

(76) "Storage practices" means any structural BMP intended to store or detain storm water and slowly release it to receiving waters or drainage systems. The term includes detention and retention basins.
(77) "Storm drain marking" means any marking procedure that identifies a storm sewer inlet as draining directly to a receiving waterbody so as to avoid dumping pollutants. The procedures can include painted or cast messages and adhesive decals.
(78) "Storm water" means water resulting from rain, melting or melted snow, hail, or sleet.
(79) "Storm water quality management plan" or "SWQMP" means a comprehensive written document that addresses storm water run-off quality within an MS4 area. The SWQMP is divided into three (3) different submittal parts as follows:
(A) Part A-Initial Application.
(B) Part B-Baseline Characterization and Report.
(C) Part C-Program Implementation.
(80) "Stream reach characterization and evaluation report" or "SRCER" means a written report that characterizes and evaluates the pollutant sources on receiving waters from a combined sewer system discharge.
(81) "Total maximum daily load" or "TMDL" means the sum of the daily individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background minus the sum of a specified margin of safety and any capacity reserved for growth. A TMDL sets and allocates the maximum daily amount of a pollutant that may be introduced into a waterbody and still assure attainment and maintenance of water quality standards.
(82) "Traffic phasing plan" means a written plan that addresses the installation of appropriate pollution prevention practices that is directly related to the land disturbance associated with infrastructure constructed to reroute vehicular traffic within an active construction zone. The term does not include detours that are directed away from the active construction area.
(83) "Urbanized area" or "UA" means a land area comprising one (1) or more places that together have a residential population of at least fifty thousand (50,000) and an overall population density of at least five hundred (500) people per square mile.
(84) "Vegetative practices" means any nonstructural or structural BMP that, with optimal design and good soil conditions, utilizes various forms of vegetation to enhance pollutant removal, maintain and improve natural site hydrology, promote healthier habitats, and increase aesthetic appeal. Examples include grass swales, filter strips, buffer strips, constructed wetlands, and rain gardens.
(85) "Waste transfer station" means a place where solid wastes are segregated for additional off-site processing or disposal.
(86) "Wasteload allocation" means the portion of a receiving stream's loading capacity that is allocated to one (1) of its existing or future point sources of pollution.
(87) "Waterbody" means any accumulation of water, surface or underground, natural or artificial, including rivers, streams, creeks, ditches, swales, lakes, ponds, marshes, wetlands, and ground water. The term does not include any storage or treatment structures.
(88) "Watercourse" means the path taken by flowing surface water.
(89) "Waters" means:
(A) the accumulations of water, surface and underground, natural and artificial, public and private; or
(B) a part of the accumulations of water;
that are wholly or partially within, flow through, or border upon Indiana. The term does not include a private pond, or an off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water before discharge, unless the discharge from the pond, reservoir, or facility causes or threatens to cause water pollution.
(90) "Watershed" means an area of land from which water drains to a common point.
(91) "Wellhead protection area" has the meaning set forth at 327 IAC 8-4.1-1(27).

(Water Pollution Control Division; 327 IAC 15-13-5; filed Jul 7, 2003, 2:15 p.m.: 26 IR 3578; errata filed Sep 8, 2003, 3:15 p.m.: 27 IR 191; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 12. 327 IAC 15-13-7 IS AMENDED TO READ AS FOLLOWS:

327 IAC 15-13-7 SWQMP-Part B: baseline characterization and report

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-3-2
Affected: IC 13-18-4

Sec. 7. (a) An MS4 operator shall characterize the water quality of all known waters that receive storm water outfall discharges within the MS4 area. This characterization may begin with the receiving waters identified in the

NOI letter submittal, and, as receiving waters are identified, the characterization shall be expanded to those additional receiving waters and the subsequent information presented in the corresponding annual report required under section 18 of this rule. The water quality characterization must utilize existing or new information that may describe the chemical, biological, or physical condition of the MS4 area water quality. If monitoring is conducted as part of the characterization, the monitoring of receiving waters shall be either at, or in proximity to, all known, or representative, storm water outfall discharges. After the baseline characterization data is collected, the MS4 operator shall evaluate the data in the baseline characterization to determine which identified areas or specific discharge points are in need of additional water quality measures. This baseline characterization must include the following:

(1) An investigation of land usage and assessment of structural and nonstructural storm water BMP locations and conclusions, such as key observation or monitoring locations in the MS4 conveyances, derived from the land usage investigation.

(2) The identification of known sensitive areas, such as public swimming areas, surface drinking water intakes, waters containing ~~threatened or~~ endangered **or threatened** species and their habitat, or **outstanding** state ~~outstanding~~ resource ~~and exceptional use~~ waters. The identified sensitive areas should be given the highest priority for the selection of BMPs and the prohibition of new or significantly increased MS4 discharges.

(3) A review of known existing and available monitoring data of the MS4 area receiving waters, including, as applicable, data that can be correlated from SRCERs.

(4) The identification of areas having a reasonable potential for or actually causing storm water quality problems based on the available and relevant chemical, biological, physical, land use, and complaint data.

(5) Assessment results of BMP locations and, as appropriate, the structural condition of the BMP related to the BMP's effectiveness in improving storm water quality. As appropriate, this assessment should include recommendations for placement and implementation of additional BMPs within the MS4 area.

(b) An SWQMP-Part B: Baseline Characterization and Report addressing the requirements of subsection (a) must be developed and submitted to the department at the address specified in section 9(b) of this rule. The SWQMP-Part B: Baseline Characterization and Report and completed corresponding certification form must be submitted no later than one hundred eighty (180) days from the date the initial NOI letter submittal was received by the department or the expiration date of the previous five (5) year permit term.

(c) The department shall review the SWQMP-Part B: Baseline Characterization and Report for adequacy, and a written NOS letter or NOD letter shall be issued to the MS4 operator. If no letter is issued within ninety (90) days of submittal, the SWQMP-Part B: Baseline Characterization and Report is deemed sufficient.

(d) Responses to NOD letters shall be made by the recipient within thirty (30) days of the date on the NOD letter.

(e) Ongoing data collection related to the SWQMP-Part B: Baseline Characterization and Report must be submitted to the department with the corresponding annual report.

(f) A qualified professional and the MS4 operator shall certify, with the stated paragraph found in 327 IAC 15-4-3(g)(3), a submitted SWQMP-Part B: Baseline Characterization and Report checklist form.

(Water Pollution Control Division; 327 IAC 15-13-7; filed Jul 7, 2003, 2:15 p.m.: 26 IR 3584; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

SECTION 13. 327 IAC 17-2-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 17-2-4 General conditions

Authority: IC 13-18-3-1; IC 13-18-22-1; IC 13-18-22-7
Affected: IC 13-18-3; IC 13-18-4

Sec. 4. The recipient of the general permit shall comply with the following general conditions:

(1) Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

(2) Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date. The permittee shall deposit any dredged material in a contained upland disposal area to

prevent sediment run-off to any water body. Sampling may be required to determine if the dredged sediment is contaminated.

(3) No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area.

(4) Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

(5) The permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality.

(6) No activity is authorized under this general permit where state endangered, threatened, or rare species are documented on a permanent or seasonal basis within a one-half (1/2) mile radius of the proposed project site by the Indiana Natural Heritage Data Center.

(7) Upon completion of the wetland activity and any required mitigation, the permittee shall submit a signed certification to the department. The certification will include the following:

(A) A statement that:

(i) the authorized work was done in accordance with the department authorization, including any conditions; and

(ii) any required mitigation was completed in accordance with the permit conditions.

(B) The signature of the permittee certifying the completion of the work and mitigation.

(8) More than one (1) general permit provision may be used for a single and complete project to the extent applicable, provided that the acreage loss of SRWs authorized by all general permit provisions utilized does not exceed the acreage limit of the general permit provision with the highest specified acreage limit.

(9) No activity may occur in the proximity of a public water supply intake, except where the activity is for repair of the public water supply intake structures.

(10) No activity, including structures and work in SRWs or discharges of dredged or fill material, may consist of unsuitable material, for example:

(A) trash;

(B) debris;

(C) car bodies; and

(D) asphalt;

and material used for construction or discharged must be free from toxic pollutants in toxic amounts.

(11) When determining compensatory mitigation to reasonably offset the loss of wetlands allowed by the general permit, the commissioner will consider the following factors:

(A) The commissioner will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(B) Permittees may propose the use of mitigation banks to meet the wetland mitigation requirements.

(C) In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing or complying, or both, with the mitigation plan.

(12) Activities in breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

(13) Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

(14) Critical resource waters include critical habitat for ~~federally listed threatened and~~ endangered **or threatened** species, state natural heritage sites, outstanding national resource waters, ~~water pollution control~~ **environmental rules** board designated waters, for example, outstanding state or national resource waters, or both, ~~exceptional use waters,~~ outstanding state protected wetland, or other waters officially designated by the state as having particular environmental or ecological significance and identified by the commissioner after notice and opportunity for public comment. Critical resource waters affect permitting as follows:

(A) Except as noted in clause (B), discharges of dredged or fill material into SRWs are not authorized by section 2(b)(7), 2(b)(8), or 2(b)(11) of this rule for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(B) For section 2(b)(1), 2(b)(9), 2(b)(10), and 2(b)(11) of this rule, the commissioner may authorize activities under these general permits only after it is determined that the impacts to the critical resource waters will be no more than minimal.

(15) For purposes of this general condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps. Discharges of dredged or fill material into SRWs within the mapped 100-year floodplain, resulting in permanent abovegrade fills, are not authorized by general permit.

(16) The permittee shall clearly mark the construction limits shown in the plans at the tract during construction.

(17) The permittee shall allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials to:

(A) enter upon the tract;

(B) have access to and copy at reasonable times any records that must be kept under the conditions of the

permit;
(C) inspect, at reasonable times any:
(i) monitoring or operational equipment or method;
(ii) collection, treatment, pollution management, or discharge facility or device;
(iii) practices required by the permit; and
(iv) wetland mitigation site; and
(D) sample or monitor any discharge of pollutants or any mitigation site.

(18) Any activity involving fill that is associated with additional impacts to waters of the state, such as dredging, excavation, or damming, is not authorized by a general permit unless the total area of wetland affected is less than or equal to the area allowed by the general permit.
(19) Execute the project as proposed in the notice of intent.
(20) Implement the mitigation plan submitted with the notice of intent.
(21) Complete all activities necessary to construct the mitigation wetland within one (1) year of the effective date of this general permit, unless the department grants a written extension upon request.
(22) Clearly identify, on the tract, all mitigation wetlands after construction of the mitigation wetlands. Install survey markers to identify the boundaries of the wetlands. If the mitigation wetlands being constructed are adjacent to or near existing wetlands, then the survey markers must distinguish the constructed wetland from the existing wetland.
(23) An applicant establishing a Class I, Class II, or Class III mitigation wetland must file a signed and recorded environmental notice, which describes the compensatory mitigation contained in the mitigation plan, with the department within sixty (60) days of the applicant's release from monitoring requirements.

(Water Pollution Control Division; 327 IAC 17-2-4; filed May 25, 2005, 10:45 a.m.: 28 IR 2976; errata filed Oct 11, 2005, 12:00 p.m.: 29 IR 548; readopted filed Jun 15, 2011, 11:15 a.m.: 20110713-IR-327110193BFA; filed Nov 10, 2014, 1:51 p.m.: 20141210-IR-327130290FRA)

LSA Document #13-290(F)
Proposed Rule: 20140507-IR-327130290PRA
Hearing Held: September 10, 2014
Approved by Attorney General: October 30, 2014
Approved by Governor: November 7, 2014
Filed with Publisher: November 10, 2014, 1:51 p.m.
Documents Incorporated by Reference: None Received by Publisher
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Posted: 12/10/2014 by Legislative Services Agency
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