

Guidance for determination of NPDES regulatory status of various discharges on a mine site (Active and Inactive Mines)

Jun 3, 2016; NC DEQ Stormwater Program

	Feature contributing to a discharge	Conditions and comments	sw	ww	not regulated	Rule or permit citations; other guidance
1	Undeveloped areas at the site, w/o permitted mining activity	Other areas closed out and fully reclaimed, too.			X	Excluded from stormwater def. in 40CFR122.26(b)(14)
2	Overburden stockpile	Not mixed with any mined materials or other wastewater drainage. Better when fully stabilized.	X			'overburden' at 40CFR122.26(b)(14)(iii)
3	Soil borrow area drainage	Like a borrow area at a construction site.	X			DEQ BPJ interp. of citation above.
4	Vehicle maintenance areas	Additional monitoring, if qualified by motor oil usage. If commingled with WW, discharge instead subject to wastewater sampling; additional O&G sampling could be recommended but not required (per current permit).	X			Consistent w/other regulated activity identified at 40CFR122.26(b)(14)(viii); DEQ BPJ
5	Equipment boneyards		X			'refuse sites' in 122.26(b)(14)
6	AST Secondary containment release	If uncontaminated.	X			'tank farms' in 122.26(b)(14)
7	Access and haul roads, <i>without</i> dust control	<i>Except: roads off-site are not regulated</i>	X		X, off-site roads	'access roads' in sw definition in 40CFR122.26(b)(14)
8	Access and haul roads, <i>with</i> dust control, <i>when it's stormwater</i>	If just stormwater runoff from sprayed roads. OK to spray with mine pit water <u>as long as</u> no significant or sustained flow, or discharge to surface waters results. Any chemicals used should be approved and used in proper doses to prevent aquatic toxicity – refer to approved PAMS list or consult DWR Aquatic Toxicology Branch.	X			Above citation plus DEQ BPJ for spraying mine dewatering water for dust control. Inspector BPJ to determine if excessive flow or potential WQ problem is basis for wastewater determination.
9	Access and haul roads, <i>with</i> dust control, <i>when it's wastewater</i>	If recycled or process wastewater sprayed, or if spraying excessive enough to cause sustained flow or discharge to surface waters. Also wastewater if any chemicals applied are not approved by DWR Aquatic Toxicology or are used in amounts that may cause aquatic toxicity .		X		NPDES process ww definition at 40CFR122.2 plus DEQ BPJ on prudent protection for NC surface waters. Inspector BPJ to determine if spray excessive.
10	Stormwater-only sediment basins	If no wastewater contribution (mine dewatering, process ww, flow from active mining area.)	X			Stormwater in: stormwater out, DEQ BPJ
11	Stormwater-only sediment basin cleaning spoil drainage	Spoil may not impact wetlands.	X			15A NCAC 2B .0231, NC wetlands standards
12	Wastewater treatment or recycle basin cleaning spoil drainage	Includes basins that treat wastewater or mine dewatering water.		X		Wastewater in: wastewater out, DEQ BPJ
13	Processing plant: recycle water overflow or process wastewater	Even if caused by rainfall or mixed with stormwater runoff. <i>Except: segregated areas that do not drain wastewater would be stormwater, but these are rare.</i>	X, seg. area	X		40CFR122.2 def. process ww ; ' plant yards ' in stormwater definition at 122.26(b)(14)
14	Final product stockpile drainage, <i>when it's stormwater</i>	For most construction materials including sand, gravel, and stone; industrial sand.	X			'final products' in stormwater def. at 40CFR122.26(b)(14)
15	Final product stockpile drainage, <i>when it's wastewater</i>	For some mineral mines where 'final' product is subject to further processing; and if final product exposes minerals, metals, or chemicals with aquatic toxicity or other pollutant risk: DEQ may regulate as WW.		X		'comes into direct contact with...intermediate product, final product...' 40CFR122.2 Def. of process wastewater; DEQ BPJ
16	Mine <u>pit</u> dewatering, pumped or drained by efforts of the operator	Including contributions from rainfall and groundwater.		X		40CFR436.21, .31, and .41; DEQ BPJ default for all mines
17	Mine <u>pit</u> dewatering, via overflow due only to rain or groundwater seepage	DEQ considers these types of discharges, including those from clay pits (not specified in regs), as regulated wastewater. <i>Except: such wet pit overflows from 436.21</i>	X, crushed stone wet pit overflow	X		40CFR436.31 <i>Construction sand & gravel</i> have effluent limits and "mine dewatering" includes wet pit overflows; 436.41 <i>Industrial sand</i> , same;

Guidance for determination of NPDES regulatory status of various discharges on a mine site (Active and Inactive Mines)

Jun 3, 2016; NC DEQ Stormwater Program

	Feature contributing to a discharge	Conditions and comments	sw	ww	not regulated	Rule or permit citations; other guidance
		<i>Crushed Stone treated as stormwater, <u>as long as not commingled</u> with process generated wastewater.</i>				DEQ BPJ for 436.21 <i>Crushed stone narrower mine dewatering definition</i> ; DEQ BPJ for clay.
18	Mine face / Mine excavation area drainage (not a pit), <i>when it's stormwater</i>	e.g., mining an area on a mountain side or sand mine excavation area(s). <i>When water from the mine area is not</i> "pumped, drained, or otherwise removed from the mine through the efforts of the mine operator." <i>But, often mine excavation area drainage will be wastewater per 19.</i>	X			DEQ BPJ; Def. of <i>mine dewatering</i> in 40CFR436.21, .31, and .41. Situations where stormwater inside a mine is <u>not intentionally</u> routed out of the mine by operator efforts.
19	Mine face / Mine excavation area drainage (not a pit), <i>when it's wastewater</i>	e.g., active mining area on a mountain side or sand mine excavation area(s). Any "water that is impounded or that collects in the mine and is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator" is subject to effluent limitation guidelines. Also, mines where mine face exposure results in significant risk to water quality standards (note, an individual permit may be required to monitor parameters not in NCG02).		X		Consistent with <i>mine dewatering</i> definition in citations above and 'direct contact with' 40CFR122.2 def. of <i>process wastewater</i> . Includes grading, channeling, ditching, or outlet construction intended to remove/drain water from the active mining area. If exposure includes parameters not in NCG02 (metals, for example), a general permit may not be appropriate.
20	Legacy structures at a closed out and reclaimed mine: e.g. stabilized overburden stockpiles, stormwater basins, and pit/quarry overflows	And for closed out and fully reclaimed portions of an operating site			X	Excluded from stormwater def. in 40CFR122.26(b)(14); not included in process wastewater definition at 40CFR122.2
21	Deemed permitted discharges	Subject to NC rule, but not this permit. 2T covers discharges to the land surface.	-	-	-	15A NCAC 2H .0106(f) 15A NCAC 2T .0113(a)(15),(16)

Notes:

- **What is covered by NCG02?** *Stormwater and wastewater discharges from construction materials quarries, mineral mines, and stand-alone processing plants associated with them; and clay mines. What is not covered by NCG02?* *Discharges from tourist gem mines; brick manufacturing w/o clay pits (NCG07); coal, peat, oil & gas; metal mining; DOT borrow areas (NCS000250); in-stream sand dredging (NCG52); mine operations already covered under an individual discharge permit.*
- **Wastewater commingled with stormwater is regulated as wastewater.** *Even if the discharge is rainfall driven.*
- **Whether regulated with a permit under the NPDES program or not, mining discharges may not cause or contribute to a violation of an in-stream water quality standard.** *Bring DWR RO Supervisor into loop if observed site conditions suggest the potential for a WQS violation.*
- **Whether regulated with a permit under the NPDES program or not, mining discharges or operations may not: drain wetlands due to dewatering in the mine; blow out wetlands due to the volume of discharges; or damage wetlands with pollutants from the mine property.** *Bring DWR RO Supervisor into the loop if observed site conditions suggest the potential for wetlands damage whether intentional or incidental/accidental.*
- **The receiving water classification may determine the numerical value of the stormwater benchmarks or the wastewater limitations.** *See permit text.*
- **What if continuous flow measurement of wastewater is impractical or overly burdensome, and discharge isn't pumped (no pump curves)?** EPA has advised (3/24/2016) that continuous flow meter may not be necessary or practical in all situations, especially where flow discharge is infrequent; DEQ regions can make accommodations to allow permittees to use an alternative method to estimate discharge flows when appropriate. Consider that **discharges to HQWs** are subject to flow limits in the permit (based on NC WQS). Permit footnote language came from NPDES WW permit standard language and has remained in NCG02 for several permit cycles; DEQ will revisit at renewal.
- **Limitation of authority:** *This guidance table is intended as an on-site aid for DEMLR inspectors and for permittees. It does not replace relevant NC law, federal and state rules, NCG02 permit conditions, DEMLR policy, or DEMLR implementation precedent.*