



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
401 CHURCH STREET  
L & C ANNEX 6TH FLOOR  
NASHVILLE TN 37243

Addendum to Rationale  
Including  
Record of Comments and Responses  
(Notice of Determination)

**General National Pollutant Discharge Elimination System (NPDES)  
Permit for Discharges of Process Wastewater and Stormwater  
Associated with Ready-Mix Concrete Facilities**

**Permit No. TNG110000**

November 1, 2012

**Administrative Record**

The permit rationale (or fact sheet) dated September 24, 2012, sets forth the Division of Water Resources (division's) basis for permit conditions to be applied statewide for the issuance of the new Tennessee National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Process Wastewater and Stormwater Associated with Ready-Mix Concrete Facilities (RMCP). The RMCP is intended to authorize Process Wastewater and stormwater point source discharges to waters of the State of Tennessee from activities related to ready-mix concrete manufacturing.

The current RMCP expired on October 31, 2012. On September 10, 2012, the division issued Public Notice #PH 12-006, which announced the public hearing, which were conducted at the following date and location:

Date	City	Location	Time
October 15, 2012	Nashville, TN 37243	401 Church Street 17 <sup>th</sup> Floor L&C Tower Conference Room 17 "B"	6:00 P.M. Central Time

On September 24, 2010, the division issued Public Notice #MMXII-017, which announced its intent to issue the RMCP. Copy of the draft CGP permit was made available in an electronic format on the division's web site at <http://www.tn.gov/environment/permits/concrete.shtml>. The proposed NPDES permit was drafted in accordance with the provisions of the Federal Water Pollution Control Act, the Tennessee Water Quality Control Act, and other lawful standards and regulations. The division received comments through October 25, 2012. This Notice of Determination (NOD) serves as the division's response to questions, comments and issues that were raised at the hearing and/or submitted during the subsequent comment period.

Comments and Responses

Comments from EPA R4 email dated 10/11/12		
Item	Reference	Comment
1	Section 1.2.1. third paragraph	It is unclear what is meant by the sentence: “However, discharges of this type will be referred to as process wastewater discharges and all permit requirements apply, including Section 1.2.3 for Non-discharging Treatment Systems Operations.” Recommendation: Clarify the last portion of this sentence starting at “...including Section 1.2.3...”
<b>Response</b>		<b>This section is tied closely to Section 1.2.3. covered in items 3 through 6 below. However, the final phrase referenced above will be reworded “...including the requirements of Section 1.2.3 for Non-discharging Systems if the facility was designed as a non-discharging system.”</b>
2	Section 1.2.2. in regards to this sentence	“In addition, this permit shall not apply to discharges to a receiving stream that will result in a significant increased loading of a pollutant that is given as a cause of impairment to the receiving stream.” Question: How is “significant increase loading” determined? In some cases any increase should not be allowed (i.e., TSS if stream has siltation impairments). This should be further clarified in the permit and also discussed in the rationale.
<b>Response</b>		<b>In this case, the word “significant” is used in an introductory paragraph which precedes an enumerated list of specific prohibitions such as all discharges to Outstanding Natural Resource Waters and any discharge regulated by an existing NPDES permit if the general permit is less restrictive. Furthermore, the word “significant” was used in accordance with its meaning and use in the state General Water Quality Criteria, Chapter <a href="#">1200-04-03</a>. No permit change is to be made.</b>
3	Section 1.2.3.	Question: If there is a discharge of wastewater from a “non-discharging system” should this not be grounds for violation? Please respond to the question and clarify the permit, as needed.
<b>Response</b>		<b>See item 4 below.</b>
4	Section 1.2.3.(b)	This section appears to be contradictory of requiring “non-discharging systems” when this permit allows discharge that meets the terms of this statement. Clarify why the systems are called “non-discharging” systems when they may discharge?
<b>Response</b>		<b>The Ready Mixed Concrete Facility General Permit has historically contained an option for operators to obtain what has been described as “non-discharging” coverage under the general permit. To obtain this coverage the operator must submit plans, with the NOI, that specify the wastewater retention, treatment, and reclaim/recycling systems that the operator intends to use to prevent discharges of wastewaters from the site. The permit specifically requires that the retention ponds be designed with a minimum freeboard sufficient to handle a 2 hour 10 year storm in addition to normal operation. The division’s intent in establishing the non-discharging operation was to establish an option for RMCPs to practice water conservation, take advantage of the economy of not having to perform sampling, and, also, to locate in areas where water quality may not be receptive to RMCP pollutants of concern. (Note Section 1.2.5.2. concerning discharges from new or expanded sources, which can only obtain coverage under the non-discharging option.) However, the division does understand that, especially in areas like Tennessee, discharges will occur in the extremely rare situations where unusual precipitation occurs. The</b>

		<p>requirements concerning discharge monitoring are included in the permit only to assure that even unintentional discharges meet permit requirements.</p> <p>However, from the number of remarks from EPA, the division realizes that the concept, even though it is clear to TDEC and the RMCP community, may not be clear to others. A brief explanation of the concept as a practical non-discharging option relying on reclaim and recycle systems to eliminate discharges except in response to a rain event larger than the design storm will be added in Section 12. Also, the division also has historically required non-discharging operators to use DMR forms to report “No Discharge” for each reporting period to document that there has been no discharge during each reporting period. This requirement is being added to section 1.2.3. for clarity. Additionally, a minor change is being made to the NOI form (submission of plans) which is already a requirement of the permit.</p>
5	Section 1.2.3.(e)	<p>The permit does not describe how it will be determined that the permittee will be in compliance with the "freeboard" provision.</p> <p>Include some sort of self reporting to TDEC on a regular basis.</p>
<b>Response</b>		<b>The permit requires the permittee to measure and record the freeboard weekly. Once freeboard information is recorded, it must be maintained at the facility for 3 years, according to the section 8.9.2. Retention of Records. The records may be checked during inspections.</b>
6	Section 1.2.3.(h)	<p>It is recommended that this Section be placed after Section (b). Also recommend that it notes Part 6 of the permit since this is the “reporting” requirements section.</p>
<b>Response</b>		<b>The recommended changes will be made in the final permit.</b>
7	Section 1.2.4.1.	Does the MS4 also require that washout wastewater reach surface water?
<b>Response</b>		<b>The last sentence of this section will be modified to “...must comply with applicable requirements of Municipal Separate Storm Sewer Systems (MS4s) if the facility discharges to the MS4.</b>
8	Section 1.2.4.2.	<p>Should the permittee inform TDEC of the "washout sites" prior to any washouts?</p> <p>Why must only "privately owned property" be used as a remote washout site? Could city or public property be used instead?</p> <p>Clarify for consistency on the Notice of Intent (NOI) and in the permit, as needed.</p>
<b>Response</b>		<b>Section 1.2.4.2. deals with “remote washout sites.” The permit allows washout at the permitted facility and at the job site. Section 1.2.4.2 deals only with sites used for washouts other than those two sites. The section requires written permission for a remote site prior to use. Operators may use public property for washout only if the site is an active job site.</b>
9	Section 1.2.5, second sentence	<p>It appears there may be a typographical error. Please correct. “...support classified uses due to the presence <u>of</u> pollutants.”</p>
<b>Response</b>		<b>This correction will be made.</b>

10	Section 1.2.5.3.	Why not make all new or expanding facilities go to the “non-discharge” method if this is available, particularly in light of the fact that many TMDLs have been developed and it would require TDEC to re-evaluate whether a new or expanded facility discharging to waterbodies would still meet the intent of the TMDL? It is recommended that new or expanded facilities go to a “non-discharge” system and the permit be revised accordingly.
<b>Response</b>		<b>RMCP facilities tend to be somewhat transitory due to the nature of their business. RMCP plants must be positioned fairly close to the location of a large quantity of business due to the short shelf life of the mixed concrete. For this reason a facility may not be in business for a long period of time or may remain idle for extended periods of time, as many plants in Tennessee have been during the recent economic downturn. Installing the non-discharging infra-structure for these types of operations may not be economically feasible. Particularly in light of the intermittent and low pollutant loading nature of the discharge, there are many Tennessee waters that have the more than enough capacity to absorb the minimal pollutants from an RMCP.</b>
11	Section 1.2.6.	It appears that all three bullets of this section must be met, but this is not clear by the requirement of this section. It is recommended that the word ‘either’ be removed and this section be clarified. Also, it is recommended that the first bullet be rewritten (as it is unclear what is being stated).
<b>Response</b>		<b>This section simply means that, by issuing the NOC, the division confirms that the discharge described in the NOI is either to a stream with available conditions for pollutants of concern or will comply with the second two bullets, both of which are true. The second pair of bullets will be combined into one bullet for clarification.</b>
12	Section 1.2.8.2.	It is recommended to use “upon” instead of “after” in the language “...Endangered Species Act, the director, <u>upon</u> written notification to the permittee, shall either...” – as this does not take place after the fact when notified.
<b>Response</b>		<b>This change will be made.</b>
13	Section 1.2.8.2.(b)	The sentence “The permittee shall have 60 days after such notice to make such modifications to the wastewater and stormwater runoff treatment methods and control measures, and then 12 weeks to implement these modifications...” is not clear. Are permittees allowed 2 months to determine what sort of modifications to make and then another 3 months to make them (for a total of five months)? Please clarify this sentence as appropriate.
<b>Response</b>		<b>The division believes that two months to design and install modifications is a very compressed schedule. An additional three months to start up the modified system, which includes complete compliance with all permit requirements, is an appropriate time period, particularly if any change to the system design is necessary. In some cases, for an extreme example the need to model or test a filtration system, the time period may not be sufficient. Therefore, the option to apply for an extended schedule is included. The division believes these time constraints are appropriate for realistic manufacturing operations situations.</b>
14	Section 2.	It is unclear how facilities covered under the GP in effect until October 31 (expiration of current permit) are covered, since this GP has not been issued. Will all facilities presently covered need to apply after this GP is signed and issued? Please clarify this section.
<b>Response</b>		<b>Yes. It is the intent of the division to issue the RMCP general permit on November 1, 2012 with administrative coverage for 60 days at which time</b>

		<p>the current coverage holders will be required to submit an NOI. The time period for submission of the NOI was originally 30 days in the draft permit, but an additional 30 days has been granted at the request of the Tennessee Concrete Association during the recent Public Hearing. The request was made because the association had scheduled a state-wide training seminar at the end of November to train RMCP operators concerning the changes in the permit and provide instructions on filling out the NOI.</p>
15	Section 3.2. (item 2.)	<p>Is this referring to the GP that expires October 31, 2012? Please clarify as needed.</p>
<b>Response</b>		<b>See item 14 above.</b>
16	Section 3.3	<p>It would be better to cite Section “8.4,” not “8.4.1” because “8.4” is more inclusive of the certification process and changes to authorization.</p>
<b>Response</b>		<b>Part 3.3 is headed “Signatory Requirements for the NOI” and Section 8.4.1 is headed “Signatory Requirements for a Notice of Intent (NOI).” Section 3.3 deals with NOI requirements. The specific reference is applicable.</b>
17	Section 4.1	<p>Significant values were not used for maximum pH, iron, and total suspended solids (TSS) (i.e., 50.0 mg/1 for TSS). The minimum pH value listed here is different than the rationale. Monthly averages for iron and TSS were not included. Even for quarterly sampling, per 40 CFR Section 122.45(d), a monthly average and daily maximum limit shall be applied, unless these are non-continuous discharges. It is not clearly documented why the monitoring of iron, TSS, and pH have been reduced to quarterly sampling frequency. The rationale (page 5, item S.C.) also does not provide a detailed rationale of why less monitoring is being allowed. Is data available to show compliance for all parameters are adequately maintained for all facilities? Recommendation: unless better justification is made, the monitoring frequencies of once per month should be maintained. It is recommended that monthly monitoring as required in the permit expiring October 2012 be maintained or provide better justification why quarterly monitoring will now be allowed.</p>
<b>Response</b>		<ul style="list-style-type: none"> <li>• The tables in the draft permit were copied from the division’s database, WaterLog, which was populated from ICIS after data was migrated from PCS to ICIS. The permit writer neglected to recall that the migration process truncated limit values during the process. These values will be changed to include the same significant digits as in the previous permit.</li> <li>• Tennessee’s water quality regulations contain two pH ranges for different types of waterbodies for the designated use of Fish and Aquatic Life. The range is 6.0 to 9.0 SU for smaller streams (wadeable) and 6.5 to 9.0 SU for larger rivers, reservoirs and wetlands. Since this is a general permit, the more stringent range was chosen.</li> <li>• Ready mixed concrete plants are intermittent dischargers. Well over 50 % of the facilities covered under this permit are either no discharging or report discharge less than half the reporting periods. Even within the reporting periods, sedimentation basins or lagoons used by RMCPs discharge only intermittently during heavy use or wet weather.</li> <li>• A review of the available monitoring data from January 2009 to date indicates general compliance. Additionally as the <i>Rationale</i> indicated and as stated above, RMCPs almost exclusively use lagoons (sediment basins) as treatment systems, which do an effective job of removing sediment. Lagoons, by their nature, are designed to treat wastewater by holding it for extended periods of time, and thus have</li> </ul>

		<p><b>a large surge capacity and a homogeneous discharge.</b></p> <p><b>The division also conducted a review of permitting authorities that use general permits for RMCPs. In all, ten state’s general permits were reviewed. Monitoring frequency requirements ranged from ‘no discharge allowed’, to annually, to quarterly, to monthly. One state required annual monitoring, 3 were no discharge allowed, 3 were quarterly, and 3 were monthly. Keeping in mind that a significant percentage of RMCP dischargers are currently non-discharging, the division believes that this permit, which incorporates both quarterly sampling requirements for dischargers and non-discharging requirements for some new and increased loading dischargers, is the most appropriate permitting strategy to protect waters of the state while fostering growth and development in the regulated community.</b></p>
18	Section 4.2 (last paragraph)	<p>Are facilities supposed to develop or review the BMPs and maintain them on site?</p> <p>Clarify the permit as needed in regards to the development or review of BMPs and maintaining them.</p>
<b>Response</b>		<b>This requirement is stated in Subpart 5.3. and Part 7. of the permit.</b>
19	Section 5.	<p>The sampling locations are not clearly defined. The sampling methods are noted later in the document in Section 8.9.4.</p> <p>For clarity, the correct sampling procedures and locations should be defined in this section. For example: cite 40 CFR part 136 for the correct test methods (or refer to Section 8.9.4. of the permit) and note that effluent locations are "at the end of treatment" prior to mixing with other water.</p>
<b>Response</b>		<p><b>Section 8.9.1. Representative Samples/Measurements will be modified to address this recommendation:</b></p> <p><i>“Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the monitored discharge, and shall be taken after treatment and:</i></p> <ul style="list-style-type: none"> <li>• <i>prior to mixing with uncontaminated stormwater runoff or the receiving stream;</i></li> <li>• <i>prior to effluent leaving the construction site boundary.”</i></li> </ul>
20	Section 6.1.1.	<p>Please verify that DMRs with carbon copies are being used; if not, this section should be revised to indicate the original and a copy should be sent to TDEC. Recommendation: note the DMRs are to be sent to TDEC at the address in Section 6.2 (otherwise, it might go to the field office).</p>
<b>Response</b>		<b>This was a copying error. The sentence referring to “top two copies’ will be removed from the draft.</b>
21	Section 7.1. third bullet	<p>Since this bullet discusses “toxic or hazardous pollutants” it is suggested that this be defined are regulation referenced somewhere (maybe in the definitions section).</p>
<b>Response</b>		<b>See Item 54, below. The reference to Section 313 water priority chemicals used in the TN Multi-sector Stormwater General Permit for Industrial Dischargers (TMSP) will be added.</b>
22	Section 7.1. fourth bullet	<p>This section references that the permittee is to determine "a reasonable potential for containing significant amounts of pollutants" without defining how to do this.</p> <p>Please clarify.</p>
<b>Response</b>		<b>See Item 54, below. This language will be eliminated.</b>

23	Section 7.2. last bullet on page 17	How often should the stormwater be tested for the presence of non-stormwater discharges? What indices (pollutants) would be used to determine that water is “non-stormwater?” Please clarify these points.
<b>Response</b>		<b>See Item 54, below.</b>
24	Section 7.4.	The stormwater management programs <u>shall</u> (not “may”) reflect requirements of SPCC. This should be changed for enforceability.
<b>Response</b>		<b>Spill Prevention Control and Counter-measure programs are not a requirement of this permit nor within the state’s regulatory jurisdiction. It is not likely that any RMCP would have sufficient quantity of any material covered under the SPCC regulation so as to be required to develop an SPCC. However, this is standard division language that states that the two types of programs may be combined into one plan.</b>
25	Section 8.1.2.	Are these penalty amounts accurate? The EPA has increased amounts over the years, but the State may not have yet adopted them, thus may not be able to apply them? Please review and revise as needed.
<b>Response</b>		<b>The penalty amounts are correct, and the assumption is correct. The state has not updated the code.</b>
26	Section 8.4.	Remove the reference to "acute toxicity testing reports" since it does not apply to these facilities.
<b>Response</b>		<b>This reference will be removed.</b>
27	Section 8.4.2.	Please change “Subpart 8.7” to “Subpart 8.4”
<b>Response</b>		<b>This reference will be changed.</b>
28	Section 8.6.1.	In this section, the permittee is allowed one of three options after TDEC notifies them of a violation with three different time periods (60 days, 120 days, and 180 days). The state would have to wait up to 180 days to see if any of the three options were to be chosen. Is this the intent? Please clarify as needed.
<b>Response</b>		<b>The division believes that these time periods are realistic for the alternatives. Allowing the covered RMCP 60 days to conduct sufficient sampling activities (perhaps including stream biomonitoring) and the appropriate analytical and evaluation and reporting time, two months is a very compressed time period. Again, depending on the nature of the changes required, a period of four months to conduct concept, engineering design, bidding, procurement, design and start-up is a realistic time schedule. The final time period of 180 days is realistic period of time for the division to allow for preparing an application for an NPDES permit, especially considering the constraints of performing the social and economic analysis and the alternatives analysis required by regulation after first evaluating existing processes and any modifications that may be involved. If the permittee was late on any given time constraint for a given alternative, the division would consider taking enforcement action.</b>
29	Section 8.6.1 Last option	Are the permittees supposed to send any applications for individual permits to the field offices instead of the central office? Please clarify.
<b>Response</b>		<b>The division recently instituted a policy of receiving all permit related documentation at the central office. The documents are scanned and uploaded to our centralized database, WaterLog, and are available to all offices, statewide. Critical documents such as permits and draft permits are available to the general public by way of internet access.</b>

30	Section 8.6.2.	Please correct the typographical error: the Environmental Field Offices are listed in Part 11 (not Subpart 1.2)
<b>Response</b>		<b>This reference will be changed.</b>
31	Section 8.10.	The right of entry should allow EPA access (the standard language used in your individual permits should also be used in the general permit).
<b>Response</b>		<b>This change will be made.</b>
32	Sections 8.12., 8.13., and 8.14.	Recommendation: Please clarify as to the location (EFO or central office) which must receive the reporting requirement.
<b>Response</b>		<b>This change will be made.</b>
33	Section 12.	Is this term "Margin of Safety" needed in the definitions since it does not seem to appear in the permit? A definition of 'process wastewater is not included in the permit. It is strongly recommended that a definition of the term be included. "Stormwater" appears to be defined incorrectly, since it is noted in the permit that contaminated stormwater is "process wastewater." It is recommended that the definition of 'stormwater' be clarified. Please correct the typographical error: capitalize "Total Maximum Daily Load"
<b>Response</b>		<b>"Margin of Safety" will be eliminated.</b>  <b>"Process Wastewater" will be defined in Section 12. Section 2 of the <i>Rationale</i> discusses the generation of process wastewater at RMCP facilities. This language will be used to develop the definition for 'process wastewater' with one addition. Since the fifth paragraph of permit Section 1.2.1. states that facilities that manufacture other concrete products such as concrete block and brick may be covered under the permit, language including water that is used to wash or cool any process or equipment will also be added to the definition.</b>  <b>In the draft permit Section 1.2.1. refers to "process wastewater that has been combined with stormwater runoff..." as being referred to as process wastewater. Of course, the converse is true. Whether stormwater is mixed with process wastewater or process wastewater is mixed with stormwater runoff, the division will designate the water to be process wastewater. Stormwater that has not been mixed with process wastewater is still stormwater, whether or not it is contaminated.</b>  <b>"Total Maximum Daily Load" will be capitalized.</b>
34	After Section 12.	A list of acronyms should be added to this general permit.
<b>Response</b>		<b>A list of acronyms will be added to the permit as Section 13.</b>
35	NOI	At the top it asks for the existing number for permit modification, it should also be required for reissuances, too.
<b>Response</b>		<b>This change will be made.</b>
36	NOI	The NOI should require the permittee to list each outfall and receiving stream separately (not just the number of outfalls).
<b>Response</b>		<b>The instructions on the NOI require the applicant to identify the receiving waters. Also, the instructions also suggest that the applicant use additional paper if there is not sufficient room on the form. Additionally, RMCP facilities are relatively small, usually a few (2 or 3) acres; and almost all discharge to one receiving stream. However if there is any question, by using the division's GIS-based mapping/location tools the permit writer can easily locate a facility from either an address or latitude and longitude. The tool switches easily between a choice of topographical maps and aerial</b>

		<b>photographical views. If there are any questions on a particular site, it is a simple matter for the permit writer to verify discharges with the facility and/or the field office.</b>
37	NOI Instructions Under "Complete the form" paragraph	Since the current GP is about to expire (October 31, 2012), and if this permit is effective November 1 (it is not known if the timing of the permit will become November 1), there will not be enough time for permittees to submit the NOI prior to the effective date of the GP - timing could be an issue. Clarification is needed
<b>Response</b>		<b>See item 14, above.</b>
38	NOI Under 'Identifying Discharges'	It is recommended that this section should also require a map from the facility (to ensure no changes have occurred).
<b>Response</b>		<b>See Item 36, above</b>
39	Under 'Identifying Discharges'	This paragraph discusses the differences in process wastewater and stormwater. It is not clear if this was adequately included in the general permit itself (and it should be). Ensure that adequate language is included in the actual permit to differentiate process wastewater and stormwater.
<b>Response</b>		<b>The definitions of process wastewater and stormwater runoff have not changed over the previous general permit. The only concept that the division has changed is the concept of "Mixed Outfalls." Mixed outfalls used to be defined as outfalls consisting of combined process wastewater and stormwater runoff. The draft permit defines these outfalls as Process wastewater outfalls. See also Item 33, above.</b>
40	Submitting the Form	Note that the subsection referenced (8.7) is not the signature requirements for this GP. It is unclear what is meant by electronic submission. Correction and clarification is needed.
<b>Response</b>		<b>Section 8.7 will be changed to Section 3.5. Electronic submission of NOIs is covered in Section 3.5 of the permit. A clarification will be added if space is available on the NOI form.</b>
41	Rationale 1	It is suggested to add RMCP after "ready mix concrete plants."
<b>Response</b>		<b><u>General Comment:</u></b> <b>As a matter of policy, the division does not make changes to the <i>Rationale</i> document, itself. The <i>Rationale</i> is used to establish a timeline for the changes that are made to a permit. All comments are addressed in addendums to the permit (or in this case a Notice of Determination) and appropriate changes are made in the permit document, itself. Because of this, minor "typo" or "clarification changes" that may normally be addressed with a change in a document will not be addressed with a change to the <i>Rationale</i>. Item 41 is one such comment. This change would normally be made since it is a simple clarification, but this and similar changes will not be addressed below. They will simply be noted as "Typo" or "Clarification."</b>
42	Rationale 1 (R 1)	Clarify that the "Division of Water Resources" was formerly known as "Division of Water Pollution Control" for clarity since the permit that is about to expire October 31 was issued under this administrative name.
<b>Response</b>		<b>Clarification.</b>
43	R 5.A.	Recommend the following changes to the second sentence (of the second paragraph) "The division has identified waters that do not meet water quality criteria, the parameters for which the waters do not meet standards and the sources of the parameters."
<b>Response</b>		<b>Typo.</b>

44	R 5.B., TSS and Iron	As previously indicated per 40 CFR 122.45(d), it is recommended that these parameters should contain monthly average and daily maximum limits (even if less frequent monitoring).
<b>Response</b>		<b>See Item 17, above.</b>
45	R 5.B., pH	There may be a discrepancy with the permit and the rationale; the permit shows 6.5 s.u. for a minimum pH limit; this rationale states it is 6.0 s.u. Please correct as needed.
<b>Response</b>		<b>See Item 17, above.</b>
46	R 5.B., Iron	Was consideration given to lowering the iron limit since the data is indicating that the average value of iron was 0.8 mg/L? The state should consider lowering the iron benchmark.
<b>Response</b>		<b>The limits established in this permit were based on the previous permit and the discharge history during the previous permit cycle. The state has not established a water quality criterion for iron, and the federal recommended water quality criterion for iron (as it would apply to these discharges) is primarily a “welfare” criterion. The federal criterion narrative states that iron discharges have very little toxic affect on aquatic life accept in very extreme conditions (very low dissolved oxygen). Historically these limits have proven protective to water quality in Tennessee. See also Item 53.</b>
47	R 5.B. Stormwater	Note that the stormwater benchmark in the permit for minimum pH is 6.0 SU, yet this number is listed as 5.0 SU. Please correct as needed.
<b>Response</b>		<b>Typo.</b>
48	R 5.C.	As previously noted, (and there is not a strong compelling reason one way or another), it is recommended that the monthly monitoring remain in the permit. There are not that many parameters to measure to begin with and once a month is not that much monitoring for flow, pH iron, and TSS. More data will detect any problems earlier.
<b>Response</b>		<b>See Item 17</b>
49	R 5.C.	Recommendation: ensure that this narrative that is included in this paragraph is also included in the permit to ensure “that it has the ability to be enforced.”
<b>Response</b>		<b>Rationale and explanation are not included in the permit. The concepts from this section of the <i>Rationale</i> are included in the permit. See Items 17, 18 and 53.</b>
50	R Page 5, Item B, Other Conditions	Typographical error: this should be Item D
<b>Response</b>		<b>Typo.</b>
51	R Item 6, first bullet	Recommend that the first bullet be specifically described within the context of the permit (as previously noted, giving a clear definition of “process wastewater” will remedy this.
<b>Response</b>		<b>See Items 33 and 49, above.</b>

Comments from EPA R4 email dated 10/19/12		
52	Sections 4.1 & 5.1	The permit states that flow measurement should be instantaneous. The equation for the flow estimate on page 13 needs to be defined in more detail. What information is needed for determining the cross-sectional area? Is it the actual depth of water flow or the whole cross-sectional area? What is the 0.648 number in this equation? Is the friction loss of 80% the same for a rough concrete or smooth metal surface?
<b>Response</b>		<b>Historically, the permit has required the flow rate (and total daily flow) reported from a process wastewater outfall to be estimated. The ‘Sample Type’ in the draft permit table is a copying mistake and should read ‘Estimate’. The actual reporting requirement in the permit language is to report the total one day discharge as an estimate. The previous permit simply states that the permittee may use any “conventional recognized flow equation” to estimate flow rate. The equation in the draft permit is given as a practical example. The number “0.646” is the factor for converting cubic feet per second to Million Gallons per Day.</b>
53	Section 5.2	Why is there no flow monitoring requirement for stormwater discharge?  Note that EPA's Multi-Sector General Permit (MSGP) (Sector E) has more stringent benchmark values: Iron is 1 mg/l (instead of 5 mg/l in this permit) TSS is 100 mg/l (instead of 150 mg/l in this permit).  Also the EPA's MSGP has an effluent limit for facilities that have discharges from material storage piles at cement manufacturing facilities. The limit for TSS is 50 mg/l.  Lowering both Fe and TSS benchmark values would be viewed as implementing a technology-based requirement. More stringent stormwater limits should be placed into the permit to be more in line with EPA's MSGP.
<b>Response</b>		<b>This section of the permit deals with stormwater monitoring requirements. The benchmarks, monitoring requirements and storm information requirements of this section are derived directly from the TMSP, as are the rest of the stormwater related requirements in the permit, such as the SWPPP requirements. Since the TMSP doesn't require discharge flow measurement, the RMCP permit doesn't require flow measurement. The division is simply keeping stormwater monitoring requirements consistent among various permits.</b>  <b>On a practical basis, a facility's NOI and SWPPP information coupled with the storm data that is required could be used to estimate flow for a particular monitoring event. However, this data is not currently being collected for industrial stormwater, and is not being used at present.</b>  <b>The stormwater benchmarks in the RMCP draft permit are taken from the current Tennessee Multi-sector Stormwater Permit for Industrial Activities (TMSP). Benchmarks will be re-evaluated for the new TMSP in 2014, and stormwater benchmarks included in permits such as this one will be updated when they are renewed.</b>  <b>The limits found in Table 8.E-2 apply to cement manufacturing facilities. And, more importantly, the raw materials in a cement manufacturing</b>

		<p>facility are very different from an RMCP's aggregate piles. Cement raw materials include limestone, alumina, silica, iron, gypsum, fly ash and possibly other materials. The plants are very large kilns and mills and the processes are fundamentally different from RMCPs. RMCP plants are essentially small local delivery systems. RMCPs usually have one or two silos of cement and piles (sometimes contained in bins enclosed on three sides) of aggregate. A conveyor is used to load the cement through a hopper into concrete mixer trucks (or a molding process). The aggregates are loaded through the hopper, frequently with a front-end loader.</p> <p>Though RMCPs have the potential to produce dust and siltation, the nature and size of the process is drastically different from a cement manufacturer. The division believes that the monitoring requirements of the draft permit, backed by the historical monitoring data, are sufficient to spot potential problems before they occur and ensure water quality.</p>
54	Section 5.2	This permit should have a requirement to conduct Quarterly Visual Assessments of stormwater discharges.
<b>Response</b>		<b>The draft permit was drafted with the requirements from the 2001 TMSP. After review, this was in error. The entire Section 7 will be removed and replaced with the Stormwater Pollution Prevention Plan (SWPPP) requirements from the current TMSP, which includes quarterly visual assessments of storm water discharges. Only minor language modifications will be made to make references and language fit the RMCP general permit.</b>
55	Section 5.3	For facilities that exceed their benchmark or effluent limits, monitoring frequency should increase from quarterly to at least monthly until the discharge is in compliance.
<b>Response</b>		<p>Even though this comment is listed under Section 5.3, which refers only to permit requirements involving stormwater benchmark violations, the comment actually deals with both stormwater discharges and process wastewater discharges. We will discuss these discharges separately.</p> <p><u>Stormwater</u>  Stormwater monitoring frequency in the draft permit is annual, as it is in the current TMSP. Section 5.3. requires that facilities evaluate any monitoring result that exceeds the benchmark and submit a written report to the local Environmental Field Office identifying the likely cause(s) of the problem within 30 days of receiving the analytical report. Additionally, the facility must evaluate their SWPPP and identify any modifications or additions necessary to reduce the pollutant concentrations to meet the benchmark values. The changes to the SWPPP must be submitted to the field office within 60 days of receiving the original analytical report along with an implementation schedule. This requirement establishes an in-depth, multi-step process of evaluation, planning and action to correct the problem.</p> <p>The division can think of no justification for establishing an unequivocal increase in monitoring frequency. Though the prescribed method is general in nature, it doesn't rule out additional sampling if the permittee's evaluation calls for additional data. The division believes that rigorous attention to BMPs and follow-up modifications are sufficient to improve stormwater runoff quality.</p> <p><u>Process Wastewater</u>  Monitoring requirements for process wastewater discharges are found in Sections 4. and 5.1. of the permit. Section 4.1. establishes the monitoring frequency as quarterly. The justification for establishing this monitoring frequency is discussed in the <i>Notice of Determination</i> Item 17. Commonly,</p>

		<b>once a permit condition such as monitoring frequency is established in a permit, the condition can only be changed through permit modification or through an enforcement action, such as an administrative order. The division believes that establishing a flexible monitoring schedule within the permit structure would weaken the enforcement position when dealing with limit violations.</b>
56	Section 7.1	The site map should also identify the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater and the areas that drain to the treatment device.
<b>Response</b>		<b>See Item 54.</b>
57	Section 7.2	Minimum SWPPP elements should have these industrial sector requirements (see EPA's MSGP sector E). Good housekeeping to prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in your SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. You must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering. Each pollution prevention team member should list their individual responsibilities in implementing the SWPPP.
<b>Response</b>		<b>See Item 54.</b>
58	Section 7.2	The SWPPP should also have this additional certification statement in their non-stormwater discharge certification. For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES requirements or are recycled.
<b>Response</b>		<b>See Item 54. The Notice of Intent serves as a certification that the facility will comply with the permit and all requirements. References and language will be modified as needed.</b>
59	Section 7.3	The routine inspections should be conducted at least quarterly instead of semi-annually. Also, the permit has no requirement or procedures for conducting an Annual Comprehensive Site Inspection.
<b>Response</b>		<b>See Item 54. The current TMSW SWPPP requirements include monthly routine inspections. An Annual Comprehensive Site Evaluation is required in the new Part 7.</b>
60	Section 6.3	Reference to the "approved analytical as specified above" is not located prior to this section. Recommendation to add the wording "using approved analytical methods as specified in Section 8.9.4."
<b>Response</b>		<b>This correction will be made.</b>

		<u>Comments from other interested parties</u>
61	Metro Nashville MS4	<p>Excerpts from letter dated October 26, 2012 from Michael Hunt, Metro Nashville MS4:</p> <p>“The Ready Mixed Concrete Permit generally requires concrete mixing facilities to control pollutants discharging from their site via stormwater runoff and process water discharges. While Metro understands the need for the permit to be vague as it relates to mentioning specific types of controls to be implemented, we would request the permit be more detailed on minimizing the migration of pollutants to the MS4/street/right of way. Specifically, Metro requests language be added to section 7.2 (Minimum elements and Activities of SWPPP) that addresses the tracking out of aggregate material into public streets...</p> <p>“...it is Metro’s position that facilities’ street sweeping should only be considered a remediation activity and facilities with tracking issues should be required to implement primary, on-site BMP controls to prevent the tracking of materials from their property into public right of ways – especially if such material will eventually route to MS4.”</p>
<b>Response</b>		<p><b>As noted in the response to Item 54, the entire Section 7. has been changed to reflect the requirements of the current TMSP Sector E. SWPPP requirements. Section 7.3.1. of the permit now contains, not only broad general requirements such as “regular, frequent, and timely cleaning of spills and leaks,” but also specific recommendations such as sweeping of paved areas and storage and conveyance in enclosed containers and equipment when practical. Even though the division does not have the statutory authority to prevent the tracking of solid wastes onto Metro’s jurisdiction, the requirements in the permit, in particular the requirements found in Section 7 of the permit, will have the effect of controlling dust, spills, leaks and other miscellaneous pollutant releases on the entire site. This should prevent pollutants from entering Metro’s jurisdiction as well as waters of the state.</b></p>
62	Public Hearing Comment	<p>During general discussion at the public hearing, concern was expressed over occasional severe weather conditions that may prevent the completion of discharge monitoring activities.</p>
<b>Response</b>		<p><b>The division responded by emphasizing that safety concerns are foremost in situations such as these, and language would be added to the permit that would clarify this position. Language will be added to Part 5 of the permit that allows permittees to submit a written explanation if weather or site conditions prevent monitoring during a monitoring period.</b></p>

## Determination

In conclusion, the comments included in this notice of determination document were compiled based on their relevance to the permit content, intent and interpretation of this general permit, rather than implementation of the permit conditions (e.g. penalty evaluations, appropriateness of various enforcement measures, development of TMDLs, etc.). Those questions or comments that became a moot point as a result of the changes made in the final permit were not included in this document.

The division's decision on this matter is to issue a General NPDES Permit for Discharges of Process Wastewater and Stormwater Associated with Ready-Mix Concrete Facilities, Permit No. TNG110000.

DATE: November 1, 2012



---

Vojin Janjić  
Manager, Permit Section