

TMDLs and Implementation Plans

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Quality

The background of the slide is a solid blue color. In the lower half, there are several faint, concentric white circles that resemble ripples on water, scattered across the bottom right and bottom center areas.

TMDL PROCESS

- A two part process
- A TMDL to determine general limits for contaminant of concern
- An Implementation Plan for the strategy to improve water quality

TMDL

- Sets limits on loads of the contaminant of concern
- Assimilative Capacity
- General limits
 - Permitted Sources
 - Non-Permitted Sources
 - Margin of Safety

TMDL

➤ Permitted Sources

- WWTP Allocation
 - WWTP Load Limits
- Aggregate Permitted Storm Water Allocation
 - No Load Limits

➤ Non-Permitted Sources

- Single Allocation

RECENT & CURRENT TMDLs

Name	Adoption Date	Segments	General Location
Carters & Burton Creek - Bacteria	2011	1209C, 1209L	Bryan, College Station
Cottonwood Branch & Grapevine Creek - Bacteria	2011	0822A, 0822B	Dallas
Trinity River - Bacteria	2011	0805	Dallas
U Oyster Creek - DO	7/28/10	1245	Fort Bend County
Dickinson Bayou Watershed - Bacteria	2011	1103, 1103A, 1103B, 1103C, 1103D, 1104	Galveston County, Dickinson, Webster, Friendswood
Lake Houston Tributaries - Bacteria	2011	1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, 1011	Harris County, Montgomery County
Greens Bayou Watershed - Bacteria	6/2/10	1016, 1016A, 1016B, 1016C, 1016D	Houston
Brays Bayou Watershed - Bacteria	9/15/10	1007B, 1007C, 1007E, 1007L	Houston
Eastern Houston - Bacteria	9/15/10	1006F, 1006H, 1007F, 1007G, 1007H, 1007I, 1007K, 1007M, 1007O, 1007R	Houston
Halls Bayou Watershed - Bacteria	9/15/10	1006D, 1006I, 1006J	Houston
Sims Bayou Watershed - Bacteria	9/15/10	1007D, 1007N	Houston

Implementation Plan

- Long term, Phased Plan
 - Developed by stakeholders in the watershed
 - Typically, a coordinating committee and work groups
 - Work groups typically include
 - WWTP operation
 - Storm water
 - Public Outreach
 - Others
- 

Implementation Plan

- Work groups may identify requirements for
 - WWTP
 - Storm Water
 - BMP
 - Public Outreach
 - Others
 - May be added to Storm Water Management Plan
 - Typically, Phase II requirements are sufficient
- Non-permitted storm water sources from urban areas may have similar requirements

Current Implementation Plans

Name	Approval Date	General Location
Gilleland Creek - Bacteria	2011	Travis County, Pflugerville, Austin
Guadalupe Above Canyon - Bacteria	2011	Kerr County, Kerrville
Upper San Antonio River - Bacteria	2011	Wilson County, Bexar County, San Antonio
Bacteria Implementation Group - IP	2011	All Houston area bacteria impairments. Harris County, Montgomery County, Houston
Trinity River - Bacteria	2012	Dallas
Orange County - Bacteria, DO, & pH	2012	Orange County, Orange
Carters & Burton Creek - Bacteria	2012	Bryan, College Station
Upper Texas Coast - Oyster Waters Bacteria	2012	Galveston Bay
Cottonwood Branch & Grapevine Creek - Bacteria	2012	Dallas
Dickinson Bayou Watershed - Bacteria	2012	Galveston County, Dickinson, Webster, Friendswood
U Oyster Creek – DO & Bacteria	2012	Fort Bend County

Thank You

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REASONABLE POTENTIAL DETERMINATIONS



National WET Guidance

- Issued in November 2004 as “Draft” Guidance
- Three goals:
 - National consistency in WET implementation
 - NPDES regulatory compliance
 - Emphasize existing guidance, policy, and regulations
- EPA Region 6 policy May 2005
 - Sublethal RP determinations
 - WET Limits to include sublethal endpoints



40 CFR 122.44(d)

- Must determine whether the discharge causes, has reasonable potential to cause, or contributes to non-attainment of the narrative criterion in the water quality standards for WET.
- If the determination is positive, WET limits must be included in the permit.



40 CFR 122.44(d)

- Requires an RP determination, but does not require the use of a specific procedure
- EPA Region 6 is requiring a modified 1991 Technical Support Document (TSD) approach, meaning two or more failures equals RP
- TCEQ has developed an alternate risk based approach



TCEQ Approach

- Use RP decision tree
- More than 3 failures in past five years, or 3 failures with 2 in the past three years, equals RP
- 2 or more failures in past five years, but less than above, requires a BPJ approach
- BPJ approach uses “weight of evidence” approach, accounting for duration and magnitude of test failures

Unresolved Issues

- The Implementation Procedures document is currently with EPA for review and comment.
- EPA has not approved the proposed IP WET requirements, RP determination method, or consideration of BPJ factors.
- Additionally, EPA is currently objecting to default 3 year compliance periods . EPA is requiring shorter compliance periods, enforceable interim milestones, and justification of the compliance period.

WATER QUALITY GENERAL PERMITS

TITLE	DESCRIPTION	EXPIRATION DATE	STATUS	~NUMBER OF AUTHORIZATIONS
*TXR040000 Phase II MS4s	Authorizes the discharge of storm water from small MS4s located in the urbanized area.	August 13, 2012	Issued-Begin renewal in 2011	403
*TXR050000 MSGP	Authorizes the discharge of storm water associated with industrial activities.	August 14, 2011	Renewal with EPA for review	8000
*TXR150000 Storm Water Construction	Authorizes the discharge of storm water from construction sites.	March 3, 2013	Processing NOIs	11419
**TXG110000 Concrete Production	Authorizes the discharge from concrete production facilities.	November 7, 2011	Drafting Renewal	68
**TXG130000 Aquaculture	Authorizes discharge from aquaculture facilities.	April 18, 2011	Public Notice Ends November 1, 2010	32
**TXG340000 Petroleum Bulk Storage and Terminals	Authorizes discharge from PBSTs.	April 23, 2012	Processing NOIs	35
*TXG500000 Quarries in the John Graves Scenic Waterways	Authorizes discharges from quarries in the John Graves Scenic Waterways.	December 15, 2013	Processing NOIs	2
**TXG530000 Harris County On-Site	Authorizes discharge from on-site treatment systems from single family residences located within the San Jacinto River Basin in Harris County.	January 29, 2014	Issued	0
**TXG670000 Hydrostatic Testing	Authorizes discharge resulting from the hydrostatic testing of vessels.	April 5, 2015	Processing NOIs	56
**TXG830000 Water Contaminated by Petroleum Product	Authorizes the discharge of water contaminated by petroleum fuel or petroleum substances.	September 12, 2013	Processing NOIs	75
***TXG920000 Concentrated Animal Feeding Operations	Authorizes the disposal of wastewater from CAFOs.	July 20, 2014	Processing NOIs	556
***TXG870000-Pesticides	Authorizes application of pesticides into over or near waters of the U.S.	New Permit	Drafting	0
**WQG200000 Manure Compost	Authorizes the disposal of wastewater from manure compost facilities	November 10, 2013	Processing NOIs	6

*Storm Water & Pretreatment Team

**Industrial Permits Team

***CAFO Team

OVERVIEW OF MAJOR REVISIONS TO THE WATER QUALITY STANDARDS JUNE 30, 2010

Background:

The Texas Surface Water Quality Standards (Title 30, Chapter 307 of the Texas Administrative Code) describe the chemical, physical, and biological conditions to be attained in the surface waters of Texas. Authority for adopting and revising water quality standards is contained in §26.023 of the Texas Water Code (TWC), and in §303(c) of the Federal Clean Water Act. Standards are periodically revised to adjust uses and criteria of individual water bodies, to incorporate new scientific data on the effects of specific chemicals and pollutants, and to address new provisions in the TWC, federal regulations, and EPA guidance. The guidance document *Procedures to Implement the Texas Surface Water Quality Standards* details the procedures used by the TCEQ to develop wastewater discharge permits in accordance with the water quality standards.

Status:

After extensive coordination with stakeholders and an advisory workgroup, the TCEQ adopted revision to the standards and approved changes to the implementation procedures on June 30, 2010, with some additional changes in response to public comment. The proposed standards were published in the Texas Register on January 29, 2010 and a public hearing for both of these revised documents was conducted on March 11, 2010. TCEQ received 172 comment letters from organizations, affiliations, and elected officials on the rule and 22 comment letters on the implementation procedures. Numerous comments were received from individuals, including 1455 form letters on the standards, and six attendees provided oral comments at the public hearing. The adopted standards revisions were published in the Texas Register on July 16, 2010. The adopted standards revisions and the changes to the implementation procedures have been submitted to EPA for review and approval.

Recreation Standards and Bacteria Criteria:

- Notes:
 - Almost all water bodies are assigned contact recreation in the 2000 standards.
 - Revised standards established additional recreational use categories and associated criteria. A framework for conducting recreation use-attainability analyses (UAAs) to assign site-specific recreational uses were established in the revised Standards and Implementation Procedures.
 - Methodology for recreation use-attainability analyses (UAAs) includes:
 - Coordination with local entities (e.g. river authorities, etc.)
 - Simple surveys to assess unclassified stream types
 - Comprehensive UAAs for classified segments
 - Comprehensive UAAs for unclassified streams where presumed standards are inappropriate

- Adopted:
 - Expanded recreational use categories:

Uses	Geometric Mean Criteria (colonies/100 ml)			
	<i>E. coli</i> (FW)	Enterococci (Salty inland FW)	Enterococci (SW)	Fecal coliform (FW& SW)
2000 Standards:				
Contact recreation	126	--	35	200
Noncontact recreation	605	--	168	2000
2010 Standards:				
Primary contact (PCR)	126	33	35	200**
Secondary contact 1 (SCR1)	630	165	175***	1000
Secondary contact 2 (SCR2)	1030	270	--	1000
Noncontact recreation (NCR)	2060	540	350	2000

- * Salty (high saline) inland FW = High saline inland water bodies (conductivity ≥ 9000 $\mu\text{mhos/cm}$)
- ** Fecal coliform will be gradually phased out as criteria for salty inland waters
However, fecal coliform would continue to be used for oyster waters criterion (14/100ml median)
- *** Secondary contact 1 for SW would only be applicable when not in conflict with the federal Beach Act

- Revised standards applicability to classified segments:
 - PCR – apply to all classified fresh waters and tidal waters
 - SCR1, SCR2, NCR – apply only as a site-specific standards revision, after a UAA
- Revised standards applicability to unclassified water bodies:
 - PCR – apply to unclassified fresh waters and tidal waters, except:
 - SCR1 – apply to intermittent & perennial freshwater streams where (1) PCR is unlikely to occur based on site-specific information, (2) thalweg (channel) is < 0.5 meters deep, and (3) substantial pools ≥ 1 meter deep do not occur.
 - SCR1 – apply to tidal waters when not in conflict with the federal Beach Act only as a site-specific standards revision, after a UAA
 - SCR2, NCR – apply as a site-specific standards revision, after a UAA
- Assess attainment with only geometric mean criteria; not single-sample criterion
 - To assess attainment, exclude “unrepresentative” samples (with respect to flow, location)
 - Specified a high flow exemption: (1) exclude bacteria data taken when flows exceed 90th percentile, and/or (2) exclude data based on SWQM flow severity index

Toxic Criteria:

- Notes:
 - EPA has substantially updated guidance for human-health toxic criteria
 - EPA has new guidance criteria for mercury, to apply directly to fish tissue
 - New toxicity data are available for a variety of aquatic-life and human-health toxic criteria
 - EPA requests including other background sources in criteria for some toxicants

- Adopted:
 - Added new human-health criteria for 28 toxicants; new aquatic-life criteria for 2 toxicants
 - Revised numerous human-health and aquatic-life criteria
 - Included child exposure rates (EPA); assume people eat more fish (17.5 grams per day)
 - Set mercury criterion as 0.7 ppm in fish tissue; (EPA criterion is 0.3 ppm)
 - Added fish-tissue criteria for other highly bioaccumulative toxicants (such as PCBs, dioxin)

Nutrient Criteria:

- Notes:

- EPA is requiring numerical criteria for nutrients for major water bodies
 - TCEQ submitted an updated nutrient development plan in Nov 2006, and EPA concurred
 - The plan calls for criteria for reservoirs first; then rivers and estuaries

- Adopted:
 - Established criteria for chlorophyll *a* only for 75 major reservoirs based on historical data
 - Applied criteria as a median long-term average for the main body of each reservoir
 - Clearly specified minimum default criteria when calculated values less than quantification levels.

Other Adopted Changes of Note:

- Deferred listing unclassified water bodies as impaired based on “presumed” aquatic-life use
- Expanded description of “representative” samples to be used to assess impairment
- Deleted proposed revision to assess total dissolved solids and human health using a median
- Deleted proposed revision referencing minimum number of samples and time period required for assessment purposes

Site-specific Standards:

- Notes:
 - Numerous standards, such as at permit sites and for impaired waters, may need adjusting

- TCEQ and others have conducted numerous supporting studies (UAAs)
- Adopted:
 - Revised uses and/or criteria for numerous larger water bodies (classified segments)
 - Designated PCR for all classified freshwater segments
 - Changed TDS, chloride, or sulfate criteria changes for 19 classified segments
 - Changed pH criteria changes for 7 classified segments
 - Lowered temperature criteria in upper parts of San Marcos and Comal Rivers – from 80° F to 78° F
 - Lowered aquatic life use and dissolved oxygen criteria for 2 classified segments
 - Raised aquatic life use and dissolved oxygen criteria for 1 classified segment
 - Raised aquatic life use and lowered dissolved oxygen criteria for 2 classified segments
 - Lowered aquatic life use for 1 classified segment
 - Lowered dissolved oxygen criteria for 7 classified segments
 - Added Black Cypress Bayou (Creek) as a new segment
 - Removed public water supply use for 2 segments, and for part of 1 segment
 - Revised boundary descriptions for several classified segments
 - Added aquatic-life uses for 48 new small streams based on receiving water assessments or UAAs
 - Added site-specific toxic criteria for 24 water bodies
 - Added new appendix to list sole-source drinking water supplies (legislative requirement)
 - Assigned SCR1 to 3 very small and/or concrete-lined tributaries in the Houston area, based on a recreation UAA for the watersheds of Buffalo and White Oak Bayous

Water Quality Advisory Workgroup

October 19, 2010

Outline

Storm water updates

1. EPA Storm Water Construction Regulation
2. Multi-Sector General Permit (MSGP)
3. MS4 Phase 1 Permits

Pretreatment Program Updates

4. SubMod Backlog
5. Risk based audits

STORMWATER

1. EPA Storm Water Construction Regulation

- EPA finalized in December 2009 new effluent limitations guidelines in 40 CFR Part 450 that set specific requirements for regulated construction sites. The rule requires operators of any regulated construction activity (disturbing at least one acre or part of a larger plan of development of sale) to meet a series of non-numeric effluent limitations.
- The rule also requires a numeric effluent limit for turbidity of 280 NTU (daily average) for sites disturbing more than 10 acres, with a phased implementation. In March 2012, large sites > 20 acres must meet the limit; and by February 2, 2014, the limit will apply to sites disturbing over 10 acres. The limit will apply to portions of these sites that are being disturbed, even if the entire area is not disturbed at one time.
- The new rules were challenged in court and as a result, on September 20, 2010, the US Court of Appeals, at the request of EPA, remanded the administrative record and is holding the case in abeyance. The remand is to allow EPA time to reconsider the rule and to fully respond to comments received during its rulemaking that related to the turbidity limit of 280 NTU.
- The court did not vacate the actual limit of 280 NTU, but allowed EPA to revise the limit through rulemaking.
- The Commission is set to adopt the new rule on November 3 by reference, so when EPA adopts a new limit, it will be automatically adopted by TCEQ.
- TCEQ will permit the turbidity limitations upon issuance of each permit
 - CGP will be reissued in March 2013 and will include the revised limits if EPA has issued revised limits by then.
 - Any individual permits with construction storm water outfalls will need to include the limits from the ELGs upon reissuance of the individual permit

2. Multi-Sector general Permit (MSGP)

- The MSGP is a statewide general permit that authorizes the discharge of storm water associated with industrial activity.
- The current permit was issued on August 14, 2006 and will expire on August 14, 2011.
- TCEQ had aimed to renew the permit in April of next year to allow for renewals to be processed before the beginning of fiscal year 2012, which starts on September 1, 2011. However, it appears that the adoption date will be closer to the actual expiration, in July or August to accommodate e-permitting development.
- The WQD will send renewal notification letters to inform permittees that the \$200 annual fee will be assessed if the permit is not terminated prior to 9/1/2011. The permit effective

date will be August 14, 2011, but that we will try to issue it in July so that the letters can go out and give permittees time to submit NOTs to avoid the annual fee. Since it will be effective August 14, the renewal NOIs will be accepted from August 14, 2011 for up to 90 days.

- No formal stakeholder process is being conducted outside of meetings and updates such as this one, since this is the second renewal of the TPDES MSGP and the proposed changes are not significant.
- A public meeting will be held in Austin at the close of the comment period (estimate January or February 2011).

Major Steps in Permit Development

1. Initial Briefings of Executive Management completed - August, 2010
2. Draft being reviewed by EPA - August through October 2010 (received preliminary comments from EPA)
3. Internal Briefings - November and December 2010
4. Public Notice and Public Meeting - December 2010 through January 2011
5. Prepare Response to Comments - February 2011
6. Internal Briefings - March 2011
7. Commission Agenda - **July or August 2011**

Primary changes proposed from the existing 2006 MSGP – and some EPA comments

- A. Automatic authorization option for additional industrial facility operators; similar to one that was added for certain general warehousing facilities in the 2006 renewal. Automatic authorization would require a condition of no exposure, and would mean that an operator would not need to submit any forms to TCEQ.

This option would be added for the following facilities:

- Operators of regulated facilities that occur within a residential home, shopping mall, or office building, and that have no exposure of any regulated activity to storm water.
 - Operators of publishing and designing companies that do not perform printing activities and that do not have exposure of any regulated activity to storm water.
 - *EPA commented that the GP needs to be more clear that the facilities are being covered under the permit and coverage is not being waived.*
- B. Originally, we had proposed that the sectors related to mining activities would be expanded to include discharges from construction activities initiated prior to mining. As a result, the relevant sections would have included the 280 NTU limit and narrative BMP requirements from the new federal categorical effluent limitations guidelines (ELGs), 40 CFR Part 450, that I mentioned earlier, which will be incorporated into TCEQ rules at 30 TAC §305.541 in November 2010. However, with the uncertainty associated with the turbidity limit, EPA is suggesting, and we are considering, keeping this portion out of the permit out during this permitting cycle.
- Either way, these sectors will include additional language to clarify when permitting requirements cease based on a mine being considered reclaimed or stabilized. This is

consistent with EPA's 2008 MSGP and will help clarify when an NOT may be submitted.

- C. A new option for transportation facilities (land transportation and warehousing, water transportation, and air transportation) to include storm water discharges from material handling and storage areas under the MSGP where those areas would require permit coverage, but had not previously been allowed under the MSGP because they were not associated with vehicle/equipment maintenance.
- The proposed change would not expand the definition of storm water associated with industrial activity, but would simply provide a mechanism for authorization of runoff from certain process areas not currently described under the general permit that may otherwise need to be permitted under an individual permit.
- D. Authorization for contaminated storm water discharges from active landfill cells described by industrial activity codes HZ (hazardous waste treatment, storage, and disposal) and LF (landfills and land application sites) that are subject to 40 CFR Part 445, Subparts A and B. The revised permit would also clarify which discharges are covered and which are not. This is consistent with the EPA's 2008 MSGP.
- Not previously allowed under EPA Region 6 permit nor the original TPDES MSGP, but the current EPA permit does include these discharges. If our permit does not include them, an individual permit would be required for these contaminated storm water discharges.
- E. Changes to requirements for paper application forms:
- Would extend the period of time required to await provisional coverage after submitting a paper NOI from two (2) to seven (7) days, in order to insure that TCEQ receives the NOI. This is the same change that was made in the reissuance of the Construction General Permit (CGP) in March 2008.
 - Proposed an increase to the application fee by \$100.00 for operators submitting a paper NOI or NEC form. The proposed new fee for paper NOIs and NECs is \$200.00. The electronic application fee would remain \$100.
 - Remove the option for facilities utilizing electronic filing to have an extra 30 days to renew coverage, as other incentives are being proposed (i.e., application fee incentive and difference in the date that authorization begins).
 - *EPA noted that their permit includes a 30 day period for NOIs to be posted before authorization begins, to allow for public input.*
- F. Proposed Changes to Benchmark Sampling:
- Revision of benchmark levels based on data that was submitted during calendar years 2007 and 2008. Some were increased, others were decreased; and these changes were done on a pollutant-by-pollutant basis.
 - New benchmark sampling requirements in Sector AD (Miscellaneous Industrial Activities) for pollutants commonly regulated in individual storm water permits: pH, COD, TSS, and oil and grease.
 - New waiver option for benchmark sampling during Years 3 and 4, if sampling during Years 1 and 2 demonstrates that the annual average result for all benchmark parameters is below the benchmark level for the regulated sector.

- residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel; or to provide justification for any group that is not addressed by the program
- Implementing a Pollution Prevention/Good Housekeeping for Municipal Operations- combine street and structural controls
- Updating construction site regulations - regulating small and large construction projects (most Phase 1 permits do not specifically require regulation of small constructions sites); addressing the control of site waste; and requiring consideration of the potential for water quality impacts in site plan review, as well as information submitted by the public.
- Maintaining a list of regulated industries discharging to the MS4, that have been issued a TPDES permit (high risk runoff)
- Updating the MS4 map to include all outfalls from the MS4 that can reach waters of the U.S.
- Managing Post Construction Site Runoff, down to a size of one acre.
- The permits will include 8 MCMs which may be reorganized permit by permit. The goal is to combine similar sections into a single control measure to make the permit more streamlined:
 1. MS4 Maintenance Activities
 2. Post–Construction Control Measures-replaces new development and redevelopment
 3. Illicit Discharges Detection and Elimination
 4. Pollution Prevention/Good Housekeeping for Municipal Operations
 5. Industrial & High Risk Runoff
 6. Construction Site Runoff
 7. Public Education and Outreach/Public Involvement and Participation
 8. Monitoring, Evaluation and Reporting

Not many changes on the monitoring requirements; however, additional requirements could be coming for MS4s that discharge to water bodies with TMDLs.

PRETREATMENT

SubMod backlog

Substantial Modification Initiative

- Initiative to review pending substantial modification packages started August 2009
- Goal was to review all packages by May 2010
- Over 22 packages were pending review
- As of this month, all 22 packages have been reviewed and declared technically complete
 - One has been issues
 - Four are under a TPDES permit action to approve the substantial modification
 - Five have been received and pending final administrative review
 - Others are undergoing city council approval
- Will now focus on processing new programs and modifications as they come in. Expect now processing times for non substantial modification to be 45 days, except for streamlining substantial modification, which will take 180 days. Substantial modifications will be reviewed and declared technically complete within 180 days of being declared administratively complete. After city council review and approval process, substantial modifications will be approved through permit action.

Risk based audits

Proposed 3 year pilot project for risk based auditing

- Approved by EPA
- Audit fewer programs each year
 - Audit 15% of TPDES universe, instead of 20%
 - 11 audits per year, instead of 14
- Under this approach, high performing programs will be audited less frequently.
- Criteria have been set-up for high performing program
- Programs that meet criteria will be audited every 7 years, instead of every 5 years
- Provide incentive to improve performance, compliance with pretreatment regulations, and pollution prevention
- Eligibility criteria approved by EPA August 1, 2010

Risk-based Criteria for Reduced Audit Frequency

- No water-quality-related enforcement actions for effluent violations pending or issued in past five years
- Less than 10% of SIUs in SNC
- All previous audit violations resolved within required timeframe
- All SIUs sampled and inspected as required by program
- No Category A pretreatment violations since the last audit
- A TCEQ compliance history rating better than "Poor"
- No effluent violations due to pass through of interference since last audit
- No administrative or judicial Clean Water Act enforcement action pending or issued within the past five years
- No whole Effluent Toxicity (WET) limits, Toxicity Identification Evaluation (TIE) or Toxicity Reduction Evaluation (TRE) requirements, or biomonitoring problems

WET RP DECISION TREE

Number of Years Prior to Permit Application Review X = Demonstration of Significant Toxicity (lethal or sublethal)					Limit Decision
5	4	3	2	1	
> 3 Failures during period of record					
XXXX					Limit
				XXXX	Limit
X	XX	X			Limit
3 Failures with 2 or 3 in the last 3 Years					
X		XX			Limit
	X	X		X	Limit
		X	X	X	Limit
3 Failures with 1 in the last 3 Years					
X	X	X			BPJ
	XX	X			BPJ
XX		X			BPJ
2 Failures in the last 3 Years					
		XX			BPJ
				XX	BPJ
2 Failures with 1 in the last 3 Years					
X		X			BPJ
	X	X			BPJ
X				X	BPJ
2 or 3 Failures with 0 in the last 3 Years					
	XX				BPJ
	XXX				BPJ
1 or 0 Failures					
X					No Limit
				X	No Limit
					No Limit

REASONABLE POTENTIAL WORKSHEET

All permit applications will be screened for WET limits if there are two or more failures in the past five years (or the period of record).

- More than 3 failures = WET (toxicity) limit
- 3 failures with 2 or more in the last 3 years = WET (toxicity) limit
- 3 failures with 1 in the last 3 years - BPJ
- 2 failures in the last 3 years - BPJ

Permittee _____
 Permit No. WQ00_____

Number of failures in past 5 years
 0 1 2 3 4 5 or more

Assigned points 0 1 2 3 4 5 Points _____

For dilutions series with the critical dilution as the highest dilution:
 Lowest NOEC (failing dilution) in the past 5 years

 CD CD-1 CD-2 CD-3 CD-4 <CD-4

Assigned points 0 1 2 3 4 5 Points _____

For dilutions series with the critical dilution as the second highest dilution:
 Lowest NOEC (failing dilution) in the past 5 years

 CD CD-1 CD-2 CD-3 <CD-3

Assigned points 0 1 2 3 4 Points _____

Total Points (add first two and second or three) _____

Did the point total equal or exceeds 7? Yes – RP. No – no RP.

Comments: