Public Comment Small MS4 Permit Amendment Deadline: 7/20/17 by 12 noon



SCOTT D. MCGOLPIN Director

July 20, 2017

Jeanine Townsend, Clerk of the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814

County of Santa Barbara Public Works Department Project Clean Water

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THOMAS D. FAYRAM Deputy Director



Submitted electronically - commentletters@waterboards.ca.gov

Subject: County of Santa Barbara Comment Letter - Small MS4 Permit Amendment

Dear Ms. Townsend:

The County of Santa Barbara is writing to comment on the proposed amendment to the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Small MS4 Permit), specifically Attachment G and associated Fact Sheet incorporating the Total Maximum Daily Load (TMDL) requirements. The comments included below focus on those TMDLs that affect Santa Barbara County, but are also of importance to the other Small MS4 permittees included in these TMDLs.

Comment 1. Attachment G does not include language describing how TMDL attainment will be evaluated.

The Basin Plan Amendments addressing each of the three TMDLs for which Santa Barbara County is a responsible party (Resolutions R3-2014-0009, R3-2013-0013, and R3-2012-0002) outline how Water Board staff will assess or evaluate attainment of the waste load allocations. This wording is absent from the proposed Attachment G. There is no explanation of how compliance with this permit provision will be determined by the Water Board.

Recommendation

Include the language from the Basin Plan Amendments and/or incorporate CASQA's recommendations. See attached Exhibit.

Comment 2. Attachment G language does not match the Basin Plan Amendment language.

The discrepancies between the adopted TMDL Basin Plan Amendments and the proposed Attachment G are significant. The TMDLs for the Santa Maria River Watershed: Fecal Indicator Bacteria, Nitrogen Compounds and Orthophosphate, and Toxicity and Pesticides, all contain

Jeanine Townsend July 20, 2017 Page 2 of 14

added requirements for implementation including identification of additional milestones, measurable goals, measures and targets, and quantitative analysis to demonstrate achievement of wasteload allocation.

Recommendation

Revise the proposed Attachment G language to be consistent with the adopted TMDL Basin Plan Amendments. See attached Exhibit.

Thank you for the opportunity to submit these comments.

Sincerely,

Cathleen Garnand, Interim Manager Project Clean Water

Attachment

Jeanine Townsend July 20, 2017 Page 3 of 14

Comment 1 – Determination of Compliance with Waste Load Allocations Language Absent from Proposed Attachment G

R3-2012-0002 Fecal Indicator Bacteria in the Santa Maria River Watershed -5-

Resolution No. R3-2012-0002 Attachment 1 to Staff Report March 15, 2012

Allocation 4	Econol colliform concentration, based on a minimum of not less than five complex for any 20 day.
Allocation-1	= recai conform concentration, based on a minimum of not less than live samples for any 30-day
period, shall n	ot exceed a log mean of 200 MPN/100mL, nor shall more than ten percent of total samples
during any 30	-day period exceed 400MPN/100 mL.
Allocation-2	Fecal coliform nor E. coli concentration shall not exceed zero; no fecal coliform nor E. coli
bacteria load	priginating from human sources of fecal material is allowed.
Allocation-3	= Based on a statistically sufficient number of samples (generally not less than five samples
equally space	d over a 30-day period), the geometric mean of E. coli densities shall not exceed: 126 per 100mL,
and no sample	e shall exceed a one-sided confidence limit (C.L.) calculated using the following as guidance:
lightly used fo	r contact recreation (90% C.L.) = 409 per 100mL.
Allocation-4	= Total coliform concentration, the median throughout the water column for any 30-day period
shall not exce	ed 70MPN/100 mL, nor shall more than ten percent of the samples collected during any 30-day
period exceed	230MPN/100 mL for a five-tube decimal dilution test or 330MPN/100 mL when a three-tube
decimal dilution	on test is used.
Responsible r	arties shall meet allocations in all receiving surface waterbodies of the responsible parti
ischarges.	

The parties responsible for the allocation to controllable sources are not responsible for the allocation to natural sources.

The TMDLs are considered achieved when water quality conditions meet all regulatory and policy requirements necessary for removing the impaired waters from Clean Water Act section 303(d) list of impaired waters.

Margin of Safety

A margin of safety is incorporated implicitly in the TMDLs through conservative assumptions.

Implementation

STORM DRAIN DISCHARGES TO MS4s:

The Central Coast Water Board will require the MS4 entities to develop and submit for Executive Officer approval a Wasteload Allocation Attainment Program (WAAP). The WAAP shall be submitted within one year of approval of the TMDL by the Office of Administrative Law, or within one year of a stormwater permit renewal, whichever occurs first. The WAAP shall include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations, and specifically address:

1. Development of an implementation and assessment strategy:

Source identification and prioritization;

3. Best management practice identification, prioritization, implementation schedule, analysis, and effectiveness assessment;

4. Monitoring and reporting program development and implementation. Monitoring program goals shall include: 1) assessment of stormwater discharge and receiving water discharge quality 2) assessment of best management effectiveness, and 3) demonstration and progress towards achieving interim targets and wasteload allocations.

Demonstration of achieving wasteload allocations, interim targets, and progress shall be accomplished quantitatively through a combination of the following:

- Assessing discharge water quality.
 Assessing receiving water quality.
- c. Assessing mass load reduction.

Resolution No. R3-2012-0002			-6-
Attachment 1	to Staff Report		
			(78.20s

March 15, 2012

d. Best management practices capable of achieving interim targets and wasteload allocations in combination with water quality monitoring for a balanced approach to determine effectiveness.

e. Any other effluent limitations and conditions which are consistent with the assumptions and requirements of the wasteload allocations

Coordination with stakeholders; and Other pertinent factors.

Jeanine Townsend July 20, 2017 Page 4 of 14

R3-2013-0013 Nitrogen Compounds and Orthophosphate in the Lower Santa Maria River Watershed

Resolution No. R3-2013-0013 ATTACHMENT -12-May 30-31, 2013

parties are strongly encouraged to maximize overhead riparian canopy, where and if appropriate, using riparian vegetation, because doing so could result in achieving nutrient-response indicator targets before allocations are achieved (resulting in a less stringent allocation):

- demonstrating quantifiable receiving water mass load reductions.
- D. owners/operators of irrigated lands may be deemed in compliance with load allocations by implementing management practices that are capable of achieving interim and final load allocations identified in the TMDL:
- E. owners/operators of irrigated lands may provide sufficient evidence to demonstrate that they are and will continue to be in compliance with the load allocations; such evidence could include documentation submitted by the owner/operator to the Executive Officer that the owner/operator is not causing waste to be discharged to impaired waterbodies resulting or contributing to violations of the load allocations.

STORM DRAIN DISCHARGES TO MS4s:

The Central Coast Water Board will require the MS4 entities to develop and submit Executive Officer approval a Wasteload Allocation Attainment Program (WAAP). The WAAP shall be submitted within one year of approval of the TMDL by the Office of Administrative Law, or within one year of a storm water permit renewal which one year of a storm w include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations, and specifically address:

- 1. Development of an implementation and assessment strategy:
- Source identification and prioritization;
 Best management practice identification, prioritization, implementation schedule,
 definition of the processessment:
- 4. Monitoring and reporting program development and implementation. Monitoring program goals shall include: 1) assessment of storm water discharge and receiving water discharge quality 2) assessment of best management effectiveness, and 3) demonstration of progress towards achieving interim targets and wasteload allocations; Coordination with stakeholders: and
- 6. Other pertinent factors.

Determination of Compliance with Waste Load Allocations

Waste load allocations will be achieved through a combination of implementation of management practices and strategies to reduce nitrogen compound and orthophosphate loading. Water guality monitoring will be included as well.

To be consistent with waste load allocations, Water Board staff will evaluate compliance with waste load allocations using one or a combination of the following:

A. attaining the waste load allocations in the receiving water;

Resolution No. R3-2013-0013	
ATTACHMENT	

May 30-31, 2013

B. attaining receiving water TMDL numeric targets for nutrient-response indicators (i.e., dissolved oxygen water guality objectives, chlorophyll a targets and microcystin targets) may constitute a demonstration of the attainment of the nitrate, nitrogen and orthophosphate-based seasonal biostimulatory waste load allocations. Note that implementing parties are strongly encouraged to maximize overhead riparian canopy using riparian vegetation, as appropriate, because doing so could result in achieving nutrient-response indicator targets before allocations are achieved (resulting in a less stringent allocation);

-13-

C. demonstrating reduction of nutrient concentrations in storm water outfalls. Optionally, where storm water is conveyed through managed flood protection facilities that also serve to treat and improve water quality (e.g., treatment wetlands, bioreactors, etc.), compliance may be demonstrated by measuring storm water quality before entering the receiving water body.

In order to achieve attainment of waste load allocations, Water Board staff may additionally consider:

- D. load reductions demonstrations on mass basis at storm drain outfalls and/or downstream of treatment systems;
- E. implementation and assessment of pollutant loading reduction projects (BMPs), capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness;
- F. any other effluent limitations and conditions which are consistent with the assumptions and requirements of the waste load allocations.

Jeanine Townsend July 20, 2017 Page 5 of 14

R3-2014-0009 Toxicity and Pesticides in the Santa Maria Watershed

Resolution No. R3-2014-0009

-20-

January 30, 2014

The WAAP will be allowed to include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with DPR and other organizations taking actions to protect water quality from the use of pesticides in the urban environment, though sole reliance on such statewide efforts may not be adequate.

Monitoring

MS4 entities with operations and storm water conveyance systems in the TMDL project areas will be required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

The MS4s should develop and submit creative and meaningful monitoring programs. Monitoring strategies may be able to use a phased approach, for example, whereby outfall or receiving water monitoring is phased-in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitate accurate assessment of how well the best management practices then being implemented in other or larger parts of the MS4 jurisdiction.

Determination of Compliance with Waste Load Allocations

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution.

To allow for flexibility, Water Board staff will assess compliance with waste load allocations using one or a combination of the following:

- A. Attaining the waste load allocations in the receiving water.
- B. Demonstrating compliance by measuring pesticide concentrations and toxicity in stormwater outfalls.
- C. Implementation and assessment of pollutant loading reduction projects (BMPs) capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness.
- D. Any other effluent limitations and conditions that are consistent with the assumptions and requirements of the waste load allocations.

Timelines

The target date to achieve the pesticide TMDLs for the organophosphates (chlorpyrifos, diazinon) is October 2016. This estimate is based on apparent decreased use, current implementation of management practices to mitigate loadings, and existing regulatory efforts to reduce loading.

The target date to achieve the TMDL for malathion is ten years after approval of the TMDL by the Office of Administrative Law. This estimate is based on the increase in current usage and current limited regulatory oversight.

The target date to achieve the TMDLs for pyrethroids is 15 years after approval of the TMDL by the Office of Administrative Law. This estimate is based on the widespread availability of pyrethroids, including consumer usage, and current limited regulatory oversight.

The target date to achieve the TMDLs for organochlorine pesticides (DDT, DDD, DDE, chlordane, eldrin, toxaphene, dieldrin) is 30 years after approval of the TMDL by the Office of Administrative

Jeanine Townsend July 20, 2017 Page 6 of 14

Comment 2 – Language Discrepancies between Adopted Basin Plan Amendments and Proposed Attachment G

R3-2012-0002 Fecal Indicator Bacteria in the Santa Maria River Watershed Basin Plan Amendment language (pages 5-6)

Implementation

STORM DRAIN DISCHARGES TO MS4s:

The Central Coast Water Board will require the MS4 entities to develop and submit for Executive Officer approval a Wasteload Allocation Attainment Program (WAAP). The WAAP shall be submitted within one year of approval of the TMDL by the Office of Administrative Law, or within one year of a stormwater permit renewal, whichever occurs first. The WAAP shall include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations, and specifically address:

1. Development of an implementation and assessment strategy;

2. Source identification and prioritization;

3. Best management practice identification, prioritization, implementation schedule, analysis, and effectiveness assessment;

4. Monitoring and reporting program development and implementation. Monitoring program goals shall include: 1) assessment of stormwater discharge and receiving water discharge quality 2) assessment of best management effectiveness, and 3) demonstration and progress towards achieving interim targets and wasteload allocations.

Demonstration of achieving wasteload allocations, interim targets, and progress shall be accomplished quantitatively through a combination of the following:

- a. Assessing discharge water quality.
- b. Assessing receiving water quality.

c. Assessing mass load reduction.

d. Best management practices capable of achieving interim targets and wasteload allocations in combination with water quality monitoring for a balanced approach to determine effectiveness. e. Any other effluent limitations and conditions which are consistent with the assumptions and

- requirements of the wasteload allocations.
- 5. Coordination with stakeholders; and
- 6. Other pertinent factors.

Monitoring

The City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), County of Santa Barbara (Orcutt) and the Santa Maria Fairpark are required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

Staff encourages the City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), County of Santa Barbara (Orcutt) and the Santa Maria Fairpark to develop and submit creative and meaningful monitoring programs. Monitoring strategies can use a phased approach, for example, whereby outfall or receiving water monitoring is phased in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitates accurate assessment of how well the best

Jeanine Townsend July 20, 2017 Page 7 of 14

management practices control pollution sources, is acceptable, with the intent of successful practices then being implemented in other or larger parts of the MS4.

Interim Targets

The target date to achieve the TMDLs is 15 years from the date of TMDL approval by the Office of Administrative Law. Implementing parties must demonstrate progress towards achieving their allocations. Interim targets are a tool to gauge progress during the 15-year implementation phase. Implementing parties may develop and propose interim targets as part of their WAAP as demonstration of progress. If implementing parties choose not to develop and propose interim targets, the following interim targets are expected as demonstration of progress towards achieving wasteload allocations:

- 20% progress towards achieving wasteload allocations at the end of the fifth year following TMDL approval by OAL.
- 50% progress towards achieving wasteload allocations at the end of the 10th year following TMDL approval by OAL.
- 100% progress towards achieving wasteload allocations at the end of the 15th year following TMDL approval by OAL.

Interim targets are goals and not wasteload allocations.

Attachment G language (pages 40-41) [New/Inconsistent Requirements are bolded in red] Requirements for Implementing the TMDL

By [Hard Date: four months from adoption], the Phase II entities identified in this TMDL section (hereafter referred to in this TMDL section as "the MS4") shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:

- A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.
- 2. Identification of sources of the impairment within the MS4's jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
- 3. Prioritization of sources within the MS4's jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
- 4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
- 5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
- 6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness. MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.

Jeanine Townsend July 20, 2017 Page 8 of 14

- 7. A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4's wasteload allocation by the schedule identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.
- 8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim targets and wasteload allocations.
- 9. The MS4 shall establish interim targets (and dates when stormwater discharge conditions will be evaluated) that are equally spaced in time over the TMDL compliance schedule and represent measurable, continually decreasing MS4 discharge concentrations or other appropriate interim measures of pollution reduction and progress towards the wasteload allocation. At least one interim target and date must occur during the first five-year period or by December 31, 2021, whichever is sooner. The MS4 shall achieve its interim targets by the date it specifies in the Wasteload Allocation Attainment Program. If the MS4 does not specify interim targets as described above in its Wasteload Allocation Attainment Program, the interim targets identified in the TMDL apply. If the MS4 does not achieve any interim target by the date specified, the MS4 shall develop and implement more effective BMPs that it can quantitatively demonstrate will achieve the next interim target.
- 10. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
- 11. A detailed description of how the MS4 proposes to assess its **compliance with interim targets** and the final wasteload allocation.
- 12. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
- 13. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
- 14. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program or integrated plan.
- 15. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment, including public education and participation items identified above.

The wasteload allocations identified in the Fact Sheet of this Order are incorporated by reference. The wasteload allocations shall be achieved February 21, 2028.

Jeanine Townsend July 20, 2017 Page 9 of 14

R3-2013-0013 Nitrogen Compounds and Orthophosphate in the Lower Santa Maria River Watershed Basin Plan Amendment language (pages 12-13)

Implementation

STORM DRAIN DISCHARGES TO MS4s:

The Central Coast Water Board will require the MS4 entities to develop and submit for Executive Officer approval a Wasteload Allocation Attainment Program (WAAP). The WAAP shall be submitted within one year of approval of the TMDL by the Office of Administrative Law, or within one year of a storm water permit renewal, whichever occurs first. The WAAP shall include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations, and specifically address:

- 1. Development of an implementation and assessment strategy;
- 2. Source identification and prioritization;
- 3. Best management practice identification, prioritization, implementation schedule, analysis, and effectiveness assessment;
- Monitoring and reporting program development and implementation. Monitoring program goals shall include: 1) assessment of storm water discharge and receiving water discharge quality 2) assessment of best management effectiveness, and 3) demonstration of progress towards achieving interim targets and wasteload allocations;
- 5. Coordination with stakeholders; and
- 6. Other pertinent factors.

Determination of Compliance with Waste Load Allocations

Waste load allocations will be achieved through a combination of implementation of management practices and strategies to reduce nitrogen compound and orthophosphate loading. Water quality monitoring will be included as well.

To be consistent with waste load allocations, Water Board staff will evaluate compliance with waste load allocations using one or a combination of the following:

- A. attaining the waste load allocations in the receiving water;
- B. attaining receiving water TMDL numeric targets for nutrient-response indicators (i.e., dissolved oxygen water quality objectives, chlorophyll a targets and microcystin targets) may constitute a demonstration of the attainment of the nitrate, nitrogen and orthophosphate-based seasonal biostimulatory waste load allocations. Note that implementing parties are strongly encouraged to maximize overhead riparian canopy using riparian vegetation, as appropriate, because doing so could result in achieving nutrient-response indicator targets before allocations are achieved (resulting in a less stringent allocation);
- C. demonstrating reduction of nutrient concentrations in storm water outfalls. Optionally, where storm water is conveyed through managed flood protection facilities that also serve to treat and improve water quality (e.g., treatment wetlands, bioreactors, etc.), compliance may be demonstrated by measuring storm water quality before entering the receiving water body.

In order to achieve attainment of waste load allocations, Water Board staff may additionally consider:

- D. load reductions demonstrations on mass basis at storm drain outfalls and/or downstream of treatment systems;
- E. implementation and assessment of pollutant loading reduction projects (BMPs), capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness;
- F. any other effluent limitations and conditions which are consistent with the assumptions and requirements of the waste load allocations.

Jeanine Townsend July 20, 2017 Page 10 of 14

Monitoring

The City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), and County of Santa Barbara (Orcutt) are required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP. Staff encourages the City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), County of Santa Barbara (Orcutt) to develop and submit creative and meaningful monitoring programs. Monitoring strategies can use a phased approach, for example, whereby outfall or receiving water monitoring is phased in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitates accurate assessment of how well the best management practices control pollution sources, is acceptable, with the intent of successful practices then being implemented in other or larger parts of the MS4.

Attachment G language (pages 42-43) [New/Inconsistent Requirements are bolded in red] Requirements for Implementing the TMDL

By [Hard Date: four months from adoption], the Phase II entities identified in this TMDL section (hereafter referred to in this TMDL section as "the MS4") shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:

- 1. A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.
- 2. Identification of sources of the impairment within the MS4's jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
- 3. Prioritization of sources within the MS4's jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
- 4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
- 5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
- 6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness. MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
- 7. A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4's wasteload allocation by the schedule identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.
- 8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any

Jeanine Townsend July 20, 2017 Page 11 of 14

interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim and final wasteload allocations.

- 9. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
- 10. A detailed description of how the MS4 proposes to assess its compliance with interim targets and the final wasteload allocation.
- 11. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
- 12. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
- 13. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program or integrated plan.
- 14. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment, including public education and participation items identified above.

The MS4 shall achieve its interim wasteload allocations as specified in the Fact Sheet. If the MS4 does not achieve any interim wasteload allocation by the date specified, the MS4 shall develop and implement more effective BMPs that it can quantitatively demonstrate will achieve the next interim or final wasteload allocations.

The wasteload allocations identified in the Fact Sheet of this Order are incorporated by reference. The wasteload allocations shall be achieved by May 22, 2044.

R3-2014-0009 Toxicity and Pesticides in the Santa Maria Watershed Basin Plan Amendment language (pages 19-20) Implementation

STORM DRAIN DISCHARGES FROM MS4s:

The Central Coast Water Board will require municipal separate storm sewer systems (MS4) entities to develop, submit, and implement a Wasteload Allocation Attainment Program (WAAP). WAAP development, submittal and implementation will be required in the Phase II municipal stormwater permit. The WAAP will be required to include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL waste load allocations, and specifically address:

- 1. Development of an implementation and assessment strategy.
- 2. Source identification and prioritization.
- 3. Best management practice identification, prioritization, implementation scheduling, analysis, and effectiveness assessment.
- 4. Monitoring and reporting. Monitoring program goals will be required to include: a. assessment of stormwater discharge and/or receiving water quality, b. assessment of best management practice effectiveness, and c. demonstration of progress towards achieving interim goals and waste load allocations.

Jeanine Townsend July 20, 2017 Page 12 of 14

- 5. Coordination with stakeholders.
- 6. Other pertinent factors.

The WAAP will be allowed to include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with DPR and other organizations taking actions to protect water quality from the use of pesticides in the urban environment.

Monitoring

MS4 entities with operations and storm water conveyance systems in the TMDL project areas will be required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

The MS4s should develop and submit creative and meaningful monitoring programs. Monitoring strategies may be able to use a phased approach, for example, whereby outfall or receiving water monitoring is phased-in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitate accurate assessment of how well the best management practices control pollution sources may be acceptable, with the intent of successful practices then being implemented in other or larger parts of the MS4 jurisdiction.

Determination of Compliance with Waste Load Allocations

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution. To allow for flexibility, Water Board staff will assess compliance with waste load allocations using one or a combination of the following:

- A. Attaining the waste load allocations in the receiving water.
- B. Demonstrating compliance by measuring pesticide concentrations and toxicity in stormwater outfalls.
- C. Implementation and assessment of pollutant loading reduction projects (BMPs) capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness.
- D. Any other effluent limitations and conditions that are consistent with the assumptions and requirements of the waste load allocations.

Attachment G language (pages 45-47) [New/Inconsistent Requirements are bolded in red] Requirements for Implementing the TMDL

By [Hard Date: four months from adoption], the Phase II entities identified in this TMDL section (hereafter referred to in this TMDL section as "the MS4") shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:

1. A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.

Jeanine Townsend July 20, 2017 Page 13 of 14

- 2. Identification of sources of the impairment within the MS4's jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
- 3. Prioritization of sources within the MS4's jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
- 4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
- 5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
- 6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness. MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
- 7. A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4's wasteload allocation by the schedule identified in the TMDL. This analysis may incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.
- 8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim and final wasteload allocations. The Central Coast Water Board may approve participation in statewide or regional monitoring programs as meeting all, or a portion of monitoring requirements.
- 9. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
- 10. A detailed description of how the MS4 proposes to assess its compliance with interim targets and the final wasteload allocation.
- 11. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
- 12. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
- 13. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program or integrated plan.
- 14. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment, including public education and participation items identified above.

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated

Jeanine Townsend July 20, 2017 Page 14 of 14

through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution. The Wasteload Allocation Attainment Program may include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with Department of Pesticide Regulation and other organizations taking actions to protect water quality from the use of pesticides in the urban environment.

The wasteload allocations identified in the Fact Sheet of this Order are incorporated by reference. The target date to achieve the TMDLs for pyrethroids is November 1, 2029. This estimate is based on the widespread availability of pyrethroids, including consumer usage, and current limited regulatory oversight. The target date to achieve the TMDLs for organochlorine pesticides (DDT, DDD, DDE, chlordane, eldrin, toxaphene, dieldrin) is November 1, 2044