

2022 California Construction General Permit (CGP) Summary



ETIC Engineering (925) 602-4710

- Environmental and Civil Consulting, Engineering, and Construction
- SWPPP, BMP installations, inspections/sampling, etc.

Christopher J. Brown

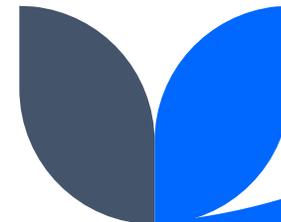
CASQA Qualified Trainer of Record

QSD/QSP, QISP, CPESC, CESSWI Instructor

cemsw@comcast.net

(916) 868-3980

- Present monthly QSP Courses and 6-Hour SWPPP Refresher via Zoom



Permit Summary



- Order
- Fact Sheet

Attachments:

- Risk Level 1/2/3 Projects - Comply with Att. D
- LUP Type 1/2/3 Projects - Comply with Att. E
- ATS users - Att. F
- Passive Treatment users - Att. G
- TMDL Applicability/Responsible Dischargers - Att. H
- ASBS Discharger Exemption Requirements - Att. I
- Dewatering Requirements – Att. J

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD
1001 I Street Sacramento, CA 95814
<https://www.waterboards.ca.gov>

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES
(GENERAL PERMIT)

ORDER WQ 2022-0057-DWQ
NPDES NO. CAS000002

This Order was adopted by the State Water Resources Control Board on:	September 8, 2022
This Order shall become effective on:	September 1, 2023
The state-wide programmatic permitting option per Section III.B.4 of this Order shall become effective on:	December 17, 2022
This Order shall expire on:	August 31, 2028

IT IS HEREBY ORDERED that this Order supersedes Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-0006-DWQ except for: (1) the requirement to submit annual reports by September 1, 2023, (2) enforcement purposes, and (3) as set forth in Section III.C of this Order. The discharger shall comply with the requirements in this Order to meet the provisions contained in Division 7 of the California Water Code (commencing with § 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder.

IT IS ALSO HEREBY ORDERED that on or after December 17, 2022, a discharger deploying Executive Order N-73-20 may obtain regulatory coverage through the state-wide programmatic permitting option in Section III.B.4 under Order 2009-0009-DWQ as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ until September 1, 2023.

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Permit Summary



- Can rain any time during the year in CA
 - BMP implementation is required year-round
- CGP regulates stormwater (SW) and Authorized non-stormwater discharges (NSWDs)
 - All other discharges are prohibited
 - ASBS, Trash/Debris, treatment chemicals, washout waters, form oils, curing compounds, fuel/oil/fluids related to vehicles/equip, soaps/solvents, toxic or hazardous substances
- Unauthorized NSWDs are prohibited – 24-hour reporting Dumping/spills/leaks
 - They contribute significant pollutant loads
- 1 acre+ disturbance triggers permit coverage
 - Less than 1 acre also requires permit coverage, if part of a larger common plan of development that disturbs more than 1 acre



Permit Summary



Obtaining Coverage -> SMARTS

- **Traditional (Risk Level 1/2/3)**
 - **Electronic Authorization Form (EAF)** must be filed/signed for each organization
 - WDID required prior to commencing construction
 - Permit Registration Documents (PRDs) - NOI, Risk determination, Maps, SWPPP, post-con standards or plans/calcs for Phase 1 or 2 MS4 requirements, annual fee
 - **WDID Public Posting requirement**
- Failure to get permit coverage is a violation of the CWA and CA water code
- **LUPs (Type 1/2/3)**
 - Standalone permit coverage option
 - **Programmatic Option:** 1 regional “Common” SWPPP/WDID
 - Linear Construction Activity Notification (LCAN) filed for each Segment, shared WDID + LCAN#
 - Annual report for each LCAN
 - **WDID Public Posting requirement**
 - **Linear Construction Termination Notification (LCTN)**



Permit Summary



Inactive Projects

- May file Change of Information (COI) if going to be inactive for **30 days or more**
 - Must be **fully inactive**, including passive and active treatment systems
 - Provide site maps/photos showing temporary stabilization bmps
- Once COI is approved by the RWQCB:
 - **Sampling may be suspended, and inspections reduced significantly**
 - **QSP or Delegate must complete monthly and pre-QPE inspections**
 - **Verify BMPs are functioning, implement corrective actions as needed**
 - QSD shall visit the inactive site **within 14 days after COI approval** to verify the SWPPP is being implemented. QSD shall amend SWPPP if needed.
 - Inspections are not required during dangerous weather conditions or access is infeasible (snow accumulation), or unsafe
 - To resume construction, the use of passive/active treatment chemicals, and/or equipment, the Discharger shall submit a COI requesting to resume the project
 - Can only resume after COI is approved by the RWQCB



Permit Summary



Terminating Coverage -> SMARTS

Submit the following 4 items:

1. Complete Notice of Termination (NOT) or LCTN for Programmatic LUP LCAN
2. QSP-prepared final NOT Insp. with QSP name/cert #
3. Final Site Map (specific requirements)
 - a) Erosion controls, post-con BMPs, LID features, boundaries, etc.
 - b) Georeferenced Photo Tags
4. Photolog
 - 70% final cover method, RUSLE/RUSLE2, Custom Method
 - 5-year Long-term maintenance plan for post-con BMPs/LID features
 - 30-day auto approval unless denied, rejected, in review



Permit Summary



Termination Conditions:

- 1. The site must meet the following conditions to be considered complete:**
 - a) All construction activity has completed
 - b) There is no greater potential for construction-related stormwater pollutants to be discharged into site runoff than prior to construction activity
 - c) Construction-related equipment and temporary BMPs have been removed from the site
 - d) Construction materials and wastes have been disposed of properly

- 2. Soils disturbed by construction activities have final (permanent) stabilization methods and BMPs using materials that:**
 - a) Have a product life that supports the full continued stabilization of the site
 - b) Achieve stabilization without becoming trash or debris
 - Avoid monofilament netting
 - c) Minimize the risk of wildlife entrapment

Permit Summary



CGP Roles

- Discharger
- LRP – Legally Responsible Person
- DAR – Duly Authorized Rep
- QSD
- QSP
- QSP Trained Delegate – new “formal” role

Permit Summary



Discharger: (organization or person)

- Responsible for all site activity for compliance and non-compliance, including work done by QSD, QSPs, and QSP delegates
- Shall ensure SWPPP and amendments are prepared by QSD.
 - Upload amendments on SMARTS within **30 days**
- Ensure those implementing permit have licenses/certifications - QSD, QSP, Eng.
- Ensure construction start/stop dates are correct
 - Used for risk determination
 - Listed on SMARTS
 - Included on WDID # notification form in a site location viewable by the public
- Ensure project data and contact info is current on SMARTS
- If LRP changes, update LRP contact info on SMARTS

Permit Summary



LRP: Primary Signatory for Discharger

- Sign/Certify/Submit permit related documents
- May designate a **Duly Authorized Rep (DAR)** who may sign/cert/submit documents
 - Update DAR info on SMARTS
- LRP and DAR must comply with electronic signature and certification requirements
- LRP “owns” the SMARTS account for the project

Permit Summary



QSD

- Discharger shall retain a QSD from the beginning of project through NOT approval
 - QSD role significantly expanded for the 2022 CGP
- QSD required to assess how construction activities effect sediment transport and erosion or other pollutant discharges in SW
 - QSD required to revise the SWPPP to address issues identified by inspections, sampling, QSP comments or their own observations
- Must include QSP Delegate(s) contact info in SWPPP
 - Delegate Training Log
- QSD may perform the work of a QSP

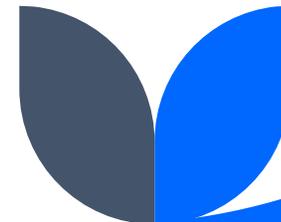


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QSD Inspections:

- Within 30 days of construction commencing
 - I've been using a checklist to ensure the new minimum requirements are being fulfilled.
 - This is a training opportunity for the QSP, Delegate, and Construction Team
- Within 30 days of a Discharger replacing the QSD
- 2 Annual insp. Between: Aug. – Oct. and Jan. – Mar.
- Within 14 calendar days after a NAL Exceedance
- Inactive projects – within 14 days of COI approval
- Within the time period requested by the RWQCB
- ❖ These are minimum inspection requirements; this may be increased by the Discharger or QSD (e.g., excessive site problems)



Permit Summary



QSPs must now review work of trained Delegates for all assigned tasks

QSP Inspections:

- Once per calendar month
- Pre-Qualifying Precipitation Event (QPE) inspections
 - Within **72 hrs.** prior to a forecasted QPE to inspect deficiencies, bmps, other issues
 - Pre-storm inspection may be done up to **120 hours** in advance if extended forecast is available from National Weather Service
- Within 14 days after a NAL Exceedance
 - Document any areas of concern
- **Prior to** the submittal of the NOT **and** for Acreage Changes COI
 - QSP-prepared final NOT inspection
 - Photolog/Mapkey



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QSP shall verify the following:

- All BMPs in the SWPPP are implemented, correctly installed, inspected, maintained
 - Begin the implementation of corrective actions within **72 hours** of identification
 - Complete ASAP and also prior to the next forecasted precipitation event (FPE).
- Trackout is controlled
- **WDID Posting Requirement** - WDID is in location viewable by the public, current, with correct start/stop dates which match dates on SMARTS
- Sampling is properly performed for SW and Non-SW Discharges by trained personnel delegated by QSP, including but not limited to, taking Representative Samples
- Contact info for the LRP, QSD, QSP are correct and updated on SMARTS within **90 days of change**
- **Photo documentation** of problem areas of erosion, sediment deposition, unauthorized NSWDS and failed BMPs is included in the SWPPP
 - Provide to Regulatory Inspector upon request
- Just FYI – **Hard copy map is required on-site**

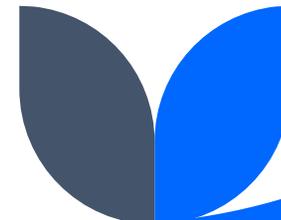


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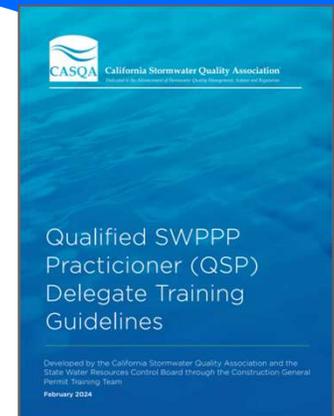


QSP Delegate

- Discharger may authorize a QSP to delegate QSP tasks (inspection/sampling/SWPPP & BMP implementation) to Delegates
- QSPs opting to delegate tasks shall provide the following training based on **Guidelines from the CGP Training Team (CGPTT)**:
 1. **Foundational training** – SW roles/responsibilities, forecasting, documentation, reporting procedures
 - Information applicable to all projects
 - Classroom/office - Occurs 1 time
 2. **Site-specific training** – inspection requirements, sampling procedures, and SWPPP & BMP implementation
 - Field training - Once at [each site](#)



Permit Summary



QSP Delegate

- CASQA released Training Guidelines
 - Provides a detailed outline of items to cover
 - Obtain the guidelines on the CASQA website
- “The QSP must use the QSP Delegate Training Guidelines as the basis for the training they provide to delegates.”
- “The QSP is responsible for the work performed by their Delegate(s) and the Water Boards may take action against QSPs that fail to use reasonable care and good judgement (e.g., additional training, suspension or rescission of QSP certification).”
 - **Foundational training**
 - If the Delegate previously completed the Foundational training, it is the QSP’s responsibility to verify it was completed and the Delegate understands the content.
 - **Site-specific training**
 - Required to be conducted in the field
 - [Perform an inspection with the Delegate](#)



Permit Summary



QSP Delegate

Modules and Recommended Minimum Training Lengths¹

Training Module	Type	Recommended Minimum Length
1.a Roles and Responsibilities	Foundational	45 minutes
1.b Weather Forecasts	Foundational	45 minutes
1.c Documentation and Reporting	Foundational	30 minutes
2.a Site-Specific SWPPP and Implementation	Site-Specific	20 minutes
2.b Site-Specific BMP Implementation	Site-Specific	30 minutes Plus the Site Walk
2.c Visual Inspections	Site-Specific	30 minutes Plus the Site Walk
2.d Sampling	Site-Specific	60 minutes Plus the Site Walk

¹Regardless of recommended minimum lengths, the QSP must assure and verify that the QSP Delegates are competent to perform the delegated tasks. This may involve more training or more time performing tasks under direct supervision depending on the experience level of the QSP Delegates.

Permit Summary



QSP Delegate

The Discharger shall ensure that:

- The QSP has determined the Delegates are **competent** to perform duties (inspection/sampling/BMP implementation) **prior to fully delegating** responsibilities to the delegate
 - Confirm this at the completion of the foundational and/or site-specific trainings
 - Add Quizzes to the trainings
 - Conduct periodic reviews
- Delegates name, email, phone are maintained on a **training log**, uploaded as an attachment to SMARTS **prior to the Delegate performing the functions**
- Delegates have a system to **record/report issues back to the QSP within 24 hours** of when a corrective action is needed
- Delegates **cannot perform** the QSD and QSP required inspections
- Delegates can be a data submitter

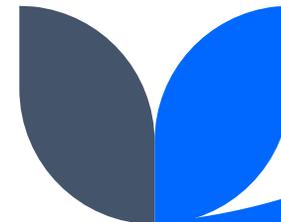


Permit Summary



QSD/QSP – Continuing Education

- **Annual** requirement for QSD/QSPs to **complete 6 hours** of continuing education
 - Must specifically be related to **storm water topics** listed in CGP
 - Site assessment, BMPs, inspections, sampling
- May use the hours earned to fulfill your underlying certification
 - FYI: Some underlying certs require 6 to 12 hours
- Complete online QSD/QSP renewal every 2 years - including additional training updates provided by the CGPTT
- **CBPELSG Folks** do not have to complete the 6-hour continuing education requirement



Permit Summary



SWRCB or RWQCB may:

- Suspend QSD/QSP cert. and require additional training, if it has been determined that the QSD/QSP lacks adequate knowledge or training to perform duties required by CGP
- Rescind QSD/QSP cert. if, after providing notice and opportunity to be heard, the Executive Director/Officer finds the QSD/QSP:
 - Willfully/negligently caused or allowed a violation of the CGP
 - Submitted false or misleading information to the SWRCB or RWQCB
 - Used fraud or deception
 - Failed to use reasonable care and good judgment



Permit Summary



Traditional Projects - Inspections

Risk Level	Weekly	Pre-Qualifying Precipitation Event	During Qualifying Precipitation Event	Post-Qualifying Precipitation Event
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X

LUP Type Projects - Inspections

Linear Underground and Overhead Project Type	Weekly	Pre-Qualifying Precipitation Event	During Qualifying Precipitation Event	Post-Qualifying Precipitation Event
1	X	X	X	Not Applicable
2	X	X	X	X
3	X	X	X	X

Permit Summary - Inspections



INSPECTION TYPE	QSD	QSP	DELEGATE
WEEKLY	X	X	X
PRE-QPE	X	X	
DURING-QPE	X	X	X
POST-QPE	X	X	X
QSP MONTHLY	X	X	
QSP NOT INSP. or COI ACREAGE CHANGES	X	X	
ANNUAL EXCEEDANCE - WITHIN 14 DAYS (QSD + QSP)	X	X	
QSD – WITHIN 30 DAYS FROM COMMENCEMENT OF CONSTRUCTION	X		
QSD – 2 ANNUAL INSPECTIONS	X		
QSD CHANGE (WITHIN 30 DAYS)	X		
INACTIVE PROJECTS			
QSD – WITHIN 14 DAYS AFTER COI APPROVAL	X		
INACTIVE PROJECTS			
MONTHLY INSPECTION	X	X	X
INACTIVE PROJECTS			
PRE-QPE	X	X	X

- QSD/QSP could be the same person
- Alternate/Backups Recommended

Permit Summary



- CGP: Pre-, During, Post-QPE inspection also satisfies the weekly
- CGP: Inspections and sampling are conducted during site operating hours
- QPE = 50% POP and 0.5 inches QPF in 24-hour period

- **Pre-insp.** – within **72 hours** of a QPE
 - Could be up to 120 hours if data is available
 - Changing forecasts – Make sure you print/save the forecast utilized
- **During-insp.** – **every 24 hours with a forecast of 0.25 inches**
 - Careful: 50% pop does not come into play, just 0.25 inches or more
 - The storm ends when there is a day with less than 0.25 inches predicted
- **Post-insp.** – within **96 hours** of a QPE of 0.5 inches or more using an on-site rain gauge (now required)

Permit Summary



Qualifying Precipitation Example #1

	December 31				January 1				January 2				January 3			
Time	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p
PoP	55	95	100	40	15	-	-	-	-	5	50	55	30	30	30	35
QPF	0.02	0.13	0.83	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.1	0.01	0.01	0.01	0.04
QPE	1 st QPE – Start & End				No QPE				No QPE				No QPE			

	January 4				January 5				January 6				January 7			
Time	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p
PoP	35	45	60	80	75	55	35	30	20	15	15	15	-	-	-	-
QPF	0.05	0.11	0.28	0.51	0.35	0.30	0.27	0.11	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00
QPE	No QPE		2 nd QPE – Day 1 (Start)				2 nd QPE – Day 2 (End)				No QPE				No QPE	

PoP = Probability of Precipitation

QPF = Quantitative Precipitation Forecast

QPE = Qualifying Precipitation Event

Permit Summary



Qualifying Precipitation Example #2

	March 9				March 10				March 11				March 12			
Time	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p
PoP	-	10	100	70	80	30	70	60	65	70	75	75	75	65	60	70
QPF	0.00	0.36	0.46	0.48	0.28	0.07	0.06	0.10	0.12	0.15	0.14	0.14	0.12	0.19	0.07	0.13
QPE	No QPE		Day 1 (Start)				Day 2				Day 3				Day 4	

	March 13				March 14				March 15				March 16			
Time	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p	4a	10a	4p	10p
PoP	80	90	90	70	60	45	40	40	40	35	30	25	-	-	-	-
QPF	0.18	0.24	0.26	0.32	0.30	0.26	0.17	0.12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QPE	Day 4		Day 5				Day 6 (End)				No QPE				No QPE	

PoP = Probability of Precipitation

QPF = Quantitative Precipitation Forecast

QPE = Qualifying Precipitation Event

Permit Summary



Monitoring Exemptions

Dischargers shall conduct visual inspections and collect samples to meet the requirements of this Attachment (D and E). Dischargers are not required to physically conduct visual inspections or collect samples under the following conditions:

- During dangerous weather conditions such as electrical storms, flooding, and high winds above 40 miles per hour;
- Outside of scheduled site operating hours; or
- When the site is not accessible to personnel.

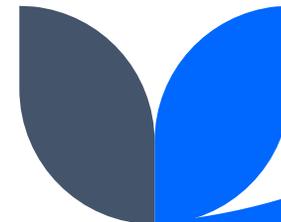
Dischargers shall **provide an explanation** with supporting information for all missed visual inspections or sampling required by the CGP, to be included in the Annual Report.



Permit Summary Water Quality Monitoring



Sample Collection Schedule			
Risk Level & LUP Risk Type	Stormwater Discharge Sample Collection (when applicable)	Receiving Water Sample Collection (when applicable)	Non-Visible Sample Collection (when applicable)
1	N/A	N/A	X
2	X	N/A	X
3	X	X (Post-exceedance/Trigger)	X



Permit Summary



Numeric Action Levels

- pH range: 6.50 - 8.50
 - Must report to 2 decimal points
- Turbidity Limit: 250 NTUs

Table 1. Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharger Type	Method Detection Limit	Units	Numeric Action Level
TMDL-Related Pollutant	U.S. EPA-approved test method for specific pollutant parameter	Responsible Dischargers	Depends on the test method	mg/L	Refer to Table H-2 in Attachment H
pH	Field test with calibrated portable instrument using EPA approved procedures	Risk Level 2 and 3 Risk Type 2 and 3	0.2	pH Units	Lower Value= 6.5 Upper Value= 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2 and 3 Risk Type 2 and 3	1	NTU	250



Permit Summary



Numeric Action Levels (NALs)

- Provide information on **performance of BMPs** to minimize discharge of pollutants
- Protect receiving water beneficial uses
- Dischargers must **take action**, *corrective action*, when exceedances occur
- **Iterative process** - continuously improving
- Failure to implement corrective actions is a **violation** of the CGP

Permit Summary



Numeric Action Levels (NALs)

- Risk Level 2/3 sites - Refer to Att. D
- LUP Type 2/3 sites - Refer to Att. E
- Apply to Non-stormwater discharges at 2/3 sites
 - Authorized NSWDS are mentioned in NAL discussions in several locations in the CGP
 - Order pages 5 & 26. States the purpose of NALs is to reduce pollutants in SW and NSWDS
 - D-15 – III.G.3.b – SW and NSWDS discharges are mentioned in the discussion about exceedances. E-17 also.
- Responsible Dischargers - TMDL-related NAL
- Dewatering activities subject to NALs in Att. J

Permit Summary Water Quality Monitoring



Stormwater Discharge Sample Collection – Risk Level/LUP Type 2 & 3

- Risk Level 2/3 – Collect one GRAB sample from all discharge locations during discharge
- LUP Type 2/3 – Collect one GRAB sample from one or more representative discharge locations
- Collect samples (1 per discharge location) every 24-hour period during the QPE
- **Compare each sample result to the NAL limits**
- NALs apply to both stormwater and authorized non-stormwater discharges
- Collect samples of stored or contained SW during discharge from the impoundment
- Run-on samples may be taken if there is a reason to believe the run-on is contributing to an exceedance of the NALs/NELs



Permit Summary Water Quality Monitoring



Exceedance Response Requirements (for NALs and NELs)

Parameter	Risk Level/ LUP Type	Numeric Action Level	Numeric Effluent Limitation
pH (NAL)	Risk Level/Type 2 and 3	Lower = 6.5 Upper = 8.5	N/A
Turbidity (NAL)	Risk Level/Type 2 and 3	250 NTU	N/A
TMDL-related Pollutant (NAL/NEL)	Responsible Dischargers with a project of any Risk Type	Refer to TABLE H-2 in Att. H of CGP	Refer to TABLE H-2 in Att. H of CGP

- Determine the source of the pollutant and **immediately** implement corrections to reduce pollutants in stormwater and authorized NSWDS
- Continue with corrective action until in compliance with the NALs
- The **Source Evaluation shall be kept with the SWPPP**, list what corrective actions were taken or will be taken, and a schedule of completion



Permit Summary Water Quality Monitoring



Storm Water Discharge Reporting – Risk Level/LUP Type 2 & 3:

- Submit sample data results via SMARTS website
- **Compliant samples:** submit ALL field sampling results within 30 days of the conclusion of the storm event; or
- **NAL exceedance:** submit sample results within 10 days of conclusion of the storm event
- **NAL Exceedance Report:** Prepared when requested, in writing, by RWQCB, and due within 30 days of written request

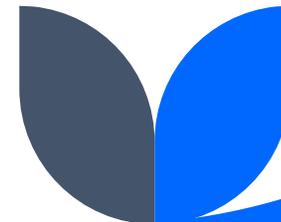


Permit Summary Water Quality Monitoring



Storm Water Discharge Monitoring Reporting – Risk Level/LUP Type 2 & 3:

- The Numeric Action Level Exceedance Report shall include:
 - The analytical method(s), method reporting unit(s), and method detection limit(s) of each parameter;
 - The date, place, time of sampling, visual inspections, and/or measurements, including precipitation; and
 - An assessment of the **existing BMPs** associated with the sample that exceeded the numeric action level, a description of **each corrective action taken**, including photographs, and date of implementation.
- Numeric Action Level Exceedance Report shall be retained for a minimum of **3 years** after the date the exceedance report is certified and submitted.



Permit Summary Water Quality Monitoring



Receiving Water Monitoring Requirements - Risk Level/LUP Type 3 Dischargers

- Dischargers who discharge directly into receiving waters are required to monitor that receiving water if sampling results from the discharge monitoring location meets either of the following conditions: **(TRIGGERS)**
 - pH value falls outside of the range of 6.0 and 9.0 pH units; or
 - Turbidity exceeds 500 NTU
- Receiving water monitoring does not apply if run-on from a **forest fire** or any other **natural disaster** caused the stormwater results to fall outside the pH range or exceed the turbidity value.
- Dischargers required to conduct receiving water monitoring shall:
 - **Collect, at minimum, one upstream and one downstream** receiving water sample from accessible and safe locations.
 - Samples shall be representative of the receiving water and as close as possible to the discharge location (site discharge).



Permit Summary Water Quality Monitoring



Receiving Water Monitoring Requirements - Risk Level/LUP Type 3 dischargers – cont.

- Dischargers shall analyze the samples (within the receiving water) for the parameter that triggered this monitoring (either pH or turbidity, or both).
- **Dischargers shall collect the samples once every 24-hour period of the QPE.**
- Dischargers shall specify the specific locations where samples were collected, date and time of sample collection, as well as constituents analyzed.
- The Regional Water Board Executive Officer delegate may require, in writing, that the discharger **continue to sample the receiving water** for the parameter that required this monitoring (pH and/or turbidity) after the QPE ends.

Reporting:

- Submit sample results via **SMARTS within 10 days** of conclusion of the storm

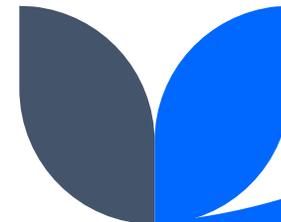


Permit Summary Water Quality Monitoring



Non-Visible Pollutant Monitoring Requirements - Risk Level/LUP Type 1/2/3

- Dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants when there is:
 - Evidence of pollutant releases that are **not visually detectable** in stormwater discharges; and
 - Releases of substances which could cause or contribute to an exceedance of water quality objectives in the receiving waters.
- Dischargers are required to conduct sampling and analysis for non-visible pollutants identified in the SWPPP or otherwise known to be on site, **only when** the pollutants may be discharged due to **failure to implement BMPs, a container spill or leak, or a BMP breach, failure, or malfunction.**



Permit Summary Water Quality Monitoring



Non-Visible Pollutant Monitoring Requirements - Risk Level/LUP Type 1/2/3 – cont.

- Dischargers shall **collect at least 1 sample, within 8 hours**, from each discharge location hydraulically down-gradient from the observed triggering event or condition.
- Dischargers shall continue to collect at least one sample per applicable discharge location for **each 24-hour period that there is discharge**, until the necessary corrective actions are completed to control further discharge of the pollutant.
- Dischargers are **not required to sample** if one of the conditions described above (e.g., breach or spill) occurs and, prior to discharge, the material containing the pollutant is **fully remediated or removed**; and BMPs to control the pollutant are implemented, maintained, or replaced as necessary.
- Dischargers shall analyze samples in the field or submit them to a laboratory as specified in Attachments D and E (Section III.F) for analysis of all non-visible pollutants suspected to be present in the discharge, including applicable TMDL-specific pollutants listed in Table H-2 in Attachment H.



Permit Summary Water Quality Monitoring



Non-Visible Pollutant Monitoring Reporting:

- Submit results via SMARTS **within 30 days** after obtaining the analytical result
- Or **within 10 days** if the analytical results demonstrate the exceedance of an applicable TMDL-related NAL or NEL or Basin Plan parameter.
- All dischargers that exceeded an applicable **TMDL-related NAL** shall prepare a **NAL Exceedance Report** when requested, in writing, from a RWQCB delegate and shall submit and certify each NAL Exceedance Report through SMARTS **within 30 days** of receiving the written request, in accordance with Section IV of the General Permit's Order.

All dischargers that exceed an applicable TMDL-related Numeric Effluent Limitation (NEL) shall comply with the **Water Quality-Based Corrective Action** requirements in Section VI.Q of the Order.



Permit Summary

Numeric Effluent Limitations (NELs)

- All ATS users subject to NELs in Att. F
 - Turbidity NEL – 10 NTU daily average/20 NTU single sample
 - And the Residual Chemical shall be <10% of the MATC
 - pH NEL (new) – 6.0 to 9.0
- **Responsible Dischargers** for a TMDL with a wasteload allocation that was translated to a TMDL-related NEL are subject to the NELs in Table H-2 in Att. H.

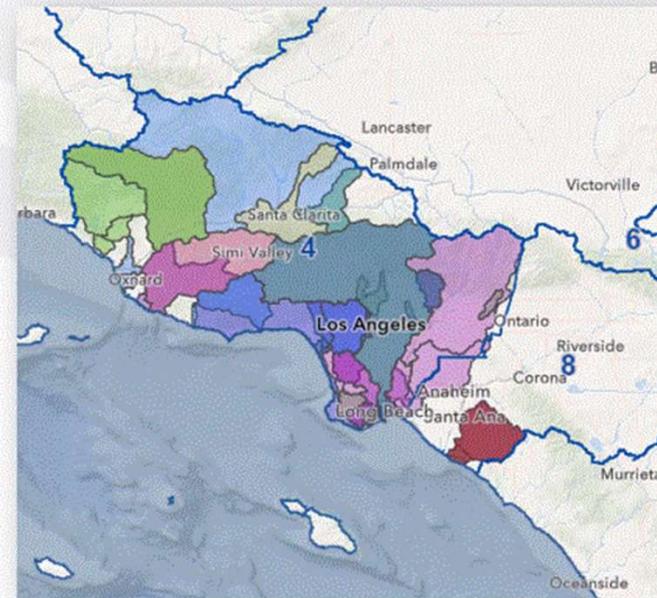
Permit Summary

Total Maximum Daily Load (TMDL) Implementation

Step 1: Determine Responsible Discharger status

Step 2: Perform site-specific pollutant source assessment

Step 3: Refer to Attachment H for applicable implementation requirements



Permit Summary



Total Maximum Daily Load (TMDL) Implementation

- TMDLs assign waste load allocations to contributing point sources of a pollutant
- NPDES permits include requirements or limitations to meet the allocation
- Responsible Dischargers are those that discharge to a watershed/waterbody identified in a TMDL and have identified one or more TMDL pollutants present on-site
- There are four categories of implementation requirements for Responsible Dischargers

Compliance Categories

Comply with
General Permit

Erosion and
Sediment Controls
paired with
RUSLE2 modeling

Numeric Action
Levels

Numeric Effluent
Limitations

Permit Summary



TMDL Implementation Requirements

- **SWPPP - Pollutant Source Assessment**

Responsible Dischargers are dischargers who:

- Discharge SW and Authorized NSWD directly or through MS4/other conveyance to an impaired waterbody or watershed identified in a US EPA approved TMDL with a waste load allocation assigned to **construction stormwater sources**
- Have identified, through the site-specific pollutant source assessment, that one or more pollutants specific to the TMDL are present on-site with the potential to enter construction stormwater discharges.
- TMDL-related numeric action level (NAL), subject to H-2
 - **NAL Exceedance: From same drainage area, within 1 reporting year, 2 samples or more exceed the TMDL-related NAL**
 - **NAL Exceedance is not a violation, but failure to take action is.**
- TMDL-related numeric effluent limitation (NEL), subject to H-2
 - **NEL Exceedance: From same drainage area, within 1 reporting year, 2 samples or more exceed the TMDL-related NEL**
 - **Each exceedance after the 1st is a NEL Violation = Subject to mandatory minimum penalties**
- **Water Quality Based Corrective Actions** are triggered by NEL exceedances or violations of Receiving Water Limitations
 - Site Assessment
 - SWPPP evaluation to determine if additional BMPs are needed

Permit Summary



ATS - changes

- New pH NEL 6.0 – 9.0
- Lead Person (5 years experience or CA Class A Contractor License) oversees operation
- Responsible person (on-site during operation) or
- Can now be operated remotely with very specific requirements
 - Continuously monitored
 - Must be able to perform safe shut down autonomously
- Bypass is allowed if the discharge meets numerous requirements NALs, NELs, RW limitations
- Data collection/reporting for freeboard



Permit Summary



Passive Treatment (Att. G) – Water applied only – Utilized in Conveyances/Basins

Applying liquid treatment chemicals, powders, slow releasing solid blocks

- Passive treatment BMPs can prevent/reduce discharge of fine particles
- Passive Treatment - Application of natural/synthetic products to reduce turbidity, Coagulation/flocculation: **Anionic (-) chemicals only.**
- Do not utilize cationic (+) chemicals (this is used in active treatment systems)
 - Fish Gills (-) charge
- **Must prepare a Passive Treatment Plan – 14 days prior to chemical use**
 - Acute and chronic toxicological test data of materials used
- **Discharge must pass through sediment control** (e.g., sand filter or geotextile bag) to settle or remove flocculants prior to discharge
- Must prevent discharge of chemicals used (unbound chemicals), avoid exceedance of narrative/numeric water quality objectives in WQ control plans
- **Applying chemicals directly to receiving water is prohibited**
- Trained staff shall ensure mixing and reaction time is followed



Permit Summary



Dewatering Requirements

- Types of discharges: excavations/trenches, groundwater, impoundments (low points, accumulation points)
- Dischargers with a separate dewatering permit (de minimis and low threat discharges) are not subject to this permit
 - 9 RWQCBs have permits that clearly or indirectly apply to dewatering
 - The Discharger is responsible for determining if they need to get a dewatering permit with the RWQCB (primary if available) or utilize Att. J of the CGP (secondary)
- If not under a separate permit, dewatering activities must comply with Att. J
 - **Requires RWQCB notification at least 24 hours prior to dewatering – via email**
 - QSD must update swppp at least 24 hours prior to dewatering and upload to SMARTS within 14 days
 - Must comply with the NALs
 - Sample within 1st hour and daily
 - Halt immediately if a single sample exceeds the NALs
 - If NAL exceedance: Report on SMARTS within 10 day and QSD shall update within 10 days to incorporate corrective actions, preventing further exceedances



Permit Summary



SURFACE WATER BUFFER:

Dischargers shall provide and maintain natural buffers and/or equivalent erosion and sediment controls when a water of the United States is located within 50 feet of the site's earth disturbances, unless infeasible.

Dischargers shall comply with one of the following alternatives for any discharges to waters of the United States located within 50 feet of a site's earth disturbances:

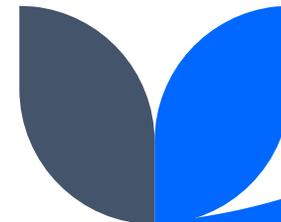
- Provide and maintain a 50-foot undisturbed natural buffer, from the edge of the disturbed area to the top of bank;
- Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. The equivalent sediment load may be calculated using the Revised Universal Soil Loss Equation, Volume 2 (RUSLE2) model or another method approved by the Regional Water Board; or
- Implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer when it is infeasible to provide and maintain an undisturbed natural buffer of any size. The equivalent sediment load may be calculated using RUSLE2 or another method approved by the Regional Water Board.

Permit Summary



Erosion Control Requirements:

- Erosion control BMPs (with the exception of sprayed products) shall be available on-site or at a nearby location (e.g., laydown yard), year-round, with trained persons able to deploy the product under QSP direction.
- Implement effective wind erosion controls;
- Preserve existing vegetation;
- Minimize the amount of soil exposed during construction activity;
- Minimize the disturbance of steep slopes;
- Schedule earthwork to minimize the amount of disturbed area when feasible;
- **Immediately initiate stabilization** for disturbed areas whenever earth disturbing has permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days



Permit Summary



Erosion Control Requirements:

- Minimize soil compaction in areas other than where the intended function of a specific area dictates that it be compacted;
- Reestablish vegetation or non-vegetative erosion controls as soon as practicable;
- If feasible, divert up gradient run-on water from contacting areas of exposed soils disturbed by construction activities or convey run-on through the site in a manner that prevents erosion from areas of construction and does not compromise the effectiveness of erosion, sediment, and perimeter controls

Permit Summary



Erosion Control Requirements:

- Run-on water flowing onto a site from off-site areas may be separated from a site's stormwater discharge to eliminate commingled contribution. Run-on diversion shall occur prior to entering an area affected by construction activity. Run-on flow diversion shall be conveyed through or around the construction activity in **plastic pipe or an engineered conveyance channel** in a manner that will not cause erosion due to flow diversion. Run-on combined with a site's stormwater discharge is considered a stormwater discharge;
- Limit the use of plastic materials when more sustainable, environmentally-friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation;
- Control stormwater and non-stormwater discharges to minimize downstream channel and bank erosion; and
- Control peak flowrates and total volume of stormwater and authorized non-stormwater discharges to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.



Permit Summary



For Land-Applied Products:

- **Spray-on erosion controls** - BFM, hydromulches, spray tackifiers, etc.
 - Apply the product according to the **manufacturer's instructions** and guidance; and
 - Apply the product according to the manufacturer's guidance to allow for **ample cure time** and to prevent treatment chemicals from being transported by runoff.

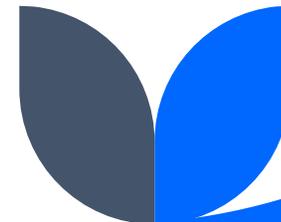


Permit Summary



Sediment Control Requirements:

- Establish and maintain effective **perimeter controls**;
- Stabilize all **construction entrances** and exits to sufficiently control erosion and sediment discharges from the site;
- Design, install, and maintain effective sediment controls to minimize the discharge of pollutants utilizing site-specific BMPs; and
- Design **sediment basins** and impoundments according to the California Stormwater Quality Association's (CASQA) current Construction BMP Guidance Handbook and **utilize outlet structures that withdraw water from the surface**, unless infeasible. Dischargers utilizing sediment basins shall complete **installation prior to other land** disturbance activities unless infeasible.



Permit Summary



Sediment Controls - Additional Risk Level/LUP Type 2/3 Requirements:

For areas under ACTIVE construction -

- Design and construct cut and fill slopes in a manner to ensure slope stability and to minimize erosion including, but not limited to, these practices:
 - Reduce continuous slope-length using terracing and diversions;
 - Reduce slope steepness; and
 - Roughen slope surfaces with large cobble or track walking.
 - Track walking can reduce erosion by ~30-40% depending on the rainfall intensity

Permit Summary



Sediment Controls - Additional Risk Level/LUP Type 2/3 Requirements:

- Install **linear sediment controls** along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes according to sheet flow lengths as shown in Table 1 until slope has reached Notice of Termination conditions for erosion protection.
- When infeasible to comply with **Table 1** due to site-specific geology or topography, the Qualified SWPPP Developer shall include in the SWPPP a justification for the use of an alternative method to protect slopes from erosion and sediment loss.

TABLE 1 – Critical Slope and Sheet Flow Length Combinations for Linear Sediment Reduction Barrier

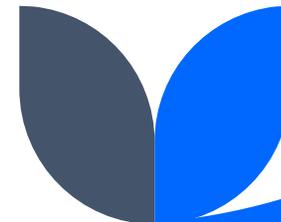
Slope Ratio (Vertical to Horizontal)	Sheet Flow Length not to Exceed
$\leq 1:20$	Per QSD's specification
$> 1:20$ to $\leq 1:4$	35 feet
$> 1:4$ to $\leq 1:3$	20 feet
$> 1:3$ to $\leq 1:2$	15 feet
$> 1:2$	10 feet

Permit Summary



Sediment Controls – Risk Level/LUP Type 2/3 dischargers shall:

- Limit construction activity traffic to and from the project to entrances and exits that employ effective controls to prevent off-site tracking of sediment.
- Maintain and protect all storm drain inlets, perimeter controls, and BMPs at entrances and exits (e.g., tire wash off locations).
- Remove any excess sediment or other construction activity-related materials that are deposited on the impervious roads by vacuuming or sweeping prior to any precipitation event.
- Implement additional site-specific sediment controls upon written request by the Regional Water Boards when the implementation of the other requirements are determined to inadequately protect the site's receiving water(s).



Permit Summary



Non-Stormwater Discharges:

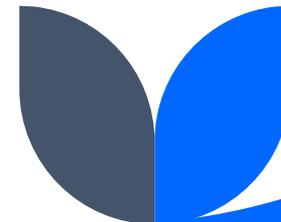
- Wash vehicles in such a manner as to **prevent** non-stormwater discharges to surface waters or MS4 drainage systems;
- Clean streets in such a manner as to **prevent** unauthorized non-stormwater discharges from reaching surface waters or MS4 drainage systems; and
- **Eliminate** any non-stormwater discharges that are not specified in Section IV.A of the Order, Authorized Non-Stormwater Discharges.

Permit Summary



Good Housekeeping Measures – Construction Materials:

- Identify and protect the products used and/or expected to be used, and the end products that are produced and/or expected to be produced from exposure to stormwater. This requirement does not apply to materials and equipment that are designed to be outdoors and exposed to environmental conditions (e.g., poles, equipment pads, cabinets, conductors, insulators, bricks);
- Apply best management practices (BMPs) to erodible stockpiled construction materials (e.g., soil, spoils, fly-ash, stucco, hydrated lime) to prevent erosion and pollutant transport;
- Store chemicals in watertight containers with secondary containment to prevent any spillage or leakage or store in a complete enclosed storage area;



Permit Summary



Good Housekeeping Measures – Construction Materials:

- Minimize exposure of construction materials to precipitation. This requirement does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (e.g., poles, equipment pads, cabinets, conductors, insulators, bricks);
- Implement BMPs to control the off-site tracking of sediment and loose construction and landscape materials; and
- Implement BMPs to control the discharge of plastic materials and limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Dischargers shall consider the use of plastic materials resistant to solar degradation where plastic materials are deemed necessary.

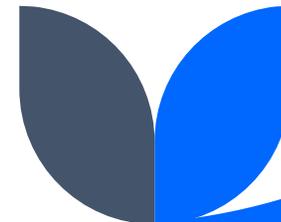


Permit Summary



Waste Management Measures:

- Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, masonry wash waters, and other wash waters. **Wash waters shall be captured and treated prior to discharge or disposed of at a permitted facility that can accept that waste, to mitigate impacts to water quality;**
- Provide **containment** (e.g., secondary containment) of **sanitation facilities** (e.g., portable toilets) to prevent discharges of pollutants to the stormwater drainage system or receiving water;
- **Clean or replace sanitation facilities and inspect** them regularly for leaks and spills;
- Keep debris or trash in waste containers if it is subject to transport from the site by wind or runoff;



Permit Summary



Waste Management Measures:

- Cover waste disposal containers at the end of every business day and during a precipitation event;
- Prevent discharges from waste disposal containers to the stormwater drainage system or receiving water (e.g., containers with solid bottoms and regular maintenance);
- Contain and securely protect stockpiled waste material from wind and precipitation unless actively being used; and
- Secure and contain concrete washout areas and other washout areas that may contain additional pollutants to minimize discharge into the underlying soil and onto the surrounding areas.
 - Washout areas shall be covered prior to and during a precipitation event.

Permit Summary



Vehicle/Equipment Storage and Maintenance Measures:

- Contain fuel, grease, and oil to prevent them from leaking into the ground, storm drains, or surface waters;
- Place all equipment or vehicles, which are to be fueled, maintained, and stored in a designated area with BMPs installed; and
 - This now applies to Traditional and LUP Types
- Clean leaks immediately and dispose of leaked materials properly in accordance with the law.

Permit Summary



Landscape Materials Measures:

- Contain and protect stockpiled materials such as mulches and **topsoil**, or other erodible landscape materials, from wind and precipitations unless being actively used;
- Contain packaged landscape materials (e.g., fertilizers) when they are not being actively used;
- Discontinue the application of any **erodible landscape material at least 2 days** before forecasted precipitation event (FPE) as defined in Attachment B of the CGP or during periods of precipitation; and
- Apply erodible landscape material at quantities and rates according to manufacturer recommendations or based on written specifications by knowledgeable and experienced field personnel.



Permit Summary



Good Housekeeping Measures:

- Dischargers shall implement good housekeeping measures on the construction site, and of site operations, to control **aerial deposition** of site materials. **Such particulates can include, but are not limited to, metals, nutrients, organics, sediment, other particulates, and trash.**
- Dischargers shall document all housekeeping BMPs in the Stormwater Pollution Prevention Plan (SWPPP) that correspond to the nature and **phase of the construction** activities.
 - Construction phases at **traditional** land development projects include: demolition and pre-development site preparation phase, grading and land development phase, streets and utilities phase, vertical construction phase, and final landscaping and site stabilization phase.
 - LUP must also document housekeeping BMPs based on phases of construction



Permit Summary Water Quality Monitoring



The Discharger shall **designate and train personnel** for the collection, maintenance, and shipment of samples in accordance with the above sample protocols and laboratory-specific practices.

Sample Collection and Handling Instructions

- Identify applicable parameters that require laboratory analysis to be tested for each stormwater discharge location (pH and turbidity are typically analyzed with field meters).
- Request the laboratory provide the appropriate number of sample containers, types of containers, sample container labels, blank Chain of Custody forms, and sample preservation instructions.
- Use the appropriate sample shipping method to the laboratory. The laboratory should receive samples within **48 hours of the physical sampling** (unless otherwise required by the laboratory to meet all method hold times). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.



Permit Summary Water Quality Monitoring



Sample Collection and Handling Instructions – cont.

- Use only the sample containers provided/specified by the laboratory to collect and store samples. Use of any other type of containers could cause sample contamination.
- Prevent sample contamination by not touching or putting anything into the sample containers before collecting stormwater samples.
- Not overfill sample containers. Overfilling can change the analytical results.
- Secure each sample container cap is tightly secured without stripping the cap threads.
- Label each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.

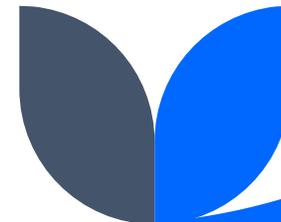


Permit Summary Water Quality Monitoring



Sample Collection and Handling Instructions – cont.

- Carefully pack sample container into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment; frozen ice packs or ice is placed into the shipping container to keep sample close to 4° C (39° F) until arriving at the laboratory (do not freeze samples).
- Complete a Chain of Custody form with each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, the analysis that is required for each sample container, and both the signatures of the persons relinquishing and receiving the sample containers.

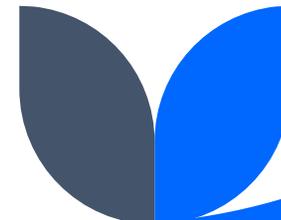


Permit Summary



NONA

- "No Discharge" claimed through NONA
- Site's location is not hydrologically connected to Waters of the US
- File a No Discharge Technical Report - demonstrate not hydrologically connected
- NDTR - wet signed by CA Eng. or Geologist
 - RWQCB may ask for reassessment if they feel it is in error



Permit Summary



Authorized NSWDs

- Dechlorinated potable/non-potable
 - Fire fighting activity
 - Fire hydrant system flushing
 - Irrigation of vegetative erosion controls
 - Dechlorinated potable water, including uncontaminated water line flushing
 - Hydrostatic pipe flushing/testing
 - Air condition condensate
 - Uncontaminated ground water or spring water from construction dewatering – Must comply with Attach. J
 - Water to control dust



Permit Summary



Authorized NSWDs

- Authorized under the following conditions:
 - Discharge not routed through exposed soil areas, except for dust control/irrigation
 - Discharge does not cause/contribute to an exceedance of water quality standards in RW
 - Complies with requirements of the CGP numeric action levels, effluent limitations and monitoring/reporting requirements
 - Discharge is not prohibited by an applicable regional/statewide water quality control plan
 - Discharge is in accordance with applicable state/regional water board permits
 - Discharge does not contain toxic constituents in toxic amounts or cause toxicity of the receiving water body

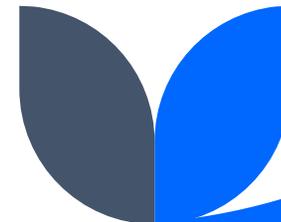


Permit Summary



Post-Con Standards:

- Concept of sustainability
- Performance standards for post-con BMPs
- Post-con BMPs used to match the pre-con hydrology, sustain physical/bio integrity of aquatic ecosystems
- "Runoff Reduction" approach = low impact development, proven to protect watershed/waterbodies from adverse impacts
- LUPs are not subject to the post-con standards



Permit Summary



Post-con Requirements (Green Building)

- Traditional requirement only
 - Implement BMPs to reduce runoff/pollutants in SW discharges - Post-con BMPs
- Dischargers in Phase 1 or 2 MS4 are not subject to post-con requirements of this CGP
 - Submit the following with PRDs
 - Attachment or web-source containing MS4s post-con requirements
 - Post-con plans/calculations submitted to comply with the MS4 requirements

