VALLEY CENTER MUNICIPAL WATER DISTRICT

A Public Agency Organized July 12, 1954

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March 11, 2026

VIA E-MAIL

SUBJECT: OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]
ADDENDUM NO. 2

Dear Bidder:

Attached is Addendum No. 2 to the Contract Documents of the subject project.

Each bidder shall acknowledge receipt of Addendum No. 2 in Section 00400 of the bid package **AND** include the signed certification page with the bid. Do **NOT** include the remaining addendum pages with the bid submittal. Failure to comply may result in bid disqualification.

If you have any further questions, please email Engineering_Projects@vcmwd.org.

Sincerely,

Melody Rocco, PE
District Engineer

29300 Valley Center Road • P.O. Box 67 • Valley Center, CA 92082
(760) 735-4500 • FAX (760) 749-2665 • www.valleycenterwater.org • e-mail vcwater@valleycenterwater.org

ADDENDUM NO. 2
TO CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR CONSTRUCTION OF THE
OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]

The following additions, modifications, corrections, deletions, and clarifications are hereby made to the Contract Documents and made a part thereof.

CONDITIONS OF THE CONTRACT:

Item No. 1 – Section 00010 – Table of Contents

REPLACE in its ENTIRETY with the attached revised section.

Item No. 2 – Section 00100 – Notice Inviting Bids

REPLACE in its ENTIRETY with the attached revised section.

Update bid opening date to April 8, 2026

Item No. 3 – Section 00200 Instruction to Bidders Page 00200-8

REPLACE in its ENTIRETY with the attached revised section.

Item No. 4 – Section 00400 – Bid Form

REPLACE in its ENTIRETY with the attached revised section.

Item No. 5 – Section 00455 DBE GFE Verification

REPLACE in its ENTIRETY with the attached revised section.

Item No. 6 - Section 00460 – DBE Forms

DELETE in its ENTIRETY with the attached revised section.

Item No. 7 – Section 01010 - Summary of Work

REPLACE in its ENTIRETY with the attached revised section.

TECHNICAL SPECIFICATIONS:

Item No. 8 – Section 15041 Disinfection of Piping

REPLACE in its ENTIRETY with the attached revised section.

Item No. 9 – Section - 15044 Hydrostatic Testing Pressure Pipe

REPLACE in its ENTIRETY with the attached revised section.

PLANS AND DRAWINGS:

Item No. 10 – VCMWD Standard Drawing Updates (Referenced in Contract Documents)

The District has revised the following VCMWD Standard Drawings:

- W-1, W-2, W-3, W-3A, W-4, W-5, W-6, W-6A, W-7, W-8, W-9, W-10, W-10A, W-11, W-12, W-12A, W-13, W-14, W-15, and W-54.

To the extent any of the above-listed Standard Drawings are referenced in or applicable to this Project, the current versions as posted on the District's website as of the date of this Addendum shall govern and supersede any previous versions.

https://media.vcmwd.org/pdf/eng_std/SECTION_3_DRAWINGS/WATER_STD_DWG_FULL_PUBL.PDF

Item No. 11 – Sheet 2 of 34 (G-1)

REPLACE in its ENTIRETY with the attached revised section.

- Water Note 8: Revised to state Deflection shall be accomplished with appropriate fittings, submitted and approved by District. Longitudinal bending of the pipe is not allowed.

Item No. 12 – Sheet 12 of 34 (C-9)

REPLACE in its ENTIRETY with the attached revised section.

- Update callout EX 8" water main to 12" water main

Item No. 13 – Sheet 13 of 34 (C-10)

REPLACE in its ENTIRETY with the attached revised section.

- Update callout EX 8" water main to 12" water main

Item No. 14 – Sheet 14 of 34 (C-11)

REPLACE in its ENTIRETY with the attached revised section.

- Update callout EX 8” water main to 12” water main

Appendices:

Item No. 15 – Appendix F
Add Appendix F EPA Community Grants Flow Downs for Old Castle Phase 2

Item No. 16 – Appendix G

Add Appendix G Statewide National Pollutant Discharge Elimination System (NPDES) Permit For Drinking Water Systems Discharges To Waters of The United States.

BIDDER’S QUESTIONS AND ANSWERS:

Item No. 17

Q: Please confirm what is outlined in Appendix A.1 is correct and that advertising requirements may be satisfied by posting the project in a newspaper **or** on an established e-Procurement website.

*A: Per Appendix A.1 “*To ensure qualified DBEs are informed of the project, the recipient and prime contractor must circulate the advertisement for bids for each project by posting in a newspaper or on and established e-Procurement website such as Planet Bids (www.planetbids.com), DBE Good Faith (www.dbegoodfaith.com), or an equivalent website.”*

ATTACHMENTS

1. Revised Section 00010 Table of Contents
2. Revised Section 00100 Notice Inviting Bids
3. Revised Section 00200 Instruction to Bidders Page 00200-8
4. Revised Section 00400 Bid Form
5. Revised Section 00455 DBE GFE Verification Form Page 0045-1
6. Deleted Section 00460 DBE Forms
7. Revised Section 01010 Summary of Work
8. Revised Technical Specification Section 15041 Disinfection Piping
9. Revised Technical Specification Section 15044 Hydrostatic Testing Pressure Pipe
10. Revised Standard Drawing W-1, W-2, W-3, W-3A, W-4, W-5, W-6, W-6A, W-7, W-8, W-9, W-10, W-10A, W-11, W-12, W-12A, W-13, W-14, W-15, and W-54.
11. Revised Plan Sheet 2 of 34 (G-1)
12. Revised Plan Sheet 12 of 34 (C-9)
13. Revised Plan Sheet 13 of 34 (C-10)
14. Revised Plan Sheet 14 of 34 (C-11)
15. Addition of Appendix F EPA Community Grants Flow Downs for Old Castle Phase 2

16. Add Appendix G Statewide National Pollutant Discharge Elimination System (NPDES) Permit For Drinking Water Systems Discharges To Waters of The United States.

END OF ADDENDUM NO. 2

Each bidder shall acknowledge receipt of Addendum No. 2 in Section 00400 and include the Bidder's Certification Page with Bid, failure to do so may result in bid disqualification. If there are further questions, please submit them in writing 72 hours prior to the bid date.

By: ______________________ Date: 03/11/2026

Melody Rocco, PE
District Engineer

VALLEY CENTER MUNICIPAL WATER DISTRICT
VALLEY CENTER, CALIFORNIA

ADDENDUM NO. 2
TO CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR CONSTRUCTION OF THE
OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]

BIDDER'S CERTIFICATION

(Include this page only with Bid)

I acknowledge receipt of the foregoing Addendum No. 2 and accept all conditions contained herein.

Name of Bidder: ______________________________

Signature: ______________________________

Name: ______________________________

Title: ______________________________

Dated: ______________________________

SECTION 00010
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INTRODUCTORY INFORMATION

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APPENDICES

SECTION 00100
NOTICE INVITING BIDS

The Valley Center Municipal Water District ("District") will receive sealed bids for the **OLD CASTLE ROAD PIPELINE PH-2** ("Project") at the office of the Valley Center Municipal Water District no later than **WEDNESDAY, APRIL 8TH~~MARCH 25TH~~, 2026, 2:00 P.M**, at which time or thereafter said bids will be opened and read aloud. Bids received after this time will be returned unopened. Bids shall be valid for 60 calendar days after the bid opening date.

The Project generally consists of the following:

- All work is located within Old Castle Road, an existing developed County of San Diego public right of way.
- Abandonment of approximately 5,025 linear feet of existing 12-inch CMLC and installation of new 12-inch PVC.
- 5,840 linear feet of existing 12-inch CMLC to be removed and replaced with 12-inch PVC potable waterline.
- Install air vacuum assemblies, blowoff assemblies, water service, and the abandonment of an existing water service and existing steel cylinder waterline.
- A temporary water pipeline system shall be installed during construction.

ENGINEER'S ESTIMATE: $6,775,000.00

All to be completed in **620** calendar days.

Project Funding: Funding for this project has been provided in full or in part through an agreement with the State Water Resources Control Board. California Drinking Water State Revolving Fund ("DWSRF") is capitalized through a variety of funding sources, including loans or grants from the United States Environmental Protection Agency ("USEPA") and state bond proceeds. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. (Gov. Code § 7550, 40 CFR § 31.20.) Bids must comply with all requirements associated with this funding source, including, but not limited to, USEPA DBE compliance and American Iron and Steel. In addition, the successful Bidder will be required to comply with all requirements associated with the DWSRF funding in carrying out the Project. The DWSRF funding requirements are described in Section 00800 DWSRF Funding Requirements.

"NON-MANDATORY" Pre-Bid Conferences will be held at the corner of **Old Castle Road and Indian Hill Lane** on the following date(s) and time(s): **Wednesday, February 4, 2026, at 2:00 pm and Wednesday, February 11, 2026, at 2:00 pm.** Each and every Bidder **"SHOULD"** attend at least one (1) of the Pre-Bid Conferences. Prospective bidders **"MAY"** visit the Project Site without making arrangements through the District's Project Manager. Bids **"WILL"** be accepted from any bidder who did not attend a Pre-Bid Conference.

Bidders may examine the Contract Documents at the office of the Valley Center Municipal Water District, 29300 Valley Center Road, Valley Center, California 92082 (Contact: Fernando Carrillo 760) 735-4579. Hard copy prints of Plans, Specifications, and Contract Documents can be ordered from ERI Repro, 1200 Simpson Way, Escondido, CA 92029, Phone: (760) 745-8626. Bidder is responsible for payment of all costs associated with acquiring plans and specifications from

Escondido Reprographics, Inc. Digital copies shall be made available only through Valley Center Municipal Water District offices. Bids must be submitted on the District's Bid Forms or copies thereof.

Bids must be accompanied by cash, a certified or cashier's check, or a Bid Bond in favor of the District in an amount not less than ten percent (10%) of the submitted Total Bid Price.

Each bid shall be accompanied by the security referred to in the Contract Documents, the Non-Collusion Declaration, the list of proposed subcontractors, and all additional documentation required by the Instructions to Bidders.

The successful bidder will be required to furnish the District with a Performance Bond equal to 100% of the successful bid, and a Payment Bond equal to 100% of the successful bid, prior to execution of the Contract. All bonds are to be secured from a surety that meets all of the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California.

Pursuant to Public Contract Code Section 22300, the successful bidder may substitute certain securities for funds withheld by the District to ensure his performance under the Contract.

The Director of Industrial Relations has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract which will be awarded to the successful bidder, copies of which are on file and will be made available to any interested party upon request at the Engineering office or online at http://www.dir.ca.gov/dlsr. A copy of these rates shall be posted by the successful bidder at the job site. The successful bidder and all subcontractor(s) under him, shall comply with all applicable Labor Code provisions, which include, but are not limited to the payment of not less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor, and the debarment of contractors and subcontractors.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted, nor any contract entered into, without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

The California Air Resources Board ("CARB") implemented amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulations ("Regulation"), which are effective on January 1, 2024, and apply broadly to all self-propelled off-road diesel vehicles 25 horsepower or greater and other forms of equipment used in California. A copy of the Regulation is available at https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation . Bidders are required to comply with all CARB and Regulation requirements, including, without Bidders are required to comply with all CARB and Regulation requirements, including, without limitation, all applicable sections of the Regulation, as codified in Title 13 of the California Code of Regulations section 2449 et seq. throughout the term of the Project. Bidders must provide, with their Bid, copies of the Bidder's and all listed subcontractors the most recent, valid Certificate of Reported Compliance ("CRC") issued by CARB. Failure to provide valid CRCs as required herein may render the Bid non-responsive.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its bid.

Since this Project is funded in whole or in part with DWSRF funds, the work must also comply with the minimum rates for wages for laborers and mechanics as determined by the Secretary of Labor in accordance with the provisions of Davis-Bacon. **As between the State and Federal rates, the higher of the two rates must be paid.** Attention is directed to the DWSRF Funding Requirements section of the Contract Documents.

Each Bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: **A-General or C-34 Pipeline**.

Award of Contract: The District shall award the Contract for the Project to the lowest responsible bidder as determined from the base bid alone by the District. The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact the District Engineering Department at (760)735-4500 or Engineering_Projects@vcmwd.org.

END OF NOTICE INVITING BIDS

27. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the Bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors Form. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

28. DWSRF REQUIRED SUBMISSIONS

Each Bidder shall submit the completed: DBE Good Faith Efforts supporting documentation, the Bidder's List and the Federal Debarment and Suspension Certification, with its bid. These forms and certifications are included in the Bid Documents. Additional guidance regarding DBE compliance is included as Appendix A.1 to the DWSRF Funding Requirements.

29. DRUG FREE WORKPLACE CERTIFICATION

Each bidder shall submit the Drug Free Workplace Certification. The certification is included in the Bid Documents.

30. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

Within the time specified in the Contract Documents, the Bidder to whom a Contract is awarded shall deliver to the District four identical counterparts of the Performance Bond and Payment Bond in the form supplied by the District and included in the Contract Documents. Failure to do so may, in the sole discretion of District, result in the forfeiture of the Bid Guarantee. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the District. The Performance Bond and the Payment Bond shall be for one hundred percent (100%) of the Total Bid Price.

31. REQUEST FOR SUBSTITUTIONS

The successful bidder shall comply with the substitution request provisions set forth in the Contract Documents, including any deadlines for substitution requests **which may occur prior to the bid opening date**.

SECTION 00400
BID FORM

NAME OF BIDDER:____

The undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

OLD CASTLE RD PIPELINE PH-2
PROJECT NO. 01-06-78-51420

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project for the following TOTAL BID PRICE:

BID SCHEDULE

OLD CASTLE ROAD PIPELINE PH-2

NO.	ITEM DESCRIPTION	UNIT OF MEASURE	EST. QTY.	UNIT PRICE	ITEM COST
1.	Mobilization	LS	1	$____________	$____________
2.	Utility Potholing	LS	1	$____________	$____________
3.	Excavation Support System	LS	1	$____________	$____________
4.	Temporary Highline	LS	1	$____________	$____________
5.	Sawcut, Excavate and Dispose Existing Asphalt Concrete Pavement.	SF	51,000	$____________	$____________
6.	Abandon Existing Water Service.	EA	62	$____________	$____________
7.	Abandon Existing Blow Off.	EA	8	$____________	$____________
8.	Abandon Existing Fire Hydrant.	EA	5	$____________	$____________
9.	Abandon Existing Air Vac.	EA	5	$____________	$____________
10.	Water Main Connection Per Detail 1 on Sheet 3	LS	1	$____________	$____________
11.	Water Main Connection Per Detail 2 on Sheet 3	LS	1	$____________	$____________
12.	Water Main Connection Per Detail 3 on Sheet 3	LS	1	$____________	$____________

13.	Water Main Connection Per Detail 4 on Sheet 3	LS	1	$____________	$____________
14.	Water Main Connection Per Detail 5 on Sheet 3	LS	1	$____________	$____________
15.	Water Main Connection Per Detail 6 on Sheet 3	LS	1	$____________	$____________
16.	Water Main Connection Per Detail 7 on Sheet 3	LS	1	$____________	$____________
17.	Water Main Connection Per Detail 8 on Sheet 3	LS	1	$____________	$____________
18.	Water Main Connection Per Detail 9 on Sheet 14	LS	1	$____________	$____________
19.	12-inch Diameter C900 PVC (CL305) Pipe Sta. 11+1.58 to 61+30.04	LF	5,025	$____________	$____________
20.	Remove Existing CML&C and Replace with 12-inch Diameter C900 PVC (CL305) Pipe Sta. 61+30.04 to 119+62.26	LF	5,680	$____________	$____________
21.	Remove and Replace 12-inch Diameter (CML) and (CML&C) Steel Pipe Sta. 61+45.87 to 63+23.57 (Bridge Crossing)	LF	160	$____________	$____________
22.	Miscellaneous Work at Sta. 23+70, 42+70, 59+07, & 97+85	LS	1	$____________	$____________
23.	1-inch water service, W-3	EA	32	$____________	$____________
24.	1-inch water service, W-3A	EA	2	$____________	$____________
25.	1.5-inch water service, W-4	EA	3	$____________	$____________
26.	2-inch water service, W-4	EA	2	$____________	$____________
27.	2-inch water service manifold, W-6.	EA	4	$____________	$____________
28.	3--inch water service manifold, W-6.	EA	1	$____________	$____________
29.	4-inch water service manifold, W-6A	EA	1	$____________	$____________
30.	12-inch RSGV	EA	2	$____________	$____________
31.	2-inch Air Vacuum Assembly	EA	8	$____________	$____________
32.	6-inch Fire Hydrant	EA	13	$____________	$____________

33.	2-inch Blowoff Assembly	EA	1	$__________	$__________
34.	AC Base Paving Per SDRSD G-24A, Type C	SF	51,000	$__________	$__________
35.	Mill and Overlay 1 ½ -Inch (12' Full width lane)	SF	130,200	$__________	$__________
36.	Striping	LS	1	$__________	$__________
37.	Demobilization and site restoration	LS	1	$__________	$__________
38.	Traffic Control	LS	1	$__________	$__________
39.	Removal of Existing Parallel 12-inch Pipeline	LF	1,000	$__________	$__________
40.	Seal Coat Driveway Crossings at Sta 23+70, 42+70, 72+33, 82+70, 87+33, 90+15, & 98+11	SF	5,000	$__________	$__________
41.	Unanticipated Obstructions	EA	50	$ 500	$ 25,000
42.	Rock Allowance	LS	1	$ 50,000	$ 50,000

~~**SUMMARY OF BID SCHEDULE**~~

~~**BID SCHEDULE (BID ITEMS 1-39) SUB-TOTAL $**~~________________

~~**UNKNOWN UTILITY ALLOWANCE AMOUNT $ 25,000**~~

~~**ROCK ALLOWANCE AMOUNT $ 50,000**~~

TOTAL BID SCHEDULE

(BID ITEMS 1-~~39~~ 42 ~~AND ALLOWANCES~~) TOTAL $________________

$____________________________
Total Bid Price in Numbers

____
Total Bid Price in Written Form

SECTION 00400
BID FORM

The costs for any Work shown or required in the Contract Documents but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

In case of discrepancy between the unit price and the item cost set forth for a unit basis item, the unit price shall prevail and, shall be utilized as the basis for determining the lowest responsive, responsible bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price. If any of the above discrepancies exist, the District may recalculate the bid price on the basis of the unit price and the bidder agrees to be bound by such recalculation. Final payment shall be determined by the District from measured quantities of work performed based upon the unit price.

The undersigned agrees that this Bid Form constitutes a firm offer to the District which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the bid opening, or until a Contract for the Work is fully executed by the District and a third party, whichever is earlier.

The Contract duration shall commence on the date stated in the District's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents. In no case shall the Contractor commence construction prior to the date stated in the District's Notice to Proceed.

Bidder certifies that it is licensed in accordance with the law providing for the registration of Contractors, License No. _________, Expiration Date _______, class of license ______. If the bidder is a joint venture, <u>each</u> member of the joint venture must include the above information.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addenda No. ________________________

Addenda No. ________________________

Addenda No. ________________________

1. Attached is the required bid security in the amount of not less than 10% of the Total Bid Price.
2. Attached is the fully executed Non-Collusion Declaration form.
3. Attached is the completed Designation of Subcontractors form.
4. Attached is the completed Iran Contracting Act Certification.
5. Attached is the completed Executive Order N-6-22 Certification.

6. Attached is the completed Bidder Information form.

7. Attached is the completed Public Works Contractor Registration Certification form.

8. Attached is the completed Contractor's Certificate Regarding Workers' Compensation form.

9. Attached is the completed Good Faith Efforts Verification Form and Supporting Documentation.

10. Attached is the completed Bidder's List form.

11. Attached is the completed Debarment and Suspension form.

12. Attached is the completed Drug Free Workplace form.

I hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Name of Bidder __________________________________

Signature __________________________________

Name and Title __________________________________

Dated __________________________________

END OF BID FORM

SECTION 00455
DBE GFE VERIFICATION FORM

BIDDER NAME: ___________________________________ **BIDDER PHONE NUMBER:**_______________
BIDDER ADDRESS: ____

District, in accordance with 40 CFR part 33, requires bidders to provide information pertaining to the use of minority businesses, women's business enterprises, and labor surplus area firms (referred to herein as "DBEs").

Please provide the following information, using additional sheets of paper if necessary, and submit this form with your bid. Bidder should also submit mail logs, phone logs, electronic searches and communication, newspaper clippings or similar records documenting efforts to meet the Good Faith Effort requirements.

1. Solicitation Lists/Publications. The names and dates of each newspaper publication* (at least one required) and each trade journal and other publications in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication), or information related to solicitation lists on which DBEs were included:

Publications/Solicitation Lists	Dates of Advertisement

* Must be a local newspaper, or an established e-Procurement website such as Plantet Bids (www.planetbids.com), DBE Good Faith (www.dbegoodfaith.com, or an equivalent website and be published at least 30 days prior to bid opening.

2. Soliciting DBEs as Potential Sources. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

Name of DBEs Solicited	Date of Initial Solicitation	Follow Up Methods and Dates

SECTION 00455
DBE GFE VERIFICATION FORM

3. Division of Requirements. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs Item? (Yes/No)	Breakdown of Items	Amount ($)	Percentage of Contract (%)

4. Delivery Schedules; Contracting with a Group of DBEs. Efforts made to establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; efforts made to contract with a group of DBEs when a contract is too large for one firm to handle individually.

____

____

____

____

5. Services of Other Agencies. Bidders must use the services of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page downloads, etc.). In addition, Bidders are encouraged to contract other agencies for assistance in recruiting and using DBE firms. List the names of agencies, organizations or other groups contacted.

Name of Agency/Organization	Method/Date of Contact	Results

SECTION 00455
DBE GFE VERIFICATION FORM

Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

Disadvantaged Business Enterprise (DBE) Program

DBE Subcontractor Performance Form

This form is intended to capture the DBE[1] subcontractor's[2] description of work to be performed and the price of the work submitted to the prime contractor. A Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name		Project Name
Bid / Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact
Address		
Telephone No.		Email Address
Prime Contractor Name		Issuing/Funding Entity

Contract Item Number	Description of Work Submitted from the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor
DBE Certified By: _ DOT _ SBA Other: ___	Meets/exceeds EPA certification standards? YES NO Unknown	

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.2015 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an award of financial assistance.

ADDENDUM 2

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

Subcontractor Signature	Print Name
Title	Date

The public reporting and record keeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Do not send the completed form to this address.

ADDENDUM 2

Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE[1] subcontractor's[2] and the estimated dollar amount of each subcontract. A Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name
Bid / Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact
Address		
Telephone No.		Email Address
Issuing/Funding Entity		

I have identified potential DBE certified subcontractors. YES NO

If *yes*, please complete the table below. If *no*, please explain:

Subcontractor Name! Company Name	Company Address ! Phone ! Email	Estimated Dollar Amount	Currently DBE Certified?

--Continue on back if needed--

A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.2015 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an award of financial assistance.

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

The public reporting and record keeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Do not send the completed form to this address.

ADDENDUM 2

SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK UNDER THIS CONTRACT AGREEMENT.

The Project generally consists of the abandonment of approximately 5,025 linear feet of existing 12-inch and removal and disposal of 5,680 linear feet of 12-inch diameter buried concrete mortar lined and coated steel potable waterline, and installation of 10,700 linear feet of 12-inch buried polyvinyl chloride (PVC) potable waterline, including valves, air vacuum assemblies, blowoff assemblies, water service, bridge crossing, and the abandonment of an existing water service and existing steel cylinder waterline. All work is located within Old Castle Road, an existing developed County of San Diego public right of way.

A. Contractor shall perform the work with the intent of the Contract Documents as stated in the General Conditions, and the Supplementary Conditions, excluding only the work indicated or specified to be provided by the Owner or others under separate contract or other arrangement.

The following items are required on the project, except as otherwise noted, generally as follows:

Bid Schedule Item No. 1 – Mobilization

- Payment for mobilization will be made at the lump sum contract price for this item, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, the items described in General Conditions Article 43 – Mobilization and Specification Section 01505.

Bid Schedule Item No. 2 – Utility Potholing

- Payment for utility potholing will be made at the lump sum contract price for all utility potholing required for the Work, complete and in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following: performing all work required for coordination of standby utility company personnel; potholing existing utilities prior to any excavation work at pipeline connection points, crossing utilities, and all utilities within 5 feet on either side of the centerline of the proposed construction or outermost limits of the proposed structures as required by the Contract Documents; and traffic control for all potholing related work not included in any other bid item including the preparation of traffic control plans for potholing, if necessary, to the satisfaction of the appropriate jurisdiction.
- Potholing of existing utilities that parallel the proposed pipeline shall be conducted at an interval sufficient to establish their locations relevant to the Work and not to exceed 50 feet measured parallel to the centerline of construction. Potholing must be done and a report submitted with the findings at least 14 days prior to beginning trenching operations. The report must contain at a minimum: pictures, depths, type of utility, location, and note any conflicts with contract drawings.

Bid Schedule Item No. 3 – Excavation Support Systems

- Payment for excavation support system will be made at the lump sum contract price for all Excavation Support Systems installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, obtaining and complying with all permits and regulations of the California Occupational Safety and Health (Cal/OSHA); preparing and submitting plans by a licensed Engineer and obtaining State Division of Industrial Safety permit(s) for excavations that are 5 feet deep or greater, and incidental work for sheeting, shoring, or bracing systems; sloping or benching of excavation side slopes; or other protective systems necessary for the support of trench excavations or for worker protection from materials or equipment that could pose a hazard by falling or rolling into excavations.

Bid Schedule Item No. 4 – Temporary Highline

- Payment for temporary highline will be made at the lump sum contract price for all temporary highline systems installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnishing and installing all temporary waterlines, service laterals, valves, fittings, and appurtenances necessary to maintain water service during construction as shown on the project plans. The Contractor shall perform all required hydrostatic and bacteriological testing to ensure the system is watertight and approved for use. All materials shall be new and certified for use in a potable water distribution system. Upon completion of the work, all temporary facilities shall be removed, and all affected areas, including pavement at temporary road crossings, shall be restored to their existing or better condition, as directed by the District or as shown on the project plans, and meet San Diego County Regional Standards.

Bid Schedule Item No. 5 – Sawcut, Excavate, and Dispose of Existing AC Pavement

- Payment for this bid item will be made at the square foot unit contract price for the measured area of all sawcut, excavate, and dispose of existing asphalt concrete (AC) pavement and base material required for the Work, complete and in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, disposal fees, sawcuts, removal and disposal of existing AC, removal and disposal of existing petromat, and removal of existing Class 2 base. Tabulated square footage assumes a 3-foot wide trench for main line piping and 2-foot wide for laterals per SDRSD G-24A Type C and G-24B Type D. Existing pavement thickness varies from 8-inches to 12-inches of AC and 12-inches of Class 2 base.

Bid Schedule Item No. 6 - Abandon Existing Water Service.

- Payment for this bid item will be made at the contract price for each water service abandonment, as indicated, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, abandonment of existing water service and water service manifolds per the service relocation table, sheet G-1, complete and in place. All service lateral abandonments will be abandoned in place, meter boxes removed, services cut at a minimum of 12–inches below grade. Return existing meters and backflows to VCMWD.

Bid Schedule Item No. 7 - Abandon Existing Blow Off.

- Payment for this bid item will be made at the contract price for each blow off abandonment, as indicated, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, abandonment of existing blow off, complete and in place. Remove above grade mechanisms to a minimum of 12–inches below grade, fill with concrete, backfill, and compact the location. Above grade mechanism and bollards to be returned to VCMWD. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material. Contractor's field locating of water services and verification of existing conditions sufficiently ahead of time to allow for design revisions if actual conditions differ from what is shown on the plans.

Bid Schedule Item No. 8 - Abandon Existing Fire Hydrant.

- Payment for this bid item will be made at the contract price for each fire hydrant abandonment, as indicated, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, abandonment of existing fire hydrants to a minimum of 1ft below grade, fill with concrete, backfill and compact location; removal of bollards, and removal of the concrete pad, complete and in place. Return above grade mechanisms to VCMWD. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material, and final base pavement. Contractor's field locating of water services and verification of existing conditions sufficiently ahead of time to allow for design revisions if actual conditions differ from what is shown on the plans.

Bid Schedule Item No. 9 - Abandon Existing Air Vac.

- Payment for this bid item will be made at the contract price for each air vacuum valve assembly abandonment, as indicated, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, abandonment of the existing air vacuum valve assembly, removal of bollards, and removal of the concrete pad, complete and in place. Remove above grade mechanisms to a minimum of 12–inches below grade, fill with concrete, backfill, and compact the location. Return above grade mechanisms to VCMWD. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material. Contractor's field locating of water services and verification of existing conditions sufficiently ahead of time to allow for design revisions if actual conditions differ from what is shown on the plans.

Bid Schedule Item No. 10 - Water Main Connection Per Detail 1 on Sheet 3

- Payment for water connection per Detail 1 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but not be limited to, furnish and install connection to existing 8-inch CMLC waterline per Detail 1, Sht. 3, Sta 17+66.47, including piping, fittings, valves, weld on flanges, nuts bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust blocks, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

<u>Bid Schedule Item No. 11 - Water Main Connection Per Detail 2 on Sheet 3</u>

- Payment for water connection per Detail 2 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to existing 14-inch CMLC waterline per Detail 2, Sht. 3, Sta 25+12.15, including piping, fittings, valves, weld on flanges, nuts bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

<u>Bid Schedule Item No. 12 - Water Main Connection Per Detail 3 on Sheet 3</u>

- Payment for water connection per Detail 3 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to the existing 14-inch DIP waterline per Detail 3, Sht. 3, Sta 26+88.32. including piping, fittings, valves, nuts, bolts, gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly, and valve supports, complete and in place. Bid item shall include removal and capping of existing DIP piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

<u>Bid Schedule Item No. 13 – Water Main Connection Per Detail 4 on Sheet 3</u>

- Payment for water connection per Detail 4 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to existing 12-inch CMLC waterline per Detail 4, Sht. 3, Sta 31+40.79 including piping, fittings, valves, weld on flanges, nuts, bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

<u>Bid Schedule Item No. 14 - Water Main Connection Per Detail 5 on Sheet 3</u>

- Payment for water connection per Detail 5 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to the existing 8-inch DIP waterline per Detail 5, Sht. 3, Sta 44+19.13. including piping, fittings, valves, nuts, bolts, gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly, and valve supports complete and in place. Bid item shall include removal and capping of existing DIP piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

Bid Schedule Item No. 15 - Water Main Connection Per Detail 6 on Sheet 3

- Payment for water connection per Detail 6 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to existing 8-inch CMLC waterline per Detail 6, Sht. 3, Sta 55+58.97 including but not limited to piping, fittings, valves, weld on flanges, nuts bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

Bid Schedule Item No. 16 - Water Main Connection Per Detail 7 on Sheet 3

- Payment for water connection per Detail 7 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to the existing 8-inch DIP waterline per Detail 7, Sht. 3, Sta 60+35.47, including piping, fittings, valves, nuts, bolts, gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly, and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC and DI piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

Bid Schedule Item No. 17 - Water Main Connection Per Detail 8 on Sheet 3

- Payment for water connection per Detail 8 on Sheet 3 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to existing 8-inch CMLC waterline per Detail 8, Sht.

3, Sta 78+98.76, including piping, fittings, valves, weld on flanges, nuts bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing CMLC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

Bid Schedule Item No. 18 - Water Main Connection Per Detail 9 on Sheet 14

- Payment for water connection per Detail 9 on Sheet 14 will be made at the lump sum contract price for all items installed for the Work, complete and in accordance with the Contract Documents. The contract price shall include, but is not limited to, furnish and install connection to existing 8-inch diameter C900 PVC (CL305) waterline per Detail 9, Sht. 14, Sta 119+62.26 including piping, fittings, valves, nuts bolts gasket sets, mechanical restraint joints, adapters, couplings, thrust block, valve can assembly and valve supports complete and in place. Bid item shall include removal and capping of existing PVC piping, valves, and fittings in conflict with the proposed pipe alignment. Coordination with the District, County of San Diego, and/or utility companies for work during or outside of normal working hours; submittal of a shutdown plan identifying the shutdown and construction sequence and schedule; and all excavation, dewatering, water disposal, surplus material disposal, protection of existing utilities, connections to existing pipelines, closing and/or removing interfering abandoned conduits, structures, or pipes; bedding, backfill, compaction, trench plating, temporary asphalt concrete paving, hydrostatic pressure testing, disinfection, and all other labor, materials, and equipment that are incidental to pipeline connections details and that are not included in any other bid item.

Bid Schedule Item No. 19 - 12-inch Diameter C900 PVC (CL305) Pipe Sta. 11+1.58 to 61+30.04

- Payment for waterlines of the type, size, and class specified in the Contract Documents and on the bid schedule will be made at the linear-foot unit contract price for the measured quantity of pipe installed, complete in place, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following: utility standby coordination; excavation; removing and/or capping interfering abandoned conduits or structures; dewatering and any required water treatment; water disposal; surplus material disposal; furnishing and installing 12-inch diameter DR14 C900 PVC (CL305) pipe including fittings, lining and coatings, bedding, backfill and compaction, locating wire, warning tape, thrust blocks, mechanical joint restraints, temporary trench plating; including recessed trench plates if required by the County excavation permit and Class 2 aggregate base; placement and removal of temporary paving materials; utility crossings and protection; pipeline pressure testing and disinfection; compliance with District shutdown and outage requirements; removal and abandonment of old appurtenances, bollards, and valve can assemblies; and all other incidental work not covered in other bid items.

Bid Schedule Item No. 20 - Remove Existing CML&C and Replace with 12-inch Diameter C900 PVC (CL305) Pipe Sta. 61+30.04 to 119+62.26

- Payment for waterlines of the type, size, and class specified in the Contract Documents and on the bid schedule will be made at the linear-foot unit contract price for the measured quantity of pipe installed, complete in place, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following: utility standby coordination; excavation; removing and/or capping interfering abandoned conduits or structures; dewatering and any required water treatment; water disposal; surplus material disposal; debris disposal, removal of existing 12-inch CMLC steel pipe and abandoned 12 – inch tar wrapped steel pipe in conflict with new installation; furnishing and installing 12-inch diameter DR14 C900 PVC (CL305) pipe including fittings, lining and coatings, bedding, backfill and compaction, locating wire, warning tape, thrust blocks, mechanical restraint joints, temporary trench plating; including recessed trench plates if required by the County excavation permit and Class 2 aggregate base; placement and removal of temporary paving materials; utility crossings and protection; pipeline pressure testing and disinfection; compliance with District shutdown and outage requirements; removal and abandonment of old appurtenances, bollards, and valve can assemblies; and all other incidental work not covered in other bid items.

Bid Schedule Item No. 21 - Remove and Replace 12-inch Diameter (CML) and (CML&C) Steel Pipe Sta. 61+30.04 to 63+23.57 (Bridge Crossing)

- Payment for waterlines of the type, size and class specified in the Contract Documents and on the bid schedule will be made at the linear foot unit contract price for the measured quantity of pipe installed, complete in place, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following: dewatering and any required water treatment; water disposal; remove and dispose of existing 12-inch steel pipe and fittings at Bridge Crossing, protect in place existing pipe supports, furnish and install 12-inch diameter Cement Mortor Lined (CML) and Cement Mortar Lined & Coated (CML&C) steel pipe in same alignment, including fittings, and mechanical restraint joints, nut and bolts, gaskets, rubber pads at pipe supports, pipe support straps, air vac assembly (per detail on Drawing CD-1) and protective coatings, complete and in place.

Bid Schedule Item No. 22 – Miscellaneous Work at Station 23+70, 42+70, 59+07, & 97+85.

- Payment for this bid item will be made at the lump sum contract price for miscellaneous work at different locations, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, at Sta. 23+70, Remove and replace 175 SF of asphalt concrete, construct a 10’ x 6’ planter extension with asphalt berm edges; at Sta. 42+70, remove and replace 150 SF of asphalt concrete driveway and match existing thickness and AC berm; at Sta. 59+07, remove existing cactus and needed to install services; and at Sta. 97+85, remove existing rocks as needed to install watermain and services.

Bid Schedule Item No. 23 - 1-inch Water Service, W-3

- Payment for this bid item will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 1-inch water service per W-3 from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 24 - 1-inch Water Service, W-3A

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 1-inch water service per W-3A from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 25 - 1.5-inch Water Service, W-4

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 1.5-inch water service manifold per W-4 from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 26 - 2-inch Water Service, W-4

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 2-inch water service manifold per W-4 from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 27 - 2-inch Water Service manifold, W-6

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 2-inch water service manifold per W-6 from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 28 - 3-inch Water Service manifold, W-6.

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 3-inch Water service manifold per W-6 from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 29 - 4-inch Water Service manifold, W-6A

- Payment for this bid items will be made at the contract price for each Water Service relocated to new water service lateral or manifold, as indicated, installed complete in place in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to furnish and install 4-inch water service manifold per W-6A from the new waterline to the existing or new water meter (new water meters to be furnished by District); coordination with the property owners and the District to maintain service during installation; service saddles, fittings, valves, pvc water piping, ductile iron water piping and fittings, corporation stops; copper water service tubing; meter box; testing and disinfection; capping and abandonment of existing water services; disposal of removed materials; shrubs; brush; trees and tree trimmings; site restoration; and all incidental work necessary for a complete and properly functioning installation. This item shall also include all excavation, bedding, backfilling, compaction, dewatering, water control, exporting, and disposal of excavated or surplus material and debris, complete and in place. Refer to sheet G-1 of the plans for the Water Service Lateral Table.

Bid Schedule Item No. 30 – 12-inch RSGV

- Payment for resilient seat gate valves of the size and type specified in the Contract Documents and on the bid schedule will be made at the contract price for each valve assembly installed, complete in place, in accordance with the Contract Documents and per W-25. The contract price for work under this item shall include, but not limited to; furnish and install 12-inch resilient seat gate valve (CL 150), complete and in place. Bid Price shall include; procurement, delivery, installation, and testing; actuators of the type shown or specified; polyethylene encasement; concrete anchor blocks; valve stem extensions; valve wells and covers; marker posts and fittings; and all miscellaneous hardware, nuts, bolts, and gaskets.

Bid Schedule Item No. 31 - 2-inch Air Vacuum Assembly

- Payment for air and vacuum valve assemblies of the size specified in the Contract Documents and on the bid schedule will be made at the contract price for each assembly installed, complete and in place, in accordance with the Contract Documents and per W-14. The contract price for work under this item shall include, but not limited to; furnish and install 2-inch air release and vacuum assembly service saddles, lateral piping; fittings; tubing; corporation stops; polyethylene encasement; isolation valves; valve well and cover; marker posts air valves and enclosures; concrete support pads; and miscellaneous hardware, excavation, backfill, compaction testing, warning tape, and locating wire.

Bid Schedule Item No. 32 - 6-inch Fire Hydrant

- Payment for this bid item will be made at the contract price for each fire hydrant assembly of the type specified in the Contract Documents, installed complete in place, in accordance with the Contract Documents and per W-12. The contract price for work under this item shall include, but is not limited to, the following; furnish and install 6-inch fire hydrant, nuts and bolts, gaskets, fittings, valves, 6-inch fire hydrant head, lining and coatings, marker posts, concrete splash/housekeeping pad, concrete anchor blocks, valve stem extensions, valve wells and covers, restraints, thrust blocks, and all miscellaneous hardware, warning tape, locating wire excavation, backfill, and compaction.

Bid Schedule Item No. 33 - 2-inch Blowoff Assembly

- Payment for this bid item will be made at the contract price for each blowoff assembly of the type specified in the Contract Documents, installed complete in place, in accordance with the Contract Documents and per W-09. The contract price for work under this item shall include, but is not limited to, the following: furnish and install 2-inch blow off assembly, nuts and bolts, gaskets, fittings, valves, lining and coatings, guard posts, concrete splash/housekeeping pad, concrete anchor blocks, valve stem extensions, valve wells and covers, marker posts, restraints, thrust blocks, and all miscellaneous hardware, warning tape, locating wire excavation, backfill, and compaction.

Bid Schedule Item No. 34 - AC Base Paving Per SDRSD G-24A, Type C and G-24B

- Payment for this bid item will be made at the square foot unit contract price for the measured area of asphalt concrete (AC) base paving per County of San Diego (Per SDRSD G-24A Type C and G-24B). The contract unit price for this bid item shall include, but is not limited to, the following: County of San Diego permitting costs, necessary move-ins and mobilizations required for installation of AC base paving, and all other items, complete and in place. (Assumed 3’ wide pipe trench per SDRSD G-24a Type C for mainline and 2’ wide trench for service laterals and appurtenances). Existing AC and Class 2 base thickness varies throughout the length of the pipeline from 8-inch to 12-inch of AC and 18-inches of Class 2 base with Petromat.

  No measurement or payment will be made for the following: a) paving that is not ordered or approved by the Owner, b) paving that extends beyond the paving limits shown or specified on the Contract Documents, or c) paving outside the specified limits of paving damaged by the Contractor’s operations that is necessary to restore to a condition equal to or better than the condition existing prior to the start of construction.

Bid Schedule Item No. 35 - Mill and Overlay 1 ½ -Inch (12’ Full width lane)

- Payment for this item will be made at the square foot unit contract price for the measured area of milled and overlay 1-1/2-inch by full width (12') asphalt concrete pavement per County of San Diego (Per SDRSD G-24A Type C and G-24B Type D). The contract unit price for this bid item shall include, but is not limited to, the following: permitting costs, necessary move-ins and mobilizations required to mill/overlay all disturbed pavement as a result of trenching, driveway header grinds, sealing, and temporary stripping.

  No measurement or payment will be made for the following: a) paving that is not ordered or approved by the Owner, b) paving that extends beyond the paving limits shown or specified on the Contract Documents, or c) paving outside the specified limits of paving damaged by the Contractor's operations that is necessary to restore to a condition equal to or better than the condition existing prior to the start of construction.

Bid Schedule Item No. 36 – Striping

- Payment for striping will be made at the lump sum contract price for all striping required for the Work, complete and in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following, necessary move-ins and mobilizations required for striping, striping per County Requirements, rumble strips, raised pavement markers, and all other items, complete and in place.

Bid Schedule Item No. 37 – Demobilization and site restoration

- Payment for demobilization and site restoration will be made at the lump sum contract price for demobilization and site restoration required for the Work, complete and in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following, demobilization and site restoration per provisions of Technical Specification 01505-Mobilization and Demobilization, and site restoration along the entire pipeline alignment within the County ROW and storage/staging area, and all other items, complete and in place.

Bid Schedule Item No. 38 – Traffic Control

- Payment for waterlines of the type, size, and class specified in the Contract Documents and on the bid schedule will be made at the linear-foot unit contract price for the measured quantity of pipe installed, complete in place, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following: utility standby coordination; excavation; removing and/or capping interfering abandoned conduits or structures; dewatering and any required treatment; water disposal; surplus material disposal; furnishing and installing 12-inch diameter DR14 C900 PVC (CL305) pipe including fittings, lining and coatings, bedding, backfill and compaction, locating wire, warning tape, thrust blocks, mechanical restraint joints, temporary trench plating, and Class 2 aggregate base; placement and removal of temporary paving materials; utility crossings and protection; pipeline pressure testing and disinfection; compliance with District shutdown and outage requirements; removal and abandonment of old appurtenances and valve wells; roadway rehabilitation and striping and all other incidental work not covered in other bid items.

Bid Schedule Item No. 39 – Removal and Disposal of Existing Parallel 12-inch Pipeline

- Payment for removal and disposal of existing parallel 12-inch CML&C pipe and Tar Wrapped Pipe as specified in the Contract Documents and on the bid schedule will be made at the linear foot unit contract price for the measured quantity of pipe removed and disposed of, complete in place, in accordance with the Contract Documents. The contract price for work under this item shall include, but not be limited to, the following, disposal fees, removal of the existing 12-inch pipeline that runs parallel to the new pipe alignment from Sta. 93+00 to 108+00. Contractor shall remove and dispose of pipe when encountered or as directed by VCMWD. Contractor shall include the cost for additional sawcut, asphalt concrete removal, Class 2 base, and base asphalt concrete paving

Bid Schedule Item No. 40 – Seal Coat Driveway Crossings for Meter Relocations and Temporary Highline

- Payment for Seal Coat of driveway crossings for meter relocations and temporary highline as specified on the bid schedule will be made at a square foot contract cost. The contract unit price for this bid item shall include, but is not limited to, the following: permitting costs, necessary move-ins and mobilizations, Seal coat for meter relocations and temporary highline driveway crossings at Sta 23+70, Sta 42+70, Sta 72+33, Sta 72+33, Sta 82+70, Sta 87+33, Sta 90+15, and Sta 98+11. Seal coat shall be in accordance with Section 02743 Part 2.07 Seal Coat of the contract documents.

  No measurement or payment will be made for the following: a) seal coat that is not ordered or approved by the Owner, b) seal coat that extends beyond the seal coat limits shown or specified on the Contract Documents, or c) seal coat outside the specified limits of paving damaged by the Contractor's operations that is necessary to restore to a condition equal to or better than the condition existing prior to the start of construction.

Bid Schedule Item No. 41 – Unanticipated Obstructions

- The Unanticipated Obstructions will be used if a utility is encountered within the pipeline trench not shown in the contract documents and is determined to impact the work. Unknown utilities do not include abandoned facilities, utilities marked in the field through Underground Service Alert, service laterals connected to utility lines shown on the drawings or marked in the field, or utility lines whose presence can reasonable be inferred from other field-marked or visible utilities. District and Contractor will negotiate to determine the best course of action to mitigate the conditions. Payment for unanticipated obstructions will be made per each unanticipated obstruction, agreed to between the District and Contractor, as specified on the bid schedule.

Bid Schedule Item No. 42 – Rock Allowance

- The Rock Clause Allowance will be used only if a rock condition is encountered that satisfies the criteria of non-rippable rock as defined in 02200 3.05E. District and Contractor will negotiate to determine the best course of action to mitigate the conditions. Payment for rock removal will be made on a time and material basis in conformance with the documentation requirements listed in ARTICLE 47.3 LUMP SUM CHANGE ORDERS of Section 0700 GENERAL CONDITIONS. Should the cost of rock removal exceed the pre-defined dollar amount identified in the bid schedule, Contractor will be compensated based upon terms of an approved change order(s).

1.02 DRAWINGS.

The Drawings and supplemental information forming a part of the Contract Documents are listed in the Appendices.

1.03 SEQUENCE OF CONSTRUCTION.

Prior to the start of construction, the Contractor shall submit a schedule for the Owner's approval showing the Contractor's proposed sequence of the work, areas of work, and time of any anticipated shutdown of existing facilities.

1.04 EXPLANATION AND PRECEDENCE OF DRAWINGS.

A. For purposes of clearness and legibility, the Drawings are essentially diagrammatic, and although elevations are shown and locations of underground mains and points of connection are drawn to scale where possible, the Contractor shall make use of all data in all of the Contract Documents and shall verify this information prior to and during construction.

B. All work not shown in complete detail shall be installed in conformance with accepted standard practice and manufacturer's recommendations.

C. Changes in the location of all piping, as indicated on the Drawings, shall be made to meet conditions as required and as directed by the Owner. Any change in work which has not been installed shall be made by the Contractor without additional compensation, except changes which increase the number of fittings and lengths of pipe runs.

D. Work indicated on Drawings, but not mentioned in Specifications, or vice versa, shall be performed the same as if specifically mentioned or indicated by both. All labor or materials required for a complete and properly operating installation shall be furnished, whether or not indicated and specified, and without cost to Owner.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION 01010

SECTION 15041
DISINFECTION OF PIPING

PART 1 - GENERAL

1.01 DESCRIPTION.

This section describes requirements for disinfection by chlorination of potable water mains, services, pipe appurtenances and connections.

1.02 REFERENCED STANDARDS.

The publications listed below form part of this specification to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise called for.

AWWA B300	Standard for Hypochlorites
AWWA B301	Standard for Liquid Chlorine
AWWA C651	Disinfecting Water Mains

1.03 RELATED WORK SPECIFIED ELSEWHERE.

A. AWWA Standard Methods for the Examination of Water and Waste Water

B. VCMWD Standard Specifications 15000, 15044, 15056, 15057, 15061, and 15064

1.04 SERVICE APPLICATION.

A. All water mains and appurtenances taken out of service for inspection, repairs, or other activity that might lead to contamination shall be disinfected before they are returned to service AWWA C651.

B. All new water mains and temporary pipelines shall be disinfected prior to connection to the District's existing system.

C. All components incorporated into a connection to the District's existing system shall be disinfected prior to installation.

1.05 SUBMITTALS.

A written disinfection, dechlorination and discharge plan, including all recordkeeping forms, methods and equipment to be used, shall be signed by the person responsible for performing the work and shall be submitted to the District Engineer for approval prior to starting disinfection operations.

1.06 DELIVERY, STORAGE AND HANDLING.

Chlorination and dechlorination shall be performed by competent individuals knowledgeable and experienced in the operation of the necessary application and safety equipment in accordance with applicable Federal, State and Local laws and regulations. The transport, storage and handling of these materials shall be performed in accordance with Code of Federal Regulations (CFR)1910.120 Hazardous Waste Operations and Emergency Response, CFR 49.172 Hazardous Materials Regulations, and the General Industry Safety Orders of the California Code of Regulations, Title 8, Section 5194.

1.07 CONCURRENT DISINFECTION AND HYDROSTATIC TESTING.

The specified disinfection of the pipelines may *not* be performed concurrently with the hydrostatic testing.

1.08 CONNECTION TO EXISTING MAINS.

Prior to connection to existing mains, disinfection and bacteriological testing shall be performed in accordance with this specification, and hydrostatic testing shall be performed per Section 15044. District authorization for connection to the existing system shall be given only on the basis of acceptable hydrostatic, disinfection and bacteriological test results. Connection to existing mains shall be performed in accordance with Section 15000.

PART 2 - MATERIALS

2.01 SODIUM HYPOCHLORITE (LIQUID).

Sodium hypochlorite is available in liquid form in glass or plastic containers, ranging in size from 1 Qt. to 5 Gal. The solution contains approximately 10% to 15% available chlorine.

2.02 TABLET OR GRANULAR HYPOCHLORITE.

Calcium Hypochlorite conforming to ANSI/AWWA B300 is available in granular form. It must contain approximately 65% available chlorine by weight. CAUTION: The tablets dissolve in approximately 7 hours and must be given adequate contact time. The use of calcium hypochlorite intended for swimming pool disinfection is strictly prohibited.

2.03 GAS CHLORINE.

Liquid Chlorine applied in the gaseous state shall NOT be allowed with the District or within the District boundaries.

PART 3 - EXECUTION

3.01 GENERAL.

A. Disinfection of pipelines shall not proceed until all appurtenances and any necessary sample ports have been installed and the Engineer provides authorization.

B. Every effort shall be made to keep the water main and its appurtenances clean and dry during the installation process.

C. All piping, valves, fillings, and appurtenances which become contaminated during installation shall be cleaned, rinsed with potable water, and then sprayed or swabbed with a 5 percent sodium hypochlorite disinfecting solution prior to installation.

D. Water mains under construction that become flooded by storm water, runoff, or ground water shall be cleaned by draining and flushing with metered potable water until clear water is evident. Upon completion, the entire main shall be disinfected using a method approved by the Engineer.

E. Unless authorized, disinfection shall commence not longer than 1 week after a successful hydrostatic test has been approved by the District Engineer.

3.02 METHODS.

A. Sodium Hypochlorite Solution (Liquid)

1. Sodium hypochlorite solution shall be used for cleaning and swabbing piping and appurtenances immediately prior to installation and for disinfecting all components of connections to the District's existing system.

2. Sodium hypochlorite solution may be used for the initial disinfection of newly installed water mains. The solution shall be applied at a terminus of the system to be chlorinated using an injector which can adjust the amount of solution being injected into the piping system. The solution shall be injected in the appropriate concentration to achieve the specified concentration range of chlorine throughout the entire piping system. Where pumping equipment is used in conjunction with an injector, an integral backflow prevention device shall be installed and connected to the potable water supply.

3. Pumping equipment, piping, appurtenances and all other equipment in contact with potable water shall be disinfected prior to use.

4. Calcium hypochlorite solution may also be used to increase the total chlorine residual if the concentration from the initial chlorination of the system is found to be low. The solution shall be added to the system in sufficient amounts at appropriate locations to insure that the disinfecting solution is present at a concentration within the specified range throughout the piping system.

5. Water trucks shall NOT be allowed for use in any process of disinfecting the water.

3.03 PROCEDURE FOR DISINFECTING WATER MAINS AND APPURTENANCES.

A. The pipeline shall be filled at a rate not to exceed 300 GPM or a velocity of 1 foot per second, whichever is less.

B. Disinfection shall result in an initial total chlorine concentration of 150-mg/1. This concentration shall be evenly distributed throughout the system to be disinfected.

C. All valves shall be operated with the disinfection solution present in the pipeline. All appurtenances such as air-vacuum relief valves, blowoffs, hydrants, backflow prevention devices, and water service laterals shall be flushed with the treated water a sufficient length of time to insure a chlorine concentration within the specified range in all components of each appurtenance. (Note the limitations for discharge of chlorinated water outlined below.)

D. The Engineer will verify the presence of the disinfection solution throughout the system by sampling and testing for acceptable chlorine concentrations at the various appurtenances and/or at the test ports provided by the Contractor. Areas of the system found to be below the specified chlorine concentration level shall receive additional flushing as noted above and/or additional disinfection solution as necessary. (Note the limitations for discharge of chlorinated water outlined below.) Addition of disinfection solution after the initial charging of the line shall be made by either the liquid chlorine method, or the Calcium hypochlorite method as directed by the Engineer.

E. The chlorinated water shall be retained in the system for a minimum of twenty-four (24) hours. After the solution has remained in the piping system for twenty-four (24) hours, the District Engineer will test the total chlorine residual. A total chlorine residual of not less than 80% of the initial total chlorine residual must be maintained. If the total chlorine residual has decreased more than 20%, the system shall be flushed and re-disinfected and the solution maintained within the piping system for twenty-four (24) hours. Additional tests will be performed after the 24-hour period. If the total chlorine residual has not deceased more than 20% after this additional 24-hour period, the system shall be flushed in accordance with the procedure detailed herein. If the total chlorine residual has decreased more than 20% after the second test, the contractor shall prepare a written scope of work for the inspection of the pipeline for dirt, debris, or other foreign material within the pipe. Contractor shall provide District with satisfactory inspection reports including video, photos, or other documentation indicating that the interior of the pipe is free from any material that may impact pipeline disinfection. All costs including staff time, equipment, testing, and water used to flush and sample after the second chlorine residual testing will be the responsibility of the contractor.

F. Following a successful retention period as determined by the District Engineer, the high concentrated chlorinated water shall be drained from the system at its extremities and at each appurtenance. The highly concentrated chlorinated water shall be drained and de-chlorinated prior to entry to atmospheric conditions. The chemicals used to de-chlorinate the line shall be injected into the discharge piping prior to exiting the piping with sufficient distance to mix the de-chlorinating chemical with the high concentrated water. The District Engineer shall sample the water at various intervals to insure the neutralization of the chlorine. Following the successful de-chlorination of the highly concentrated water, the system shall be flushed at its extremities and at each appurtenance, using potable water from a source designated by the District Engineer. The minimum water velocity during flushing shall be 2.5 feet per second or as directed the District Engineer. Flushing shall continue until the replacement water in the new system is equal in chlorine residual to the potable source as verified by the District. (Note: See the limitations for discharge of chlorinated water outlined below.)

G. The District will perform bacteriological sampling and testing as specified herein.

3.04 DISCHARGE OF CHLORINATED WATER.

A. Indiscriminate onsite disposal or discharge to sewer systems, storm drains, drainage courses or surface waters is prohibited. It shall be the responsibility of the Developer to comply with the Statewide National Pollutant Discharge

Elimination System Permit (NPDES) for Drinking Water System Discharges to Waters of the United States, order WQ 2014-0194-DWQ, General Order No. CAG140001, for any discharge of hydrostatic test water or other potable water. The Contractor shall be solely responsible to evaluate and comply with the provisions of the NPDES order WQ 2014-0194-DWQ, including any monitoring and recordkeeping as may be required. The Contractor shall comply with all requirements of the State Water Resources Control Board and the San Diego Regional Water Quality Control Board. The Contractor shall provide copies of all discharge records and monitoring information to the District.

B. Failure to comply with the NPDES order WQ 2014-0194-DWQ is a violation of federal and state law. The Contractor hereby agrees to indemnify and hold harmless the District, its Board members, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which District, its Board members, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the NPDES order WQ 2014-0194-DWQ arising out of or in connection with the Project.

C. The environment to which the chlorinated water is to be discharged shall be examined by the Developer and the Engineer. Where necessary, federal, state and local regulatory agencies should be contacted to determine special provisions for the disposal of chlorinated water. Any indication that the discharge of chlorinated water may cause damage to the environment shall require the neutralizing of the chlorine residual by means of a reducing agent in accordance with NPDES order WQ 2014-0194-DWQ and the requirements of this specification.

D. In locations where chlorine neutralization is required, the reducing agent shall be applied to the water as it exits the piping system. The Developer shall monitor the chlorine residual during the discharge operations per NPDES order WQ 2014-0194-DWQ. The Developer will perform all necessary tests to ensure that the total residual chlorine effluent limitations per NPDES order WQ 2014-0194-DWQ are met.

E. In locations where no hazard to the environment is evident based on the joint examination described above, the chlorinated water may be broadcast for dust control on the surface of the immediate site. Care shall be exercised in broadcasting the water to prevent runoff.

3.05 BACTERIOLOGICAL TESTING.

A. After disinfection final flushing and before the water main is placed in service, a sample or samples shall be collected from the pipeline and tested for bacteriological quality to demonstrate the absence of coliform organisms per AWWA C651 and as specified herein. Two consecutive sets of acceptable samples, taken at least 24-hours apart will be taken along the pipeline at a minimum of two separate locations. Sample locations will be determined in the field per the District Engineer. Samples of bacteriological analysis shall be collected in sterile bottles treated with sodium thiosulphate. No hose or fire hydrant shall be used as a sampling station.

B. All samples shall be taken by District Staff during routine sampling each Monday. Samples taken on any other day will be at the contractor's cost. The contractor shall provide a written request for District staff to take samples a minimum of forty-eight

(48) hours prior to the requested date.

C. Contractor may flush and then re-sample a second time. If the second series of samples fail to produce passing results, then the contractor shall re-disinfect the line as stated earlier within these specifications and have samples taken. If the disinfection fails to produce satisfactory bacteriological test results, the Contractor may flush and then re-sample a fourth time. Should these samples fail to produce satisfactory results, the contractor shall prepare a written scope of work for the inspection of the pipeline for dirt, debris, or other foreign material within the pipe. Contractor shall provide District with satisfactory inspection reports including video, photos, or other documentation indicating that the interior of the pipe is free from any material that may impact pipeline disinfection and bacteriological testing. All costs including staff time, equipment, testing, and water used to flush and sample after the fourth failed bacteriological testing will be the responsibility of the contractor.

D. Unless authorized, all connections must be completed within fourteen (14) days from receipt of acceptable bactiological test results. Should connections occur after fourteen (14) days, the contractor shall flush the piping system as outlined within these specifications? Should connections occur after twenty (20) days, the contractor shall re-disinfect the piping system as outlined within these specifications.

E. Pipes, fittings, valves and all other components incorporated into connections with the District's existing system shall be spray disinfected or swabbed with a liquid chlorine solution in accordance with AWWA C651 and as specified herein. Upon connection to the main, the line shall be flushed as directed by the District Engineer. Disinfection by this method is generally limited to assemblies of twenty (20) feet or less in length. Alternate methods such as "predisinfection" prior to installation in accordance with AAWA C651 may be allowed at the discretion of the District Engineer.

END OF SECTION 15041

SECTION 15044
HYDROSTATIC TESTING OF PRESSURE PIPELINES

PART 1 - GENERAL

1.01 DESCRIPTION. This section describes the requirements and procedures for pressure and leakage testing of all pressure mains.

1.02 RELATED WORK SPECIFIED ELSEWHERE.

Standard Specifications 15000, 15056, 15064, 15099 and 15150

1.03 REQUIREMENTS PRIOR TO TESTING.

A. All piping, valves, fire hydrants, services, and related appurtenances shall be installed prior to testing.

B. The pipe trench shall have trench zone backfill placed and compacted to finish grade in rural areas.

C. For pipe in roads, the pipe trench shall have trench zone backfill placed and compacted per VCMWD Standard Drawing

C. All concrete anchor blocks shall be allowed to cure a sufficient time to develop a minimum strength of 2,000 psi before testing.

D. Pressure tests on exposed and aboveground piping shall be conducted only after the entire piping system has been installed and attached to pipe supports, hangers or anchors as shown on the Approved Plans.

E. Steel pipelines shall not be tested before the mortar lining and coating on all pipe lengths within the line have been in place for a minimum of fourteen (14) days. Cement-mortar lined pipe shall not be filled with water until a minimum of eight hours has elapsed after the last joint has been mortared.

1.04 HYDROSTATIC TESTING OF PIPELINES.

Hydrostatic testing shall be performed on all pipelines. In the event repairs are necessary, as indicated by the hydrostatic test, repairs shall be made and pipe shall be retested until it passes before disinfection process can commence. The final one-hour hydrostatic test shall be performed using a digital pressure gauge provided by the Contractor. The digital gauge shall be calibrated and capable of accurately measuring the required test pressure. Documentation verifying gauge calibration shall be submitted to the District Engineer prior to commencement of testing. Calibration shall be dated no more than six months prior to the scheduled hydrostatic test.

1.05 CONNECTION TO EXISTING MAINS.

Hydrostatic testing shall be performed prior to connections to existing mains. District authorization for connection to the existing system shall be given only on the basis of acceptable hydrostatic, disinfection and bacteriological test results.

PART 2 - MATERIALS

2.01 WATER.

A. Potable water shall be used for hydrostatic testing of pipelines.

B. Potable water shall be supplied by a District source. Make-up water for testing shall also be potable water.

C. Well water shall not be used for hydrostatic testing or any other purposes in new or existing pipelines.

2.02 CONNECTIONS.

A. Testing water shall be supplied through a metered connection equipped with a backflow prevention device at the point of connection to the potable water source used.

B. The Contractor shall provide any temporary piping needed to deliver potable water to the piping that is to be tested. Temporary piping shall be in accordance with Section 15000.

PART 3 - EXECUTION

3.01 GENERAL.

A. The Contractor shall provide the District with a minimum of 48 hours' notice prior to the requested date and time for hydrostatic tests.

B. The Contractor shall furnish all labor, materials, tools, and equipment for testing.

C. Temporary blocking during the tests will be permitted only at temporary plugs, caps or where otherwise directed by the District.

D. All valves and appurtenances shall be operated during the test period. The test shall be conducted with valves in the open position.

E. At the onset of testing, all valves, air vacuum assemblies, blowoffs, and services shall be monitored for possible leakage and repairs made, if necessary, before the test proceeds. The appurtenances shall be monitored through the duration of the testing.

F. For pipe with porous lining, such as cement mortar, the pipe shall be filled with water and placed under a slight pressure for a minimum of forty-eight (48) hours prior to the actual hydrostatic test.

G. The final one hour test of hydrostatic testing shall be completed using a Contractor provided digital gauge.

3.02 FIELD TEST PROCEDURE.

A. Before applying the specified test pressure, care shall be taken to release all air within the pipe and appurtenances to be tested. Air shall be released through services, fire hydrants, air release valves, or other approved locations.

B. A five (5) hour hydrostatic pressure test shall be performed after the pipe and all appurtenances have been installed and after any trench backfill compaction with heavy-duty compaction equipment has been completed. The hydrostatic test pressure shall be 135% above the design pressure of the pipe at the lowest point in the section being tested, and/or the test pressure shall be 110% of the design pressure of the pipe at the highest point in the section being tested, or as directed by the District Engineer, and shall be at least equal to the design class of the pipe at the highest point in the line. The test pressure shall be applied and continuously maintained by pumping for a period of four (4) hours. During the pumping phase of the test, the test pressure shall be maintained at not less than 95% of the specified test pressure at all times. At the end of the fourth (4th) hour, the pressure shall meet the requirements stated above. Pumping shall then be discontinued for one hour and the drop in pressure shall be recorded. Any recordable pressure loss will constitute a failed test. If the line is unable to pass the hydrostatic test after reasonable number of attempts, the contractor will then need to find the source of the pressure loss and report their findings to the District Engineer.

END OF SECTION 15044

Addendum No. 2

V.C.M.W.D. GENERAL NOTES

UNLESS OTHERWISE INDICATED HEREIN, ALL WORK SHALL BE DONE IN ACCORDANCE WITH BELOW; PRECEDENCE SHALL FOLLOW ORDER LISTED:

A. THESE PROJECT PLANS AND SPECIFICATION
B. VCMWD STANDARD WATER AND SEWER DRAWINGS, LATEST APPROVED EDITION
C. VCMWD SEWER FACILITY DESIGN MANUAL, FEBRUARY 2000 AND STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF PIPELINES AND APPURTENANCES, LATEST EDITION.
D. STANDARD SPECIFICATION FOR PUBLIC WORKS, "GREENBOOK" LATEST EDITION

1. A PRE-JOB CONFERENCE SHALL BE HELD BEFORE THE START OF CONSTRUCTION. CONTRACTOR ATTENDANCE IS MANDATORY.
2. CONTRACTOR SHALL NOTIFY THE VCMWD ENGINEERING DEPARTMENT IN WRITING ONE WEEK PRIOR TO THE START OF CONSTRUCTION AND VERBALLY 24 HOURS IN ADVANCE OF BEGINNING WORK TO ARRANGE FOR INSPECTION OF THE PROJECT.
3. CONTRACTOR MUST CALL "DIG ALERT" OF SOUTHERN CALIFORNIA TO HAVE UNDERGROUND SERVICE UTILITIES LOCATED PRIOR TO CONSTRUCTION
4. WORK DONE WITHOUT DISTRICT INSPECTION SHALL BE SUBJECT TO REMOVAL.
5. THE TELEPHONE NUMBER OF THE VALLEY CENTER MUNICIPAL WATER DISTRICT IS (760) 735-4500.
6. APPROVAL OF PLANS BY THE VALLEY CENTER MUNICIPAL WATER DISTRICT DOES NOT CONSTITUTE RESPONSIBILITY FOR ACCURACY OF INFORMATION NOR LOCATIONS OF OTHER EXISTING UTILITIES.
7. CONTRACTOR IS REQUIRED TO SUBMIT ALL MATERIALS FOR APPROVAL PRIOR TO INSTALLATION, ANY MATERIALS INSTALLED WITHOUT APPROVAL SHALL BE SUBJECT TO REMOVE.

~~8. CONTRACTOR IS REQUIRED TO EMPLOY CERTIFIED THIRD PARTY TESTING FOR COMPACTION AND PROVIDE REPORTS ON A TIMELY BASIS.~~

1 8. THE DISTRICT WILL EMPLOY GEOTECHNICAL SERVICES FOR THE PROJECT.

9. CONTRACTOR SHALL POTHOLE ALL FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT TO VERIFY DEPTHS, GRADES, SIZES, LOCATIONS, ETC., MINIMUM 10 DAYS PRIOR TO THE START OF TRENCHING OPERATIONS. ANY DISCREPANCIES FOUND IN THE FIELD WITH THE INFORMATION PROVIDED ON THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE DISTRICT ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
10. ANY CHANGES TO THE DESIGN OR THESE DRAWINGS SHALL BE APPROVED BY THE DISTRICT ENGINEER, IN WRITING, PRIOR TO PROCEEDING WITH CONSTRUCTION.
11. ALL MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION, UNLESS DIRECTED OTHERWISE
12. ANY "BREAK-INS" OR MODIFICATIONS TO EXISTING INSTALLATIONS SHALL BE MADE IN THE PRESENCE OF THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
13. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING VCMWD ABOVE AND BELOW GROUND FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR CONSTRUCTION OF THE WORK, INCLUDING A PERMIT FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY EXCAVATION WITHIN EXISTING COUNTY RIGHTS-OF-WAY.
15. CONTRACTOR IS TO OBSERVE ALL SAFETY AND TRAFFIC CONTROL REGULATIONS AS REQUIRED BY CAL/OSHA, COUNTY OF SAN DIEGO AND THE AMERICAN PUBLIC WORKS ASSOCIATION.
16. PRIOR TO INSTALLING ANY DISTRICT PIPELINE IN A FILL AREA, A SOILS REPORT SHALL BE SUBMITTED TO THE DISTRICT ENGINEER CERTIFYING THAT ALL EARTH FILLS WERE COMPACTED TO A MINIMUM 90% RELATIVE DENSITY TOP TO BOTTOM.
17. THE FINAL LOCATION AND ELEVATION OF SEWER AND WATER LATERALS SHALL BE SHOWN ON ORIGINAL PLANS PRIOR TO ACCEPTANCE OF WORK.
18. CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILTS ONSITE.
19. CONTRACTOR SHALL POSSESS CURRENT HARD COPIES OF PROJECT PLANS AND ALL REFERENCED SPECIFICATIONS ONSITE.
20. THE CONTRACTOR SHALL FOLLOW INSURANCE, BONDING, AND WARRANTY REQUIREMENTS AS SPECIFIED IN THE DISTRICT FACILITIES AGREEMENT.
21. EXISTING VEGETATION IN CONFLICT WITH APPURTENANCE INSTALLATION IS THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE WHETHER SHOWN ON THE PLANS OR NOT. PROPERTY OWNER MUST BE NOTIFIED PRIOR TO REMOVAL.

SAFETY REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE FOR THE PROTECTION OF ALL PERSONS AND PROPERTY AS HEREIN SPECIFIED IN ACCORDANCE WITH CAL-OSHA & OSHA, TO WHICH THE CONTRACTOR IS REQUIRED BY LAW TO CONFORM. IN THE EVENT THE CONTRACTOR FAILS TO OBSERVE ANY OF THE SAFETY PROVISIONS OF THESE STANDARDS, DIRECTOR OF OPERATIONS/FACILITIES, THE DISTRICT ENGINEER, DISTRICT SAFETY OFICER OR DISTRICT AUTHORIZED REPRESENTATIVE SHALL ORDER THE WORK STOPPED IN THE AFFECTED AREAS FOR NONCOMPLIANCE OF SAID SAFETY ORDERS UNTIL CORRECTED. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY AND FIRST AID PROCEDURES OF THEIR EMPLOYEES ON THE JOB SITE. CONTRACTOR MUST NOTIFY THE DISTRICT PROJECT MANAGER OR PROJECT INSPECTOR IF AN EMPLOYEE IS INJURED ON THE JOB SITE. NOTIFICATION IS NOT REQUIRED FOR ERGONOMIC INJURIES.

THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT THE WORK AND PREVENT ACCIDENTS DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT NIGHT LIGHTS, BARRICADES, GUARDS, TEMPORARY SIDEWALKS, TEMPORARY BRIDGES, DANGER SIGNALS, WATCHMEN, AND NECESSARY APPLIANCES AND SAFEGUARDS TO PROPERLY SAFEGUARD LIFE AND PROPERTY. HE SHALL ALSO PROTECT ALL EXCAVATIONS, EQUIPMENT, AND MATERIALS WITH BARRICADES AND DANGER SIGNALS SO THAT THE PUBLIC WILL NOT BE ENDANGERED.

TRAFFIC CONTROL

THE CONTRACTOR MUST OBTAIN, PAY ALL FEES ASSOCIATED WITH, AND COMPLY WITH ALL TRAFFIC CONTROL PERMITS AND WITH DISTRICT REQUIREMENTS AS FOR THE PROPOSED WORK. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR THE APPROVAL OF THE DISTRICT. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH PROVIDING TRAFFIC CONTROL MEASURES.

CONSTRUCTION BMP'S

THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE REGIONAL WATER CONTROL BOARD (RWQCB) FOR CONSTRUCTION RUNOFF, AND SHALL BEAR ALL COSTS ASSOCIATED WITH THE CONSTRUCTION AND MAINTENANCE OF BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT STORMWATER RUNOFF FROM THE SITE COMPLIES WITH RWQCB REQUIREMENTS

WATER NOTES

1. CONNECTIONS TO EXISTING DISTRICT FACILITIES WILL BE MADE IN ACCORDANCE WITH SPECIFICATION 15000, WHICH DETAIL THE NOTICE PERIODS, REQUIRED CONDITIONS, AND RESPONSIBILITIES OF THE CONTRACTOR.
2. UNLESS SHOWN DEEPER, ALL PIPELINES 14" AND SMALLER SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" FOR PAVED ROADWAYS OR 42" FOR UNPAVED ROADWAYS AND EASEMENTS. PIPELINES 16" AND LARGER SHALL BE INSTALLED WITH A MINIMUM COVER OF 48" FOR PAVED ROADWAYS OR 54" FOR UNPAVED ROADWAYS AND EASEMENTS.
3. DISTRICT CANNOT GUARANTEE DRY SHUT DOWNS, CONTRACTOR SHALL ALLOW FOR REASONABLE LEAKBY AND BE PREPARED FOR DEWATERING. CONTRACTOR SHALL PROVIDE A WRITTEN SHUTDOWN PROCEDURE WITH THE SHUTDOWN REQUEST.
4. ALL MAINLINE AND HYDRANT VALVES SHALL BE FLANGED.
5. CONTRACTOR MAY BE REQUIRED TO INSTALL 2" SERVICE SADDLE WITH 2" CORPORATION STOP TO TOP OF 8" WATER MAIN TO SERVE AS MANUAL AIR RELEASE DURING PIPELINE TESTING. UPON COMPLETION OF ALL PIPELINE TESTING, CONTRACTOR WILL REMOVE 2" CORP. STOP AND INSTALL 2" THREADED BRASS PLUG INTO SERVICE SADDLE.
6. WATER SERVICE LATERALS SHALL NOT BE INSTALLED WITHIN DRIVEWAY OR SIDEWALK AREAS.
7. CONTRACTOR SHALL, AT NO COST TO THE DISTRICT, EXTEND OR RELOCATE EXISTING WATER MAIN APPURTENANCES, RELOCATE EXISTING WATER SERVICE LATERALS AND METERS; RECONNECT, EXTEND/SHORTEN ALL CUSTOMER'S PRIVATE LINES AFFECTED BY THE ROAD IMPROVEMENTS INCLUDED IN THESE PLANS, WHEN NECESSARY, AT DEVELOPERS COST. THE DEVELOPER WILL BE RESPONSIBLE FOR THE COST TO UPGRADE ALL RELOCATED WATER METERS TO CURRENT BACKFLOW STANDARDS.

~~8. PRESSURE TESTING SHALL BE COMPLETED PER SPECIFICATION 15044, NO MEASURABLE LEAKAGE ALLOWED, THAT IS NOT DUE TO GAUGE TOLERANCE AND AMBIENT TEMPERATURE CHANGES DURING TESTING.~~

2 8. DEFLECTION SHALL BE ACCOMPLISHED WITH APPROPRIATE FITTINGS, SUBMITTED AND APPROVED BY DISTRICT PRIOR. LONGITUDINAL BENDING OF THE PIPE IS NOT ALLOWED.

9. ALL NEW WATERLINES SHALL BE DISINFECTED PER AWWA C651-14. BACTERIA SAMPLING SHALL BE DONE USING METHOD A PROCEDURE.
10. DISINFECTION AND PRESSURE TESTING OF NEW WATERLINES SHALL BE COMPLETED AND ACCEPTED BY DISTRICT PRIOR TO MAKING CONNECTION TO EXISTING SYSTEMS. AN AIR GAP OR TEST PLATE SHALL BE USED, PRESSURIZING/DISINFECTING AGAINST A CLOSED VALVE IS NOT ALLOWED.
11. PIPE DEFLECTION SHALL NOT EXCEED 80% OF MANUFACTURER ALLOWABLE TOLERANCE. ADDITIONAL DEFLECTION SHALL BE ACCOMPLISHED WITH APPROPRIATE FITTINGS, SUBMITTED AND APPROVED BY DISTRICT PRIOR.

1 ~~12. ALL ABOVE GROUND APPURTENANCES (FH, AV, BO, ETC.) AND PRV VALVES AND FITTINGS, WHICH ARE BEING ABANDONED AS A PART OF THIS PROJECT, SHALL BE REMOVED TO MINIMUM 12" BELOW GRADE AND DELIVERED TO THE VCMWD YARD OR AS DIRECTED BY INSPECTOR.~~ NOT USED.

13. MATERIALS SHALL BE ADEQUATELY RATED FOR SPECIFIED TEST PRESSURE AT 135% OF DESIGN PRESSURE.
14. BACKFLOW FOOTPRINT BEHIND METER SHALL BE KEPT CLEAR OF DRY UTILITIES, PRIVATE PLUMBING/IRRIGATION, OR INTRUSIVE LANDSCAPE. CONFLICTS WILL BE REQUIRED TO BE REMOVED PRIOR TO METER SET BY DISTRICT. CONTRACTOR IS RESPONSIBLE TO EXCAVATE FOR THE NEW METER AND BACKFLOW LOCATION TO ALLOW DISTRICT STAFF TO SET THE NEW METER AND BACKFLOW. CONTRACTOR IS RESPONSIBLE TO SET METER BOX LEVEL, AND BACKFILL AND COMPACT AROUND BOX AND BACKFLOW.
15. ALL ABOVE GROUND APPURTENANCES (FH, AV, BO, BOLLARDS, ETC.) AND PRV VALVES AND FITTINGS, WHICH ARE BEING ABANDONED AS A PART OF THIS PROJECT, SHALL BE REMOVED TO MINIMUM 12" BELOW GRADE, PLUGGED WITH CONCRETE, LOCATION BACKFILLED AND COMPACTED. ALL MATERIAL SHALL BE AND DELIVERED TO THE DISTRICT YARD OR AS DIRECTED BY INSPECTOR. ABANDONED PIPE REQUIRE ENDS ONLY TO BE FILLED WITH CONCRETE PRIOR TO BACKFILL.
16. DISTRICT HAS DEVELOPED A PHASING PLAN FOR THE INTENSION TO CORRECTLY PHASE TESTING, TIE INS AND METER SERVICE RELOCATION FOR THIS PROJECT. THE CONTRACTOR IS ABLE TO SUBMIT REQUEST FOR ALTERNATE PHASING IF IT MEETS ALL TESTING, INSTALLATION, SHUTDOWN, CONNECTION AND SERVICE TRANSFER REQUIREMENTS OF THE PROJECT SPECIFICATIONS

EASEMENT NOTES

A UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1990-227302, REC. 4/26/1990.

B UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1965-106381, REC. 6/15/1965.

C UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1991-0316832, REC. 6/28/1991.

D UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1991-0271069, REC. 6/6/1991.

E UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1976-367308, REC. 11/3/1976.

F UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1976-367307, REC. 11/3/1976.

CONSTRUCTION NOTES

A ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

B INSTALL NEW SERVICE(S) $\boxed{X}$ PER WATER SERVICE TABLE ON G-1

C EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.

D INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12

E 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14

F 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9

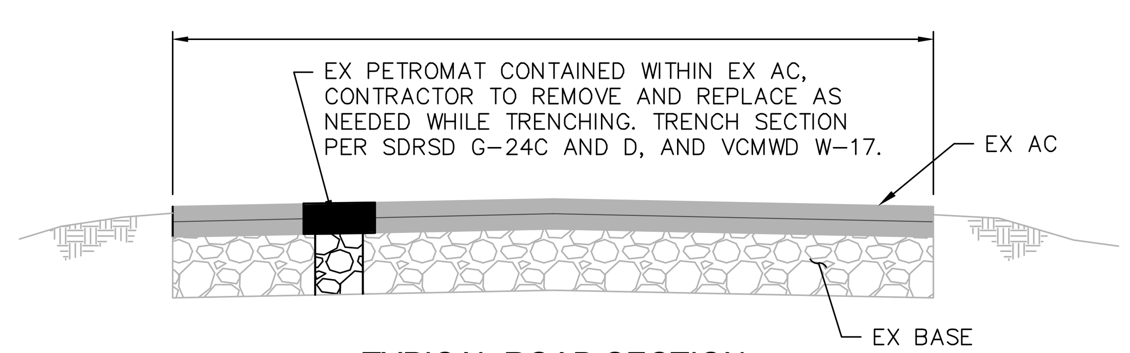
G INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25

H INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25

I POLE MOUNTED OBJECT, PROTECT IN PLACE

J ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/



TYPICAL ROAD SECTION

WATER LATERAL TABLE

ID	STATION	APN	LOT	METER SERIAL	METER SIZE	LATERAL SIZE	VCMWD DETAIL
1	11+30.00	172-120-11	1260	63799417	3/4	4	W-6A
2		172-120-13	2153	63799414	3/4		
3		172-120-18	7401	63799418	3/4		
4		172-120-04	3108	62313519	1		
5		172-120-12	8471	63799416	3/4		
6	18+13.00	172-120-15	2903	63799442	3/4	2	W-6
7		172-120-16	3278	65910501	3/4		
8		172-120-09	1959	78494989	1		
9	20+71.00	172-120-20	8001	81813858	1	1	W-3
10	23+42.00	172-040-67	1464	84435010	2	2	W-4
11	23+93.50	172-120-19	1292	89402839	3/4	1	W-3
12	29+84.00	172-040-80	2807	100480551	1.5	2	W-6
				F93015274	1		
13			12037	93015277	1		
14	31+04.00	172-040-49	4298	63799438	3/4	1	W-3
15	36+20.00	172-040-44	2947	65910513	3/4	1	W-3
16	40+50.00	185-020-01	1299	65910489	3/4	1	W-3
17	40+57.56	172-040-75	547	90205064	3/4	2	W-6
18		185-011-22	3799	90205035	3/4		
19	42+57.00	185-020-17	3299	65910492	3/4	1	W-3
20	42+95.00	185-020-25	906	65910487	3/4	1	W-3
21	45+04.00	185-020-24	907	65910490	3/4	1	W-3
22	45+13.00	185-020-04	444	65910488	3/4	1	W-3
23	46+47.00	185-011-12	4158	63799415	3/4	1	W-3
24	48+00.00	185-020-05	2550	65910491	3/4	1	W-3
25	48+41.00	185-011-13	1877	61085128	2	2	W-4
26	49+68.00	185-020-21	2282	62371344	3/4	1	W-3
27	50+15.00	185-020-22	7920	65910519	3/4	1	W-3
28	51+28.00	185-020-20	1779	65910520	3/4	1	W-3
29	51+45.00	185-011-10	9642	65910515	3/4	3	W-6
		185-011-10		F65664254	1		
30		185-011-09	10222	F65404529	1		
				66286344	3/4		
31		185-011-15	2160	63799437	3/4		
32	52+29.00	185-020-27	2567	65910517	3/4	1	W-3
33	52+72.00	185-020-26	7925	65910521	3/4	1	W-3
34	53+67.00	185-011-16	4023	63799434	3/4	1	W-3
35	55+11.00	185-020-08	445	63799422	3/4	1	W-3
36	55+16.00	185-011-17	650	62313518	1	1	W-3
37	55+75.00	185-020-15	2736	61085070	3/4	1	W-3
38	56+96.00	185-020-19	3149	62313520	1	1	W-3
39	57+91.00	185-000-18	5120	63799421	3/4	1	W-3
40	58+05.00	185-011-21	1703	89382840	1	1	W-3
41	59+07.00	185-020-13	2487	63799419	3/4	1	W-3
42	59+12.00	185-020-11	894	63799420	3/4	1	W-3
43	63+58.00	185-240-07	6029	40364406	3/4	1	W-3
44	64+96.00	185-240-08	2900	81679650	3/4	1	W-3
45	68+26.00	185-430-19	7960	I86227367	3/4	1	W-3
46	71+50.00	185-240-10	5821	63799435	3/4	1	W-3
47	74+78.00	185-240-11	3446	F68006994	1	1	W-3A
		185-240-11		1608128	3/4		
48	85+00.00	185-010-33	6413	88709954	1.5	1.5	W-4
49	85+78.00	185-010-88	560	65910512	3/4	1	W-3
50	97+79.00	185-250-21	5495	65664250	1	1	W-3
51	102+36.00	185-250-41	9051	65910514	3/4	1	W-3A
		185-250-41		F65664255	1		
52	106+36.00	185-250-23	6445	81331699	1.5	1.5	W-4
53	113+00.00	185-250-24	4887	63799436	3/4	1	W-3
54	117+17.00	185-250-08	5870	PULLED	1.5	1.5	W-4
55	119+32.00	185-250-42	145	63799432	3/4	2	W-6
56		185-250-39	6099	40364455	3/4		
57		185-250-42	11273	86836344	3/4		

REGISTERED PROFESSIONAL ENGINEER
WALLY GRABBE
C 46631

01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	UPDATE TO GENERAL NOTE		02/23/2026
H118, H129, H204, H207, H240, H448	2	UPDATE TO WATER NOTE		03/10/2026

VALLEY CENTER MUNICIPAL WATER DISTRICT

Wally Grabbe 01/15/2026
DISTRICT ENGINEER DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

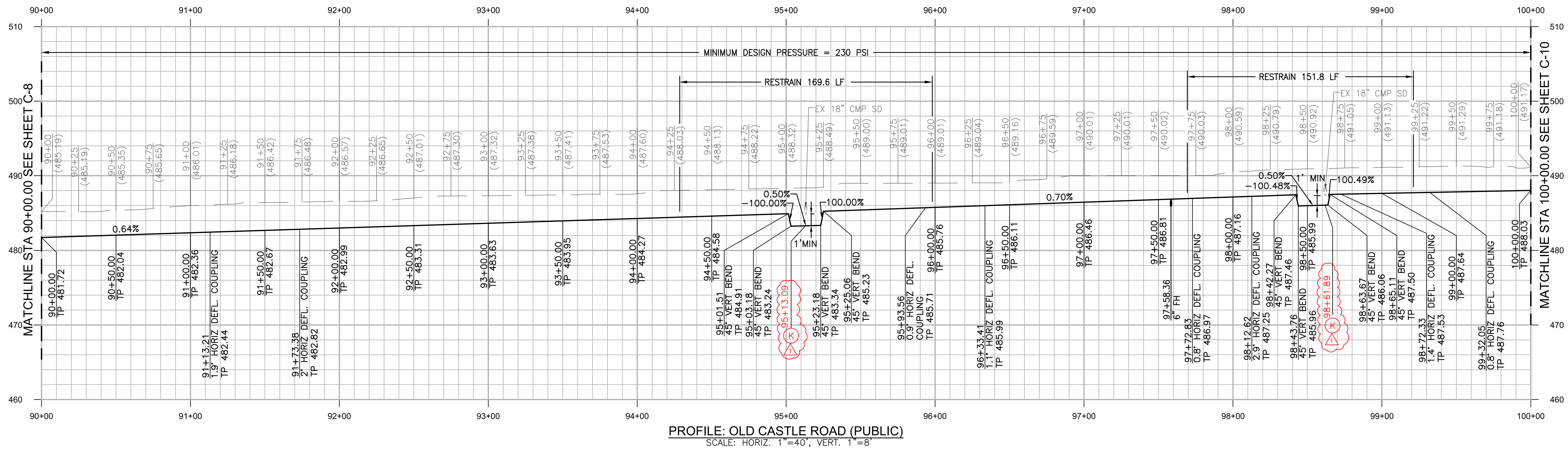
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
NOTES, DETAILS, AND
WATER LATERAL TABLE

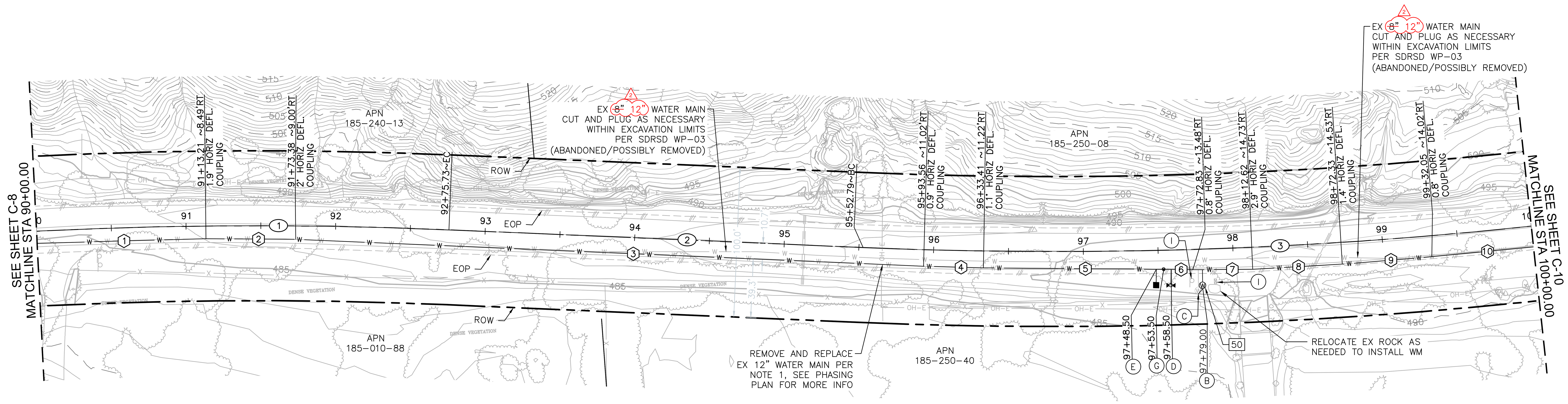
G-1

2 of 34

Addendum No. 2



PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

SCALE: 1" =40'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=5°15'58"	3000.00'	275.73'
2	S83°41'23"E		277.06'
3	Δ=8°32'29"	3000.00'	447.23'

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	S87°40'37"E	112.89'	12" PVC C900 CL305
2	S85°44'20"E	60.00'	12" PVC C900 CL305
3	S83°41'23"E	420.00'	12" PVC C900 CL305
4	S84°33'08"E	40.00'	12" PVC C900 CL305
5	S85°38'19"E	125.46'	12" PVC C900 CL305
6	S85°38'19"E	14.54'	12" PVC C900 CL305
7	S86°28'23"E	40.00'	12" PVC C900 CL305
8	S89°24'49"E	60.00'	12" PVC C900 CL305
9	N89°08'58"E	60.00'	12" PVC C900 CL305
10	N88°20'01"E	68.29'	12" PVC C900 CL305

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 90+00 TO STATION 100+00.

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	ADDED NOTE "K"	[signature]	02/23/2026
H118, H129, H204, H207, H240, H448	2	EX 8" CHANGE TO EX 12"	[signature]	03/10/2026

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER: [signature] DATE: 01/15/2026

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
90+00.00 TO 100+00.00

C-9

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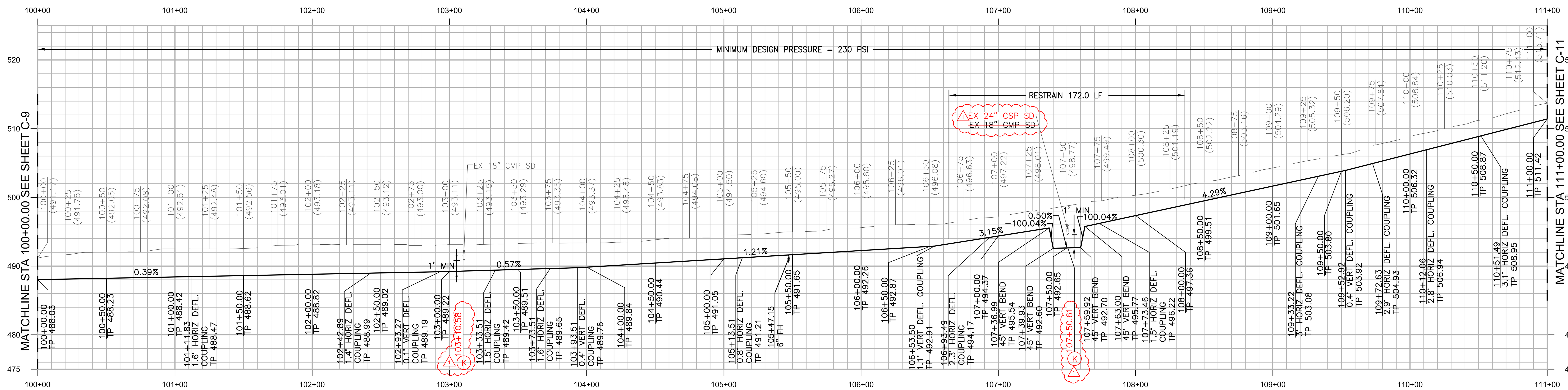
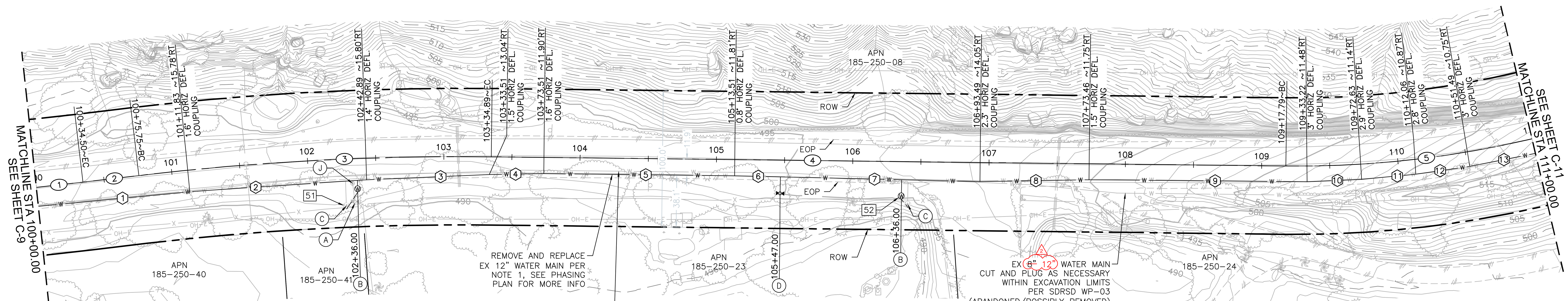
Addendum No. 2



PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

EX 8" 12" WATER MAIN
CUT AND PLUG AS NECESSARY
WITHIN EXCAVATION LIMITS
PER SDRSD WP-03
(ABANDONED/POSSIBLY REMOVED)

SCALE: 1" =40'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=0°39'31"	3000.00'	34.48'
2	N87°06'37"E		41.25'
3	Δ=7°25'25"	2000.00'	259.13'
4	S85°27'58"E		582.90'
5	Δ=13°55'13"	750.00'	182.21'

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 100+00 TO STATION 111+00.

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N88°20'01"E	111.71'	12" PVC C900 CL305
2	S89°58'19"E	130.00'	12" PVC C900 CL305
3	S88°33'35"E	90.00'	12" PVC C900 CL305
4	S87°06'08"E	40.00'	12" PVC C900 CL305
5	S85°30'15"E	140.00'	12" PVC C900 CL305
6	S84°45'13"E	33.65'	12" PVC C900 CL305
7	S84°45'13"E	146.35'	12" PVC C900 CL305
8	S87°06'52"E	80.00'	12" PVC C900 CL305
9	S85°37'06"E	160.00'	12" PVC C900 CL305
10	S88°38'45"E	40.00'	12" PVC C900 CL305
11	N88°27'29"E	40.00'	12" PVC C900 CL305
12	N85°39'04"E	40.00'	12" PVC C900 CL305
13	N82°35'52"E	49.20'	12" PVC C900 CL305

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA. ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448	2	EX 8" CHANGE TO EX 12"		03/10/2026

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

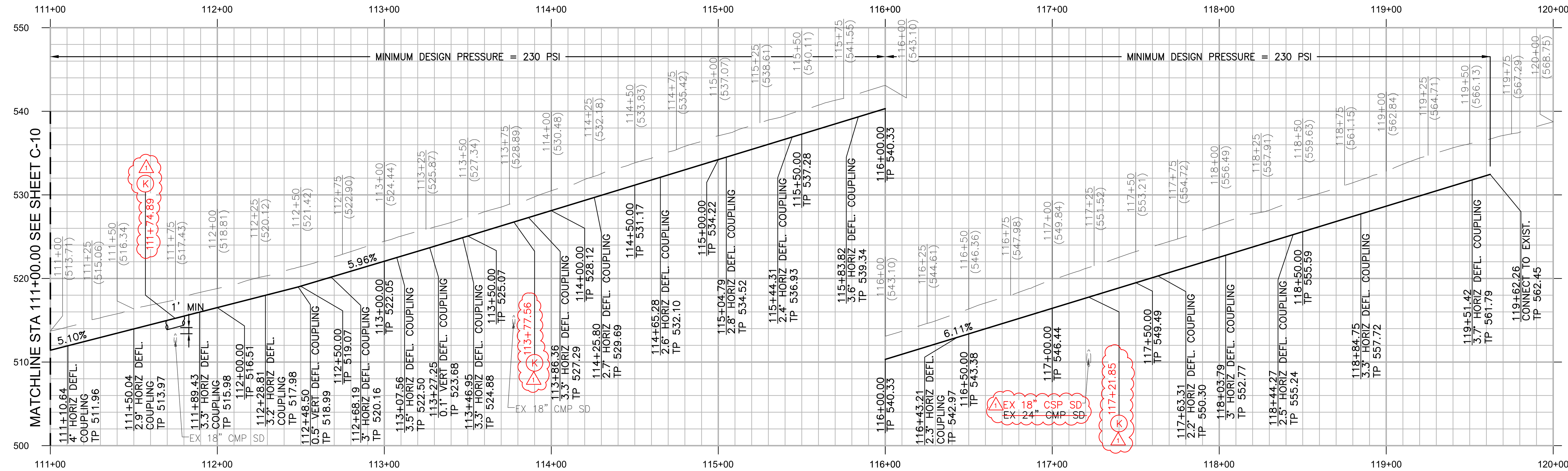
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
100+00.00 TO 110+00.00

C-10

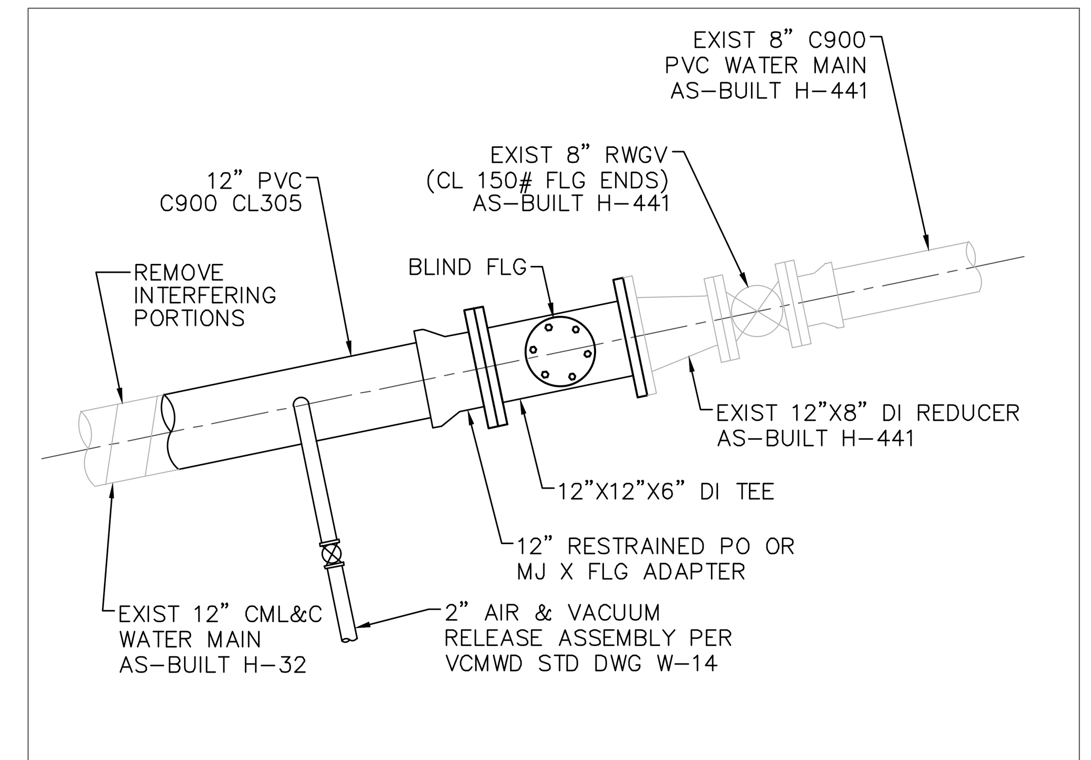
13 of 34

Addendum No. 2



PROFILE: OLD CASTLE ROAD (PUBLIC)

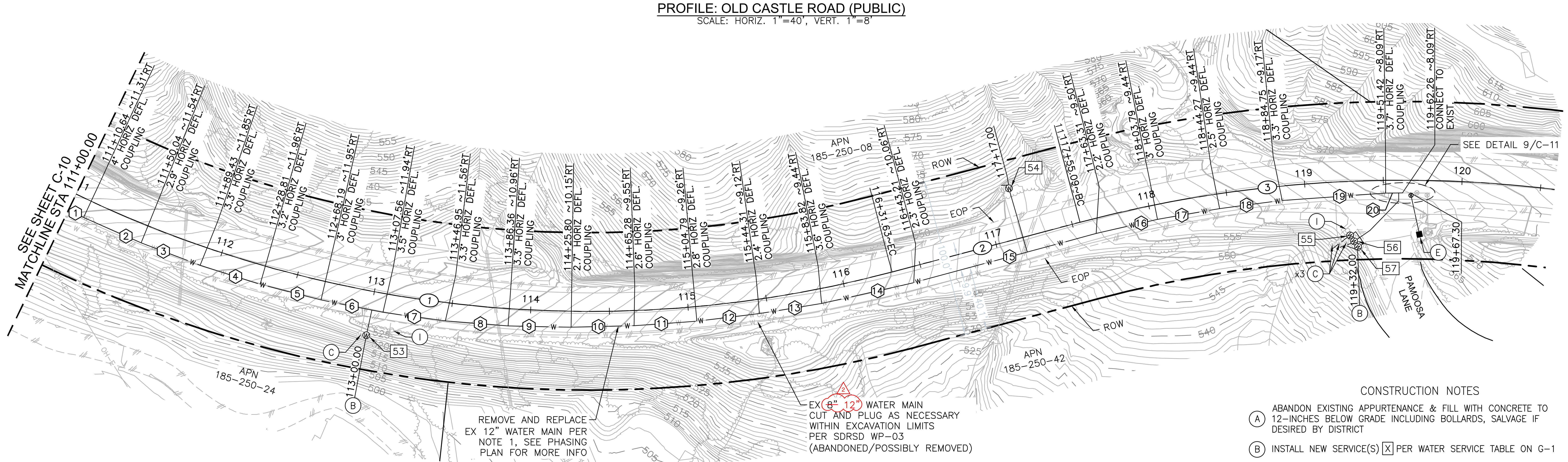
SCALE: HORIZ. 1"=40', VERT. 1"=8'



NOTE:

1. ALL FITTINGS TO BE RESTRAINED
2. SEE PHASING PLAN FOR INSTALLATION AND TESTING PRIOR TO TIE IN.

CONNECTION DETAIL "9"
OLD CASTLE ROAD @ STA 119+62.26



PLAN: OLD CASTLE ROAD (PUBLIC)

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=40°36'47"	750.00'	531.63'
2	N40°00'02"E		123.46'
3	Δ=21°46'10"	800.00'	303.96'

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N82°35'52"E	10.80'	12" PVC C900 CL305
2	N78°37'27"E	40.00'	12" PVC C900 CL305
3	N75°43'27"E	40.00'	12" PVC C900 CL305
4	N72°26'14"E	40.00'	12" PVC C900 CL305
5	N69°15'20"E	40.00'	12" PVC C900 CL305
6	N66°15'04"E	40.00'	12" PVC C900 CL305
7	N62°42'38"E	40.00'	12" PVC C900 CL305
8	N59°22'20"E	40.00'	12" PVC C900 CL305
9	N56°04'48"E	40.00'	12" PVC C900 CL305
10	N53°21'06"E	40.00'	12" PVC C900 CL305
11	N50°47'12"E	40.00'	12" PVC C900 CL305
12	N47°59'04"E	40.00'	12" PVC C900 CL305
13	N45°37'14"E	40.00'	12" PVC C900 CL305
14	N42°03'42"E	60.00'	12" PVC C900 CL305
15	N39°45'13"E	120.00'	12" PVC C900 CL305
16	N41°56'39"E	40.00'	12" PVC C900 CL305
17	N44°56'56"E	40.00'	12" PVC C900 CL305
18	N47°26'26"E	40.00'	12" PVC C900 CL305
19	N50°44'32"E	65.94'	12" PVC C900 CL305
20	N54°27'02"E	10.73'	12" PVC C900 CL305

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
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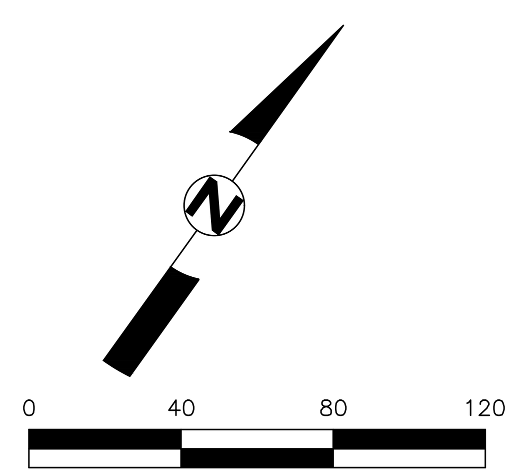
*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 111+00 TO STATION 119+62.26.

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/



SCALE: 1" =40'

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA, ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448	2	EX 8" CHANGE TO EX 12"		03/10/2026

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
110+00.00 TO 120+00.00

C-11

C:\Users\JCrespo\AppData\Local\Temp\AcPublish_23956\51420-C07-C11.dwg Mar 09, 2026 - 5:08pm

Appendix F

Community Grants Flow Downs for Old Castle Phase 2

EPA COMMUNITY GRANTS PROGRAM
FUNDING REQUIREMENTS

This Contract will be funded, in whole or part, with assistance from the U.S. Environmental Protection Agency ("EPA") Community Grants Program.

The Contractor shall comply with all applicable requirements of the District's EPA Grant Agreement, as set forth below.

2 CFR Part 200 – Contractor will comply with 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which is expressly incorporated herein by reference.

2 CFR PART 200 REQUIRED CONTRACT PROVISIONS

<u>Appendix II to Part 200 (A) - Remedies.</u>

The Contract Documents include administrative, contractual, and legal remedies for Contractor violations or breaches of the Contract terms, including applicable sanctions and penalties.

<u>Appendix II to Part 200 (B) - Termination for Cause/Convenience.</u>

The Contract Documents include termination for cause provisions and the termination for convenience provisions.

<u>Appendix II to Part 200 (C) – Equal Employment Opportunity.</u>

Since the Contract meets the definition of a "federal assisted construction contract" in 41 CFR § 60-1.3, Contractor agrees to comply with the Equal Employment Opportunity provisions as set forth in Section 7, Nondiscrimination, of Section 00800 of the Contract Documents.

<u>Appendix II to Part 200 (D), (E) – Davis-Bacon Act; Contract Work Hours and Safety Standards Act:</u>

Contractor shall comply with 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (labor standards originally enacted as the Davis- Bacon Act, the Contract Work Hours and Safety Standards Act, the Copeland Anti-Kickback Act), which are included in the Contract Documents.

<u>Appendix II to Part 200 (F) – Rights to Inventions Made Under a Contract or Agreement:</u>

This provision is not applicable to the Contract..

<u>Appendix II to Part 200 (G) – Clean Air Act and Federal Water Pollution Control Act:</u>

A. Contractor shall comply with the following:

1. Pursuant to the Clean Air Act, (1) Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as

amended, 42 U.S.C. § 7401 et seq., (2) Contractor agrees to report each violation to District and understands and agrees that District will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection District Regional Office, and (3) Contractor agrees to include these requirements in each subcontract exceeding $150,000.

2. Pursuant to the Federal Water Pollution Control Act, (1) Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., (2) Contractor agrees to report each violation to District and understands and agrees that District will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection Agency Regional Office, and (3) Contractor agrees to include these requirements in each subcontract exceeding $150,000.

Appendix II to Part 200 (H) – Debarment and Suspension:

A. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such Contractor is required to verify that none of Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

B. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

C. This certification is a material representation of fact relied upon by District. If it is later determined that Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to District, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

D. Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C throughout the Contract. Contractor further agrees to include a provision requiring such compliance in its subcontracts.

E. Contractor warrants that it is not debarred, suspended, or otherwise excluded from or ineligible for participation in any federal programs. Contractor also agrees to verify that all subcontractors performing work under this Contract are not debarred, disqualified, or otherwise prohibited from participation in accordance with the requirements above. Contractor further agrees to notify District in writing immediately if Contractor or its subcontractors are not in compliance during the term of this Contract.

Appendix II to Part 200 (I) – Byrd Anti-Lobbying Act:

The Byrd Anti-Lobbying Act provisions are addressed in Section 2, Anti-Lobbying, of Section 00800 of the Contract Documents.

Appendix II to Part 200 (J) – §200.323 Procurement of Recovered Materials.

A. Contractor shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement.

B. In the performance of this Contract, Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired: competitively within a timeframe providing for compliance with the contract performance schedule; meeting contract performance requirements; or at a reasonable price.

C. Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

D. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

Appendix II to Part 200 (K) – §200.216 Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment:

The prohibition on certain telecommunications and video surveillance services or equipment is addressed in Section 13(a), Prohibited Use of Funds, of Section 00800 of the Contract Documents.

See Public Law 115-232, section 889 for additional information.

Appendix II to Part 200 (L) – §200.322 Domestic Preferences for Procurement.

A. Contractor shall, to the greatest extent practicable, purchase, acquire, or use goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subcontracts.

B. For purposes of this section:

1. "Produced in the United States'' means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

2. ''Manufactured products'' means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

2 CFR §200.321 Contracting with Small Businesses, Minority Businesses, Women's Business Enterprises, Veteran-Owned Businesses, and Labor Surplus Area Firms.

The DBE and GFE provisions of the Contract Documents satisfy the requirements of 2 CFR §200.321.

ADDITIONAL GRANT REQUIREMENTS

1. Davis-Bacon and Related Acts (DBRA) Acknowledgement.

By accepting this Contract, the Contractor acknowledges and agrees to the DBRA Requirements for Contractors and Subcontractors Under EPA Grants, as included in the Contract Documents.

Contractor shall include this provision in all subcontracts.

2. Davis-Bacon Wages.

The Davis-Bacon Wage Determination is included in the Appendix A3 to the Contract Documents.

3. Build-America, Buy America (BABA).

A. Contractor shall comply with the domestic preference procurement requirements of 49 U.S.C. 5323(j).

B. Contractor agrees that:

1) All iron and steel used in the project are produced in the United States.

i. Specifically, all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

2) All manufactured products used in the project are produced in the United States.

i. Specifically, the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

ii. The term "manufactured products" is defined at 2 CFR § 184.3.

3) All construction materials are manufactured in the United States.

i. Specifically, all manufacturing processes for the construction material occurred in the United States.

ii. The term “construction materials” is defined at 2 CFR § 184.3.

4) The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

C. Contractor shall include this provision in all subcontracts.

4. <u>American Iron and Steel (AIS).</u>

The AIS requirements are addressed in Appendix A.2 – American Iron and Steel Requirements of the Contract Documents.

5. <u>Disadvantaged Business Enterprises (DBE).</u>

The DBE requirements are addressed in the Contract Documents, including in Appendix A.1.

Appendix G

Statewide National Pollutant Discharge Elimination System (NPDES) Permit For Drinking Water Systems Discharges To Waters Of The United States

Appendix G

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
Program Website: (http://www.waterboards.ca.gov/water_issues/programs/npdes

ORDER WQ 2014-0194-DWQ
GENERAL ORDER NO. CAG140001

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DRINKING WATER SYSTEM DISCHARGES TO WATERS OF THE UNITED STATES

Discharges from drinking water systems to surface waters in California are subject to waste discharge requirements as set forth in this Order, and as authorized by a Notice of Applicability issued by the Deputy Director of Water Quality (Deputy Director). Definitions for the purpose of this Order are included in Attachment A. Key definitions are as follows:

Table 1. Key Definitions for the Purpose of this Order

Drinking Water System[1]	A system with 1000[2] connections or greater that are regulated by the State Water Board Division of Drinking Water or a local county department of health, with the primary purpose of transmitting, treating and distributing safe drinking water. Drinking water systems include state owned/operated facilities such as parks, campgrounds, and rest areas. [1] *This Order applies to community water systems as defined in Attachment A of this Order. This Order does not apply to non-community water systems or non-transient water systems as defined in Attachment A of this Order.* [2] *Systems with fewer than 1000 connections that discharge to waters of the United States have the option to enroll in this Order. Non-enrollment does not exempt dischargers from Clean Water Act requirements.*
Drinking Water System Discharge	Short-term or seasonal discharges from a drinking water system of water that has been dedicated for drinking water purposes.
Water Purveyor	Any entity that discharges from a drinking water system, including water purveyors, wholesalers, distributors, districts, municipalities, private companies, and other entities that own or operate a community drinking water system.
Discharger	A water purveyor that is authorized to discharge under this Order through an approved Notice of Applicability issued by the Deputy Director of Water Quality.
Waters of the United States	Generally refers to surface waters, as defined for the purposes of the federal Clean Water Act. For the purpose of this Order, the terms "surface water," and "receiving water" are interchangeably used to mean "waters of the United States," unless noted otherwise.

Table 2. Administrative Information

This Order was adopted by the State Water Board on November 18, 2014:
This Order shall become effective on February 26, 2015 (100 days after the adoption date of this Order)
This Order shall expire on February 25, 2020

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on November 18, 2014.

AYE: Chair Felicia Marcus
Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore
Board Member Dorene D'Adamo

NAY: None

ABSENT: None

ABSTAIN: None

Jeanine Townsend

Jeanine Townsend
Clerk to the Board

Table of Contents

List of Tables

List of Attachments

I. Scope of Statewide General Order and Required Regulatory Coverage

This Order is a National Pollutant Discharge Elimination System (NPDES) general permit that authorizes discharges from drinking water systems, as defined on Page 1 of this Order. This Order provides regulatory coverage for short-term or seasonal planned and emergency (unplanned) discharges resulting from a water purveyor's essential operations and maintenance activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and the State Water Board's Division of Drinking Water permitting requirements for providing reliable delivery of safe drinking water.

Planned discharges include regularly scheduled, automated, or non-regularly scheduled activities that must take place to comply with mandated regulations and that the water purveyor knows in advance will result in a discharge to surface water. Emergency discharges include unplanned discharges that occur due to facility leaks, system failures, operational errors, or catastrophic events for which the water purveyor is not aware of the discharge until after the discharge has commenced. Planned and emergency discharges may occur directly, through a constructed storm drain or through another conveyance system, to waters of the United States (U.S.).

The Federal Water Pollution Control Act (also referred to as the Clean Water Act) section 402 requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the U.S., with certain exceptions, be regulated by a NPDES permit. (For the purpose of this Order, the terms "waters of the United States [or U.S.]", "surface waters" and "receiving waters" are used interchangeably unless noted otherwise.) On September 22, 1989, the U.S. Environmental Protection Agency (U.S. EPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue NPDES permits pursuant to title 40 Code of Federal Regulations parts 122 and 123.

Discharges of a pollutant from a drinking water system, regardless of the size of the system, are required to be regulated by an NPDES permit if the discharges flow into a water of the U.S. Title 40 Code of Federal Regulations part 122.28 provides for issuance of general permits to regulate a category of dischargers if they involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general order rather than individual orders. Discharges from drinking water systems that result from mandated activities to protect public health are of substantially similar types of operations, discharging the same type of waste.

This Order requires all water purveyors in California with drinking water system discharges to waters of the U.S. as described in Section I.B of this Order, except those water purveyors that meet the exception criteria identified in section I.A of this Order, to obtain NPDES regulatory coverage through enrollment in this statewide NPDES General Order. The water purveyor shall submit an application package to the State Water Board in accordance with section II.C.1 *Application Package Requirements* any time after the effective date of the permit but no later than **September 1, 2015**.

A. Water Purveyors NOT Required to Enroll in This Order

Water purveyors that meet any of the following criteria, items 1 through 6, are NOT required to submit an application package to obtain coverage through enrollment in this particular statewide NPDES General Order; this Order is, however, available for water purveyors that meet the criteria of items 1 through 3 below and choose to enroll. (This Order does not exempt any water purveyor from federal Clean Water Act requirements to obtain NPDES regulatory coverage for its discharges to waters of the U.S.) By **September 1, 2015**, water purveyors that meet any one of the items 2 through 5 below shall submit to the State Water Board a Notice of Non-Applicability form (see Attachment B-2) that certifies NPDES regulatory coverage from this Order is not required. A water purveyor with multiple community water systems in California need only submit one Notice of Non-Applicability for its systems that meet the same criterion.

1. The drinking water system has fewer than 1000 connections that deliver drinking water to end users. (This does not include water wholesalers as defined in Attachment A that deliver water to other drinking water systems); or

2. The water purveyor discharges solely to a municipal separate storm sewer system(s) (MS4) and has an established local agreement with the MS4 permittee to discharge into its system(s),

   AND

   The corresponding Regional Water Board Executive Officer provides written confirmation to the State Water Board Deputy Director that the local agreement provides sufficient regulation of the subject drinking water system discharges through an existing MS4 NPDES permit; or

3. The water purveyor is an MS4 permittee, or co-permittee, named on a State Water Board or a Regional Water Board issued MS4 permit that also authorizes discharges from drinking water systems, and all drinking water system discharges solely discharge into its own MS4 system; or

4. The water purveyor’s discharge is regulated under an existing individual site-specific NPDES permit issued by the Regional Water Board because: (1) the discharge from the system is outside of the scope of this low threat Order, and/or (2) a Total Maximum Daily Load (TMDL) was adopted and the Regional Water Board determined that TMDL-specific permit requirements for its drinking water system(s) discharges are appropriate because those discharges may contribute to the impairment of the water body; or

5. All discharges from the drinking water system do not discharge to a water of the U.S.; or

6. The discharge is exempt from the legal requirement to obtain an NPDES permit under federal law.

After review, a Notice of Non-Applicability Approval by the State Water Board's Deputy Director of Water Quality (Deputy Director) may be issued. If the Notice of Non-Applicability is not complete or the discharge is deemed ineligible, the Deputy Director will send a response letter to the applicant outlining: (1) the missing information that deems the Notice of Non-Applicability incomplete, or (2) why the described discharge is not eligible and thus the water purveyor must obtain coverage under this Order. The State Water Board will provide the water purveyor **60 days from the date of the response letter** to provide State Water Board staff the items necessary to complete the Notice of Non-Applicability or to submit a complete application package in accordance with section II.C of this Order.

B. Discharges Authorized Under This Order

This Order authorizes drinking water system discharges (as defined on Page 1) resulting from a water purveyor's essential operations and activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and the State Water Board's Division of Drinking Water permitting requirements. Discharges authorized by this Order are composed solely of water that is dedicated by drinking water facilities for the primary purpose of providing safe and reliable drinking water. Additionally, discharges authorized under this Order are determined to not adversely affect or impact beneficial uses of the receiving waters when properly managed through best management practices. Such discharges include, but are not limited to, discharges from supply wells, transmission systems, water treatment facilities, water distribution systems, and storage facilities. Any discharges that are likely to cause or contribute to an exceedance of a water quality objective other than those granted an exception under the State Water Board Resolution 2014-0067, will not be authorized under this Order.

This Order authorizes single discharges at one identified location and multiple simultaneous discharges at multiple locations. Authorized discharges to waters of the U.S. may include, but are not limited to, the following discharges:

1. Planned Discharges Due To:

a. Groundwater supply well flushing or pump-to-waste.
b. Groundwater well development, rehabilitation, and testing.
c. Groundwater monitoring for purpose of supply well development, rehabilitation and testing.
d. Trench dewatering of drinking water during planned repairs.
e. Transmission system installation, cleaning, and testing.
f. Water treatment plant operations (excluding filter backwash that is discharged to a water of the U.S).
g. Distribution system storage tank or reservoir releases.
h. Distribution system dewatering, flushing, and pressure testing.
i. Fire flow / fire hydrant testing.
j. Meter testing

k. Automated water quality analyzers operations.
l. Pressure relief valves.
m. Unscheduled activities that must be undertaken to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code.

2. Emergency (Unplanned) Discharges Due To:

a. Emergency drinking water system failures and repairs including transmission and distribution system failures and repairs.
b. Trench dewatering due to an emergency failure.
c. Operation errors.
d. Catastrophic events.

C. Discharges Not Authorized Under This Order

The State Water Board does not authorize any of the following discharges to waters of the U.S. under this Order:

1. Discharges that are not within the scope of this Order as described in section I and/or are not authorized by a Notice of Applicability issued by the Deputy Director of Water Quality (Deputy Director); or

2. Discharges to a water of the U.S. with a total maximum daily load (TMDL) that prescribes a waste load allocation to a water purveyor, where the Deputy Director determines that the requirements of this Order are not consistent with the assumptions and requirements of the TMDL and thus compliance with this Order is not sufficient for the water purveyor to comply with the imposed TMDL requirements; or

3. Discharges from new drinking water systems (not an expansion of an existing system) into a Clean Water Act section 303(d)-listed impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body, and for which a regional water board has issued an individual permit that addresses the TMDL requirements; or

4. Direct discharges into areas designated by the State Water Board as Areas of Special Biological Significance (ASBS).

II. Permit Coverage and Application Requirements

A. Permit Coverage

This Order provides regulatory coverage to water purveyors with existing and potential authorized discharges as set forth in section I.B to waters of the U.S. from a community drinking water system that does not adversely affect or impact beneficial uses of the receiving water. Permit coverage may include discharges from work conducted by contractors on behalf of the water purveyor.

B. Permit Effective Date

This Order becomes effective **February 26, 2015**, 100 days after the adoption date of this Order. Any time after the effective date but no later than **September 1, 2015**, all water purveyors that do not meet the criteria of section I.A. of this Order shall submit a complete application package in accordance with the following section II.C.

C. Application Package Requirements

To obtain regulatory coverage under this Order, a water purveyor must submit to the State Water Board a complete application package that includes all the following items. A water purveyor with multiple drinking water systems in California need only submit one complete application package (with individual Notice of Intent forms for each of its drinking water systems) and obtain one Notice of Applicability for regulatory coverage of all its systems that discharge to waters of the U.S.

1. **Notice of Intent.** A completed Notice of Intent form for each of its drinking water systems (shown as Attachment B1 of this Order), signed and certified in accordance with section V.B., *Signatory and Certification Requirements*, of Attachment D – Standard Provisions.

2. **Application Package Fee.** A fee payable to the State Water Board in accordance with California Code of Regulations, title 23, or subsequent fee regulations updates. The current fee schedule is available at the following website: (http://www.waterboards.ca.gov/resources/fees).

   Only one fee is required for an application package requesting coverage for multiple drinking water systems.

3. **Site Information.**
   a. A site schematic showing the following items:
      i. The general location of the community drinking water facilities and/or the boundaries of the water purveyor's service area(s); and
      ii. The general location of groundwater supply wells and/or any discharge locations to surface waters; and
      iii. General identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s).
   b. Names of all named receiving water bodies and/or major downstream water bodies.
   c. A description of the multiple uses of the water prior to surface water discharge or beneficial reuse that the discharges will serve (i.e. ground water recharge, irrigation).
   d. Reason(s) that the discharge water cannot be utilized for multiple uses or beneficial reuse. (Refer to section VI. MULTIPLE USES OR BENEFICIAL REUSE, below).

4. **Total Maximum Daily Loads (TMDL) Constituent-specific Application Package Supplement** (applicable for discharges into waters of the U.S. identified in section III. K of the Fact Sheet). A supplement to the application requirements listed above shall include the following items:
   i. **Laboratory Analysis of TMDL-specific constituent(s).** (The laboratory analysis shall be conducted by a laboratory certified by the Environmental Laboratory Accreditation Program (ELAP).) The application package supplement shall include a laboratory analysis sheet(s) indicating the concentration of the applicable TMDL specific constituent(s) in the drinking water system discharge at the point of discharge. The monitoring and analysis shall be conducted in accordance with title 40 Code of Federal Regulations part 136. The water purveyor shall submit the following items for the application supplement to be deemed complete:
      a) A minimum of two samples representative of the drinking water system discharge that contains or has the potential to contain the greatest concentration or level of constituent/parameter associated with the TMDL constituent/parameter. The samples shall be taken at a location after the appropriate treatment or controls are implemented for the constituent associated with the TMDL; and
      b) The estimated minimum and maximum discharge volume per discharge event; and
      c) The estimated average discharge volume from the system per year. The estimated volumes may be based on historical data.
   ii. **TMDL-specific Best Management Practices.** Description of site-specific best management practices that properly treat and/or control corresponding TMDL constituents in the discharge to a concentration or level less than the water purveyor's applicable TMDL-specific permit requirement (s) as set forth in Attachment G, if any.

   The supplemental analytical information will be used to confirm that the discharge does not contribute to the specific impairment of the TMDL-related waterbody(ies) and that the requirements in this Order are sufficient to ensure compliance with the specific TMDLs.

D. State Water Board Notice of Applicability

After the water purveyor's application package is deemed complete, the Deputy Director will issue a Notice of Applicability. Regulatory coverage for the planned and emergency discharges that occur within the areas identified in the application package commences with the date of issuance of a Notice of Applicability to the water purveyor. If the submitted application package is not complete in accordance with previous section II.C., or the discharge is deemed ineligible for coverage under this Order, the Deputy Director will send a response letter to the applicant outlining: (1) the missing information that renders the application package incomplete, or (2) why the described discharge is not eligible for coverage under this Order. The water purveyor will have **60 days from the**

date of the response letter to provide State Water Board staff the items necessary to complete the application package.

E. Permit Coverage Termination

1. **Termination of Existing Regional Water Board Permit Coverage.** Upon the issuance of the NOA in accordance with this Order, the State Water Board expects the applicable Regional Water Board to terminate regulatory coverage under an existing non-MS4 Regional Water Board NPDES permit for discharges within the scope of this Order.

2. **Termination of Statewide Permit Coverage or Revocation of Notice of Non-Applicability.** The Deputy Director may terminate coverage or revoke a Notice of Non-Applicability Approval (NONAA) under this Order for any of the specified causes, and require application for coverage under an individual or other NPDES permit as set forth in title 40 Code of Federal Regulations part 122.28(b)(3). Causes for permit coverage termination or NONAA revocation include, but are not limited to, the following:
    a. Violation of any term or condition of this Order; or
    b. Misrepresentation or failure to disclose all relevant facts in obtaining permit coverage or non-applicability status under this Order, or
    c. Written request from a Discharger to terminate enrollment because discharge has ceased or that the permit is no longer needed.

    Annual permit fees will be assessed by the State Water Board up to the date of written termination notification from the State Water Board to the Discharger, or the date of a termination request letter from the Discharger to the State Water Board, whichever is applicable.

3. **Qualified Biologist Certification Following Project Completion.** Upon completion of the project, the Discharger shall provide certification by a qualified biologist that beneficial uses of the receiving waters have been restored. For drinking water system discharges, completion of the project is when the water purveyor ceases discharges from its drinking water system under this Order, or when the State terminates NPDES permit coverage for the discharge(s).

F. Permit Transfer

A change in ownership of the facilities authorized to discharge through coverage under this Order requires the current owner to provide written notice to the State Water Board at least 30 days in advance of transfer of ownership. The Deputy Director may determine that the new owner must submit an application package to seek coverage under this Order if the nature or location(s) of the discharge(s) have changed from the application package on file.

III. Findings

The State Water Board finds the following:

A. Legal Authorities. This Order serves as statewide Waste Discharge Requirements (WDRs) pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. EPA, and the California Water Code, chapter 5.5, division 7 (commencing with § 13370). This Order shall serve as a statewide general NPDES permit for point source discharges from single or multiple discharge points to surface waters, storm drains, and other storm water conveyances leading to waters of the U.S.

B. Background and Rationale for Requirements. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this Order, and is hereby incorporated into and constitutes findings for this Order. Attachments A through E, G, and H are also incorporated into this Order.

C. Termination of Existing Coverage Under Similar Regional Water Board Orders. The State Water Board's intention in the issuance of this statewide NPDES Permit is to provide consistent and efficient regulation of discharges from drinking water systems statewide. To provide such consistency, the State Water Board intends that existing regulatory coverage under an existing non-MS4 Regional Water Board NPDES permit for discharges regulated under this Order will be terminated by the applicable regional water board upon issuance of the Notice of Applicability to a water purveyor per the terms of this Order.

D. Threat and Complexity of Discharge. When mitigated through implementation of appropriate management practices, treatment and/or controls, discharges from community water systems, as defined under this Order, pose no adverse effects or impacts to beneficial uses of the receiving waters. In accordance with the State Water Board fee regulations, the discharges that are regulated under this general NPDES Permit require minimal or no additional treatment systems to meet limits and pose no significant threat to water quality and therefore are of low threat and low complexity.

E. State Implementation Policy. As adopted in March 2000, and amended in February 2005, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) establishes implementation provisions for priority pollutant criteria, and objectives and provisions for chronic toxicity control. Section 5.3 of the SIP allows for the granting of a categorical exception for drinking water system activities conducted to fulfill statutory requirements mandated by federal and state regulations.

F. California Ocean Plan. In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (hereinafter Ocean Plan), as amended. The latest Ocean Plan amendment became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. To protect the beneficial uses of ocean water, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the

Ocean Plan and are applicable to those discharges directly into the Ocean or indirectly via a storm water system that drains into the Ocean near the location of discharge. This Order does not authorize direct discharges into Areas of Special Biological Significance (ASBS).

Section III.J of the Ocean Plan allows the State Water Board to grant an exception where the State Water Board determines that the exception will not compromise protection of the ocean waters or beneficial uses and the public interest will be served.

G. **Exception Resolution**. On November 18, 2014, the State Water Board adopted a Resolution approving an exception to the State Implementation Policy and the Ocean Plan to water purveyors statewide for discharges from drinking water systems from complying with specified priority pollutant criteria and ocean plan objectives. As provided in Resolution 2014-0067, the State Water Board granted an exception per section 5.3 of the State Implementation Policy to water purveyors statewide, for planned and emergency discharges to inland surface waters, enclosed bays and estuaries. Similarly, as provided in Resolution 2014-0067, the State Water Board granted water purveyors with drinking water system discharges to the ocean, other than direct discharges into ASBS, an Ocean Plan exception for compliance with specified Ocean Plan objectives. As further discussed in the Fact Sheet (Attachment F), the State Water Board finds that in accordance with the requirements of the SIP and Ocean Plan, discharges from drinking water systems qualify for an exception of the State Implementation Policy and Ocean Plan per Resolution 2014-0067.

H. **California Environmental Quality Act.** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA), (commencing with section 21100) of Division 13 of the Public Resources Code.

Additionally, pursuant to CEQA, Public Resources Code section 21100 et seq., on November 18, 2014 the State Water Board adopted Resolution 2014-0067 approving a Mitigated Negative Declaration for excepting the type of discharges as covered under this Order from specified requirements of the State Implementation Policy and the California Ocean Plan.

I. **Total Maximum Daily Load (TMDL) Implementation.** A review of Regional Water Board TMDLs found that, as of the adoption date of this Order, only the Los Angeles Regional Water Board and the San Diego Regional Water Board have TMDLs that either directly apply waste load allocations to, or may indirectly imply that waste load allocations are applicable to, the discharges from drinking water systems regulated under this General Order. None of these TMDLs established waste load allocations that apply exclusively to discharges from drinking water systems. These TMDLs are applicable to the discharges from drinking water systems authorized under this Order and are therefore implemented by this Order.

This Order requires TMDL-related sampling of discharges from drinking water systems identified in a TMDL. If a Regional Water Board determines that any of these TMDLs, or any newly approved TMDLs, establish requirements that should be implemented through TMDL-specific permit requirements for the discharges from drinking water systems that are authorized under this Order, the Regional Water Board may issue permit(s) for those discharges, with coverage under this Order subsequently terminated. Alternatively, if further TMDLs are adopted that address pollutants that are likely to be in discharges from drinking water systems, and allocate waste loads specifically to water purveyors regulated under this Order, the State Water Board may consider adding additional TMDL-specific permit requirements to Attachment G of this Order in a subsequent permit amendment or renewal.

J. **Notification of Interested Parties.** State and Regional Water Board staffs have conducted eight stakeholder meetings statewide, and numerous other informal communications, and have notified prospective water purveyors and interested agencies and persons of the intent to issue this statewide NPDES permit and prescribe these statewide waste discharge requirements. The State Water Board provided an opportunity for all interested parties to submit written comments and testimony.

K. **Consideration of Public Comment.** The State Water Board, in an August 5, 2014 public hearing, heard and considered public comments pertaining to the draft Order. The State Water Board also considered all written public comments submitted by the public comment due date of August 19, 2014, prior to adopting this Order. The Fact Sheet (Attachment F) provides details regarding the public notice and public hearing.

THEREFORE, IT IS HEREBY ORDERED that, in order to meet the provisions contained in California Water Code, Division 7 (commencing with section 13000) and regulations adopted thereunder, and the provisions contained in the Clean Water Act and regulations and guidelines adopted thereunder, a water purveyor shall comply with the requirements of this Order. Water purveyors that have obtained coverage under this Order shall comply with the requirements in sections IV. through VII. (Discharge Specifications and Effluent Limitations, Receiving Water Limitations, Multiple Uses or Beneficial Uses Provisions, and Compliance Determination), Attachments D and E (Standard Provisions and Monitoring and Reporting Program) of this Order, and Attachment G (TMDL-related requirements) as applicable.

IV. Discharge Specifications and effluent limitations (Only Applicable to Discharges that enter a Water of the U.S.)

For purposes of this Order, references to “discharge(s)” mean discharge(s) that may occur directly, through a constructed storm drain, or through other conveyance system, to waters of U.S. The Discharger shall comply with the following discharge specifications and effluent limitations.

A. Specification for Implementation of Best Management Practices

1. The Discharger shall implement best management practices (BMPs) that treat or control pollutants from its discharges to maintain compliance with this Order. Implementation of BMPs includes proper management, and routing of discharges to control the pollutants of concern. The Discharger shall properly manage planned discharges and implement proven BMPs provided by professional associations or

institutes such as the American Water Works Association, to protect beneficial uses of the receiving water body(ies). For emergency discharges, the Discharger shall implement BMP procedures as soon as feasible while concurrently protecting public health and safety. Attachment C of this Order provides example BMPs.

At minimum, the Discharger shall implement BMPs for planned discharges to achieve the following performance measures:

i. Prevent aquatic toxicity by using dechlorination chemical additions, implementing equivalent proven dechlorination methods, and/or assuring that the chlorine in the discharge dissipates naturally; such that the level of chlorine in the discharge is less than 0.019 mg/L prior to entering a receiving water.

ii. Prevent riparian erosion and hydromodification by implementing flow dissipation, erosion control, and hydromodification-prevention measures; and

iii. Minimize sediment discharge, turbidity and color impacts by implementing sediment, turbidity, erosion and color control measures.

2. For Groundwater Supply Well Operations, the Discharger shall implement treatment systems or BMPs for all groundwater well development, rehabilitation, or operation discharges to waters of the U.S. to ensure these discharges:

(1) Do not cause or contribute to an exceedance of the receiving water limitation for turbidity in Section V.G. of this Order, and

(2) Comply with a turbidity action level of 100 Nephelometric Turbidity Units (NTUs) or less in the discharge. An exceedance of the turbidity numeric action level of 100 NTU is not a violation of this Order, but any exceedance does require that the Discharger take action to modify, change or enhance BMPs when the turbidity level is greater than 100 NTU, until the turbidity level is 100 NTU or less.

3. The Discharger shall implement quality assurance and quality control protocol to assure best management practices, monitoring, and reporting are effective, valid, and in compliance with this Order. The Discharger shall train all personnel operating the drinking water system and responding to emergency discharges to assure the quality assurance and quality control protocol is properly implemented.

4. For planned discharges, BMPs shall be implemented prior to and during discharges that enter a water of the U.S. For planned discharges from pressure relief valves (*i.e.*, due to testing or maintenance) and unchlorinated pump-to waste wells, BMPs shall be implemented unless infeasible (e.g., inaccessible, inadequate space). For emergency discharges, BMPs shall be implemented as soon as feasible following assurance that public safety, property, and infrastructure are protected.

5. In fulfilling the requirements of this section, the Discharger may implement the example BMPs contained in Attachment C, or proven BMPs per updated approved guidance established by industry experts, professional associations, or entities (e.g.

2014 Edition of the BMP Manual for Drinking Water System Releases published by the California-Nevada Section of the American Water Works Association).

6. The Discharger shall maintain a documented log of all BMPs implemented for its different types of discharges that enter a water of the U.S., and make it available to State and Regional Water Board staff upon request.

7. The Discharger shall modify BMPs as necessary to maintain compliance with the requirements of this Order. If monitoring results or other available information demonstrate that the discharge is not in compliance, the Discharger shall determine the source of non-compliance, and develop and implement new or revised BMPs as necessary. As part of this process, the Discharger shall validate the effectiveness of any new or revised BMPs to achieve the requirements of this Order. All non-compliance and corresponding corrective actions to address non-compliance shall be reported to the State Water Board in the annual report, as required in the Monitoring and Reporting Program (Attachment E) of this Order. A log documenting the additional or revised BMPs shall be made available upon request by staff of the State and/or Regional Water Board.

B. Effluent Limitations

1. All Discharges of Superchlorinated Water:

a. The total chlorine residual concentration in the discharge shall not exceed 0.019 mg/L.

b. A field monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

2. All Planned Discharges directly into, or within 300 feet of, Inland Surface Waters, Enclosed Bays, and Estuaries

a. The total chlorine residual concentration in the discharge shall not exceed 0.019 mg/L.

b. A field monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

3. All Planned Discharges directly into, or within 300 feet of, Ocean Waters

a. The total chlorine residual concentration in the discharge shall not exceed 0.008 mg/L.

b. A field monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with a chlorine effluent limitation.

c. The turbidity concentration in the discharge shall not exceed 225 NTU at any time.

V. Receiving Water Limitations

Receiving water limitations are based on water quality objectives contained in Regional Water Quality Control Board Basin Plans and State Water Board water quality control plans, including the Ocean Plan, and policies, and are a required part of this Order. Drinking water system discharges to the receiving water that are authorized to discharge under this Order shall not cause or contribute to the exceedance of a water quality objective or standard in the receiving water, other than water quality objectives or standards for parameters that have been granted an exception under the State Water Board Resolution 2014-0067 and are not part of a TMDL, and at minimum shall not cause or contribute to an occurrence of the following in the receiving water:

A. **pH.** The pH level to be outside the range of the pH receiving water objective in a corresponding Regional Water Board basin plan.

B. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.

C. **Floating Material and Trash.** Floating material, debris or trash to be present that cause nuisance or adversely affect beneficial uses.

D. **Sediment and Total Suspended Solids.** The sediment load and total suspended solids discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

E. **Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

F. **Hydromodification.** Velocity and/or volume of discharge to modify the existing physical characteristics of a water body.

G. **Turbidity.** Turbidity concentrations to exceed corresponding Regional Water Board basin plan water quality objectives for turbidity.

VI. Multiple Uses or Beneficial Reuse

The discharge to surface waters may be considered wasteful when it is feasible for the water to be used prior to discharge. The State Water Board strongly encourages all water purveyors to put all or part of the discharge water to multiple uses or a beneficial reuse prior to discharge into surface water. Because of the high quality of the discharge water addressed in this Order, discharges authorized under this Order that are put to multiple use or beneficial reuse are not required to be monitored and generally not required to obtain any other waste discharge requirements if the water that would otherwise be discharged is instead collected and reused for landscape irrigation, agricultural irrigation or other uses in a manner that augments the existing water supply, or if the discharge is directly or indirectly discharged to: (1) storm water capture basin(s), (2) low impact development features, or (3) other groundwater-recharge system(s).

VII. Provisions

A. Standard Provisions

The Discharger shall comply with all Standard Provisions in Attachment D.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program requirements in Attachment E.

C. Special Provisions

1. Reopener Provisions

The State Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:

a. If present or future investigations demonstrate that the discharges governed by, and in compliance with, this Order cause adverse impacts on water quality or beneficial uses of the receiving waters;

b. If State Water Board precedential decisions, new policies, new laws, or new regulations are adopted;

c. To include specific implementation provisions in Attachment G for any existing or newly adopted TMDLs;

d. If an administrative or judicial decision on a separate NPDES permit or Waste Discharge Requirements addresses requirements applicable to discharges authorized in this Order; and/or

e. As otherwise authorized by law.

D. Noncompliance

Noncompliance with any requirement of this Order may be subject to enforcement action by the State Water Board and/or Regional Water Board as authorized under the Porter Cologne Water Quality Control Act (Water Code Section 13000), consistent with the State Water Board’s enforcement policy.

VIII. Compliance Determination For Planned Discharges

Compliance with the final effluent limitations contained in Section IV.B of this Order will be determined as specified below:

A. Permit Compliance for Planned Discharges only

Compliance with applicable effluent limitations, BMP implementation requirements, receiving water limitations, monitoring, notification, and reporting requirements of the permit constitutes compliance with this Order. Due to the infeasibility of a Discharger to self-monitor compliance with receiving water limits in distant receiving water bodies (for discharges into drainage conveyance systems), non-compliance with receiving water limitations for indirect discharges will be determined based on additional site-specific information made available to the Water Boards indicating that drinking water system discharges caused or contributed to the exceedance of the receiving water limitations and adversely impacted beneficial uses.

B. General

Compliance with effluent limitations shall be determined using monitoring and reporting protocols defined in the Monitoring and Reporting Program of this Order. For purposes of reporting and administrative enforcement by the State and/or Regional Water Boards, the Discharger shall be deemed out of compliance with the effluent limitations if the constituent concentration or level is greater than the effluent limitation and greater than or equal to the minimum level (ML, also known as the Reporting Level (RL)) of properly calibrated in-field monitoring equipment.

C. Total Residual Chlorine

Handheld chlorine measuring devices that are U.S. EPA-approved are appropriate to measure residual chlorine in the field for compliance determination. The minimum level of a hand-held chlorine meter used to determine compliance with the total chlorine residual effluent limitations is 0.1 mg/L or lower. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.1 mg/L shall be deemed out of compliance with a chlorine effluent limitation. Due to other possible interferences of these handheld devices, if readings are false positives, these will not be evaluated for compliance if explanation of cause of false positive is provided.

ATTACHMENT A – DEFINITIONS

Adverse Effect or Adverse Impact to Beneficial Uses of a Receiving Water Body
A detrimental effect upon water quality or beneficial uses of a receiving water body caused by a discharge or loading of a pollutant or pollutants.

Authorized Discharge
Any discharge that is authorized pursuant to this National Pollutant Discharge Elimination System (NPDES) permit and meets the requirements and conditions set forth in this Order.

Basin Plan
The Water Quality Control Plan(s) adopted by a Regional Water Quality Control Board. A Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

Beneficial Uses
The existing or potential uses of receiving waters in the permit area as designated by a Regional Water Board basin plan or other water quality control plan.

Best Management Practices (BMPs)
Methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges. BMPs include structural and nonstructural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Community Water System
A public water system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

Drinking Water System
A system regulated by the State Water Resources Control Board Division of Drinking Water or a local county department of health, with the primary purpose of conveying, treating, storing and distributing safe drinking water to at least 15 service connections used by yearlong residents or regularly serves at least 25 year around residents of the area served by the system.

Deputy Director
The Deputy Director of Water Quality for the State Water Resources Control Board or any person(s) delegated by the Deputy Director to serve as acting Deputy Director.

Direct Discharge
Any discharge that enters a Water of the U.S. without first traveling via a storm drain or any other constructed conveyance system.

Discharger
Any water purveyor named in this Order as being responsible for permit requirements within its jurisdiction. A discharger to this Order includes a public or private water purveyor, wholesaler, or district, or a contractor working on behalf of the water purveyor, wholesaler or district.

Drinking Water System Discharges
Release of flows from drinking water intakes, transmission, storage, pumping, treatment and distribution systems including flows due to: (1) system failures and pressure releases, (2) system development, testing and maintenance that is performed to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and State Water Board Division of Drinking Water permit requirements.

Emergency Discharge
A discharge due to a sudden unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services, including the provision of drinking water supplies in accordance with applicable drinking water statutes and regulations.

Estuaries
Surface waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater.

Enclosed Bays
Enclosed bays are hydrological indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay.

Impaired Water Body
A water body that is currently listed on the Clean Water Act section 303(d) list.

Indirect Discharge
Any discharge that enters a Water of the U.S. by first traveling via a storm drain or any other constructed conveyance system.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Low Impact Development (LID)
A storm water management and land development strategy that emphasizes water conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Method Detection Limit (MDL)
Minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) and Reporting Level (RL)
The minimum level (ML) means the concentration at which a properly calibrated monitoring system gives a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific monitoring procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed. A reporting level (RL) is the ML for reporting and compliance determination included in this Order.

MS4 Operator
The MS4 Operator is the entity responsible for the operation of its local municipal separate storm sewer system subject to an MS4 NPDES Permit.

Monitoring Well
Specialized wells in which the depth to groundwater can be measured and samples of ground water can be collected for analysis for the purpose of managing drinking water aquifers and/or to fulfill requirements mandated by the federal Safe Drinking Water Act and the California Health and Safety Code.

Non-community Water System
A water system that is not a community water system, as defined in this attachment. A non-community water system is a water system that generally serves less than 15 service connections used by yearlong residents or does not regularly serve at least 25 year around residents with the water system's service area.

Not Detected (ND)
Sample results less than the properly calibrated monitoring equipment's MDL.

Non-transient Water System
A water system that is not a community water system, as defined in this attachment, and that regularly serves at least 25 of the same persons over six months per year. Non-transient water systems are regulated by the State Water Board Division of Drinking Water.

National Pollutant Discharge Elimination System (NPDES)
The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Clean Water Act sections 307, 402, 318, and 405.

Pollutants
Substances defined in Clean Water Act section 502(6) (33 U.S.C. § 1362(6)), and incorporated by reference into Water Code section 13373.

Pollution Prevention
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in discharge water from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Board or Regional Water Board.

Receiving Water
The term receiving water is used interchangeably with the term waters of the U.S.

Superchlorinated Water
Water that is dosed with chlorine in order to adequately sanitize and disinfect drinking water system facilities

Supply Well
A groundwater well that is installed, operated, maintained and/or rehabilitated in accordance with the federal Safe Drinking Water Act and the California Health and Safety Code to pump ground water for the primary purpose of delivering drinking water to a municipality or community.

Transmission Systems
Transmission systems include pipes, pumps, canals, pump houses, and other components used to move water from the point of origin to storage reservoirs, treatment facilities, and distribution systems. Transmission systems do not have connections to serve end users.

Water Purveyor
Any entity that discharges from a drinking water system, including water purveyors, wholesalers, distributors, districts, municipalities, private companies, and other entities that own or operate a community drinking water system.

Water Wholesaler
An entity that provides potable water to a person, political subdivision, or municipality that is not the ultimate consumer of the service.

Waters of the State
Any surface water or groundwater, including saline waters, within boundaries of the state.

Waters of the United States (U.S.)
Generally refers to surface waters, as defined for the purposes of the federal Clean Water Act.

ATTACHMENT B1 – NOTICE OF INTENT

STATE WATER RESOURCES CONTROL BOARD
TO APPLY FOR REGULATORY COVERAGE UNDER
ORDER WQ 2014-0194-DWQ, NPDES NO. CAG140001
FOR DRINKING WATER SYSTEM DISCHARGES TO WATERS OF THE U.S.

1. DRINKING WATER SYSTEM OWNER[1]

Name		Number of Connections:___________________	
State Water Board Division of Drinking Water Drinking Water System No.:________________ (If Applicable - Conceptual Letter Approval – System No.:______________________________)			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]			Date:

2. APPLICANT (IF DIFFERENT FROM SYSTEM OWNER)

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]			Date:

3. WATER SUPPLIERS (IF APPLICABLE)

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]			Date:

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[1] If additional property owners are involved, provide the information in a supplementary letter.
[2] By signing this notice of intent, you are certifying under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of your knowledge. By signing this Notice of Intent, you agree to closely monitor and stop the discharge if there is any violation of Order WQ 2014-0194-DWQ or impact to receiving water beneficial uses.

4. BILLING ADDRESS

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			

5. PLANNED DISCHARGE INFORMATION

Identify the type of facilities that will have drinking water system discharge (all that apply)

- ☐ Intake and/or Transmission Facilities
- ☐ Distribution Systems
- ☐ Storage Tanks and/or Reservoirs
- ☐ Supply Wells
- ☐ Water Treatment Facilities
- ☐ Other (explain below)

List and description of other discharges.

Are the discharges existing discharges as of the adoption date of this Order)? ___________
If not, identify the new discharges that are proposed to take place prior to the expiration date of this Order?

List any additives to the drinking water not affiliated with drinking water treatment, their purpose, and quantity: (For example, algaecides, anticorrosion agents, etc.)

6. MULTIPLE WATER USE OR BENEFICIAL USE OPTIONS

Is using a portion of the discharge for irrigation, groundwater infiltration/recharge or other use a viable option? ☐ Yes ☐ No

Is land disposal of a portion of your discharge a viable option? ☐ Yes ☐ No

Provide a brief description of the discharge (or portion thereof), that is collected and applied for irrigation or other beneficial reuse. If no multiple water use options of any portion of your discharge are viable, explain why (attach additional sheet as necessary).

7. **RECEIVING WATER INFORMATION (provide on separate sheet if necessary)** *Note that identification of receiving waters does not necessarily constitute a formal finding that any specific water body is a water of the U.S.*

Name of all named receiving water bodies and/or major downstream water bodies:
Circle the Regional Water Quality Control Board(s) where receiving water body (ies) is/are located: REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9 (See Attachment H for identification of the various regions)
Are any of the receiving water bodies receiving drinking water system discharges listed on the current 303d list[1] for a constituent in your discharge?[1] ☐ Yes ☐ No
If Yes, then list the water bodies on the 303d list, the constituent causing the impairment:
Does/Do the receiving water body(ies) have applicable waste load allocations identified in Section K of the Fact Sheet or TMDL-related requirements in Attachment G? ☐ Yes ☐ No If yes, the following items must be attached to this form for the application package to be deemed complete: a. Laboratory Analysis and estimated volume of your discharge per section II.C.4.i. of this Order b. If applicable, a description of the additional best management practices, including applicable treatment or controls that will be implemented to comply with TMDL-related requirements per section II.C.4.ii. of this Order

[1] See: (http://www.waterboards.ca.gov/water_issues/programs/tmdl/) for current Clean Water Act section 303(d) listing

8. BEST MANAGEMENT PRACTICES (CHECK ALL THAT APPLY)

☐ Best Management Practices (BMPs) are being implemented by trained personnel of the subject drinking water system(s) and an instruction copy of the BMPs are available to all personnel and available at the water purveyor's main office(s) upon State or Regional Water Board staff request.

Date that implementation of BMPs commenced for the above identified Drinking Water System: ______________________

If not, provide date BMPs will be implemented and available. (Date must be within 6 months of the effective date of this Order.) ________________

9. APPLICATION FEE

☐ Provide the appropriate applicable fees. Information on applicable fees can be found at (http://www.waterboards.ca.gov/resources/fees/)

Checks shall be made payable to the State Water Resources Control Board.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

______________________________ ______________________________

Signature Date

ATTACHMENT B2 – NOTICE OF NON-APPLICABILITY

STATE WATER RESOURCES CONTROL BOARD

CERTIFYING NON-APPLICABILITY OF REGULATORY COVERAGE UNDER ORDER WQ 2014-0194-DWQ, NPDES NO. CAG140001

1. DRINKING WATER SYSTEM OWNER

Name		State Board Division of Drinking Water Drinking Water System Permit No.:___________	
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:			Date:

2. WATER PURVEYOR (IF DIFFERENT FROM ABOVE)

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:			Date:

3. REASON FOR NON-APPLICABILITY: (check one that applies and complete information)

Discharges from the above system(s):
☐ Are regulated by a separate individual NPDES Permit issued by a Regional Water Board to address site-specific discharges outside the scope of this Order or a Total Maximum Daily Load (TMDL) –related water quality impairments: Regional Water Board Order No. ________________NPDES Permit No.___________________
☐ Are covered under a local agreement with a municipal sewer storm system (MS4) permittee (Attach a copy of agreement and acknowledgement by the corresponding Regional Water Board)
☐ Are from a drinking water system owned/operated by an (MS4) permittee or co-permittee named on an existing Water Board NPDES Permit and <u>all</u> discharges flow into the same regulated storm drain system. Provide Order No. ________________________NPDES Permit No.___________________
☐ Do not discharge to a water of the U.S. or a conveyance that drains to a water of the U.S.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

________________________________ ________________________________

Signature Date

ATTACHMENT C – EXAMPLE BEST MANAGEMENT PRACTICES (BMPs)

The Discharger shall implement BMPs to comply with the requirements of this Order, to protect the beneficial uses of the receiving waters and to prevent erosion or hydromodification caused by drinking water system discharges. Required BMPs include but are not limited to the proven practices established by the American Water Works Association, or other professional associations or institutes, in accordance with updated available technology. Dischargers shall implement BMPs comparable to the following example procedures and measures to achieve compliance.

I. Example BMP Procedures

A. Chlorinated Water Discharges

All chlorinated water shall be dechlorinated chemically or naturally. Filter bags, filter rolls and fabric filters, shall be used to remove any sand, silt or debris from entering the surface water or storm drain system.

B. Superchlorinated Water Discharges

All superchlorinated water shall be dechlorinated at the point of discharge directly into a surface water or the point of discharge into any storm water conveyance system. Filter bags or rolls, or equivalent, shall be used to remove any sand, silt or debris from entering the surface water or storm drain system.

C. Facility Drainage Discharges

All discharges from transmission, treatment, storage and distribution facility draining for cleaning and maintenance shall be dechlorinated. Filter bags, filter rolls and fabric filters shall be used to remove sediment prior to discharging to surface waters or storm drains.

D. Groundwater Supply Well Discharges

During flushing, rehabilitation, or development of water supply wells, multi-baffled settling tanks, or equivalent, shall be used if necessary to remove large particles and to reduce turbidity. If further management is needed to reduce solids after settling, the Discharger shall filter the water implementing a filter-bag filtration system, or equivalent practice, before discharging to achieve a turbidity threshold that is in compliance with this Order.

II. Example BMP Measures

A. Sediment and Erosion Control

Sediment and erosion control BMPs that assess and prevent potential impacts to receiving waters, at discharge points and downstream reaches.

1. **Receiving Waters.** The Discharger shall identify methods for locating discharge points and receiving waters to determine appropriate sediment and erosion control measures.

2. **Sediment Control.** Sediment control practices shall be used to filter and trap sediment particles, and prevent them from reaching storm drains or receiving waters. Sediment control practices to control sedimentation discharge and buildup in receiving waters include:

   (a) Straw wattles and gravel bags may be placed in a flow pathway and around storm drain inlets;

   (b) Plastic sheets may be used to line a trench and flow pathway to prevent water contact with soil;

   (c) Check dams may be constructed to dissipate flow energy and minimize the potential for discharges to dislodge soil; and

   (d) A storm water swale, if available nearby to the point of discharge that has sufficient capacity for the discharge.

   (e) Discharge to an open field or turf to remove sand and/or silt or larger particles prior to surface water discharge.

3. **Erosion Controls.** Erosion control practices shall be used to protect soil surfaces at discharge points and receiving waters. Erosion control practices shall be used to prevent re-suspension of ambient sediment within a receiving water, and shoreline erosion and streambed scour. Such controls shall minimize the energy of discharges by managing flow velocities and volumes, and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the receiving water at the point of discharge and areas downstream of the discharge point. The following measures may be used to control erosion in receiving waters:

   (a) Construct check dams to slow down the flow;

   (b) Install flow diffusers at discharge point;

   (c) Fashion discharge flow path with as little slope as possible; and

   (d) Decrease discharge flow rates and duration.

B. Dechlorination

The following types of dechlorination methods, or equivalent, to remove chlorine:

1. Dechlorinating Diffuser – The dechlorinating diffuser connects directly to a discharge nozzle (e.g., to a fire hydrant or fire hose) and contains a chamber that houses dechlorination agent. Some diffusers feature a siphon for dechlorinating agent tablets or a solution to dechlorinate the water.

2. Dechlorination Mats – These mats are used to facilitate effective contact between the flow and dechlorinating agent during dechlorination. For dechlorination of discharges from trenches during main breaks, the tablets are placed inside synthetic mesh fabric pockets sewn together in a grid or line. The dechlorinating mats are laid across the flow path or over the storm water conveyance system. As the discharged water contacts the tablets, dechlorinating agent is released and chlorine is inactivated.

3. Broadcast Dechlorination – Dechlorination granules are spread over an area, such as pavement, where chlorinated water is flowing toward a storm water conveyance system inlet. As the discharged water contacts the tablets, dechlorinating agent is released and chlorine is inactivated.

4. Chemical Injection Metering Pump – Occasionally, a dechlorination agent is injected into a discharge pipe, such as a tank drain, to dechlorinate the water before entering the storm water system.

Addition of dechlorination chemicals shall be managed to ensure the dechlorination agent does not adversely affect or impact beneficial uses of the receiving waters.

C. Copper and Zinc Management

A Discharger that applies copper-based herbicides or zinc-based corrosion inhibitors to its water shall implement BMP measures to eliminate or reduce copper and zinc concentrations in its discharges to the extent feasible, including but not limited to the following:

1. Record keeping of where, when and how much zinc or copper is used to treat water that has the potential to be discharged to a surface water.

2. Implementation of BMPs that eliminate planned discharges and minimize emergency discharges to surface water bodies from occurring within 48 hours of applying copper-based herbicides or zinc-based corrosion inhibitors.

3. Implementation of BMPs to eliminate or reduce to the extent feasible the use of copper-based herbicides or zinc-based corrosion inhibitors by using less toxic agents or other methods in place of copper-based herbicides or zinc-based corrosion inhibitors.

D. Training

All personnel using, operating and maintaining all facilities and equipment shall be properly trained to implement BMPs to discharges when conducting mandated operational and maintenance activities. The Discharger’s staff and/or contractors shall be properly trained to understand permit compliance needs and perform the required monitoring, notification and reporting.

E. Equipment and Supplies

Equipment and sampling meters shall be inspected, maintained and calibrated per manufacturer instructions and specifications.

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger shall comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (Water Code) and is grounds for a potential enforcement action, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Water Purveyor to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision includes the operation of backup or auxiliary facilities or similar systems that are installed by a Water Purveyor only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Water Purveyor shall allow State and/or Regional Water Board staff, United States Environmental Protection Agency (U.S. EPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Water Code section 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger chooses to continue a discharge regulated by this Order after the expiration date of this Order and after the State Water Board has reissued this Order, the Discharger shall apply for and obtain new permit coverage as required by the new Order. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the State Water Board. The State Water Board may require modification or revocation and reissuance of the Order or Notice of Applicability to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3) and 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. If applicable, monitoring results shall be conducted according to test procedures under 40 Code of Federal Regulations part 136. (40 C.F.R. § 122.41(j)(4) and 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Records Retention

The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the State Water Board's Division of Water Quality Deputy Director at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) sampling and monitoring were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv)); and

5. The results of such monitoring. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and monitoring data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the State Water Board or the United States Environmental Protection Agency (U.S. EPA) within a reasonable time, any information which the State Water Board or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the State Water Board, a Regional Water Board or U.S. EPA copies of records required to be maintained by this Order. (40 C.F.R. § 122.41(h) and Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting sections V.B.2 through V.B.7, below. (40 C.F.R. § 122.41(k).)

2. For a corporation, a responsible corporate officer shall sign all permit applications. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. For a partnership or sole proprietorship, a general partner or the proprietor shall sign all permit applications, respectively. (40 C.F.R. § 122.22(a)(2).)

4. For a municipality, State, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3).).

5. All reports required by this Order and other information requested by the State Water Board, a Regional Water Board or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the State Water Board. (40 C.F.R. § 122.22(b)(3).)

6. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above shall be submitted to the State and Regional Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

7. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above is making the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in Attachment E of this Order.

2. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 Code of Federal Regulations part 136, the results of this monitoring shall be included in the calculation and reporting of the data to the State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

D. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment to the Regional Water Board. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided to the applicable regional water quality control board within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The State Water Board or a Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

E. Anticipated Noncompliance

The Discharger shall give advance notice to the appropriate Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

F. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C and V.D above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.D above. (40 C.F.R. § 122.41(l)(7).)

G. Other Information

When the Water Purveyor becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Water Purveyor shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. Standard Provisions – Enforcement

The State and Regional Water Board are authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Discharges from drinking water systems, as authorized by this Order, shall be properly managed to not adversely affect or impact beneficial uses of a receiving water body. The purpose of the monitoring and reporting requirements contained in the following Monitoring and Reporting Program is to provide information demonstrating that management practices are properly implemented to protect surface water quality. The objective of the monitoring is to validate that the management practices are performing properly to maintain compliance with this Order and protect receiving waters from adverse impacts to beneficial uses.

Title 40 Code of Federal Regulations part 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the State Water Resources Control Board (State Water Board) and a Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements, which implement the federal and State of California regulations.

Dischargers authorized under this Order shall comply with all Standard Provisions in Attachment D related to monitoring, reporting and recordkeeping.

I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the nature of the monitored discharge after implementation of best management practices (BMPs). All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the discharge flow joins or is diluted by any other waste stream or body of water.

B. Chemical analyses that require laboratory testing are not required in this Order (with the exception of application requirements for discharge into a water body with already established TMDL requirements identified in Section K of the Fact Sheet and/or TMDL-related requirements prescribed to the water purveyors listed in Attachment G). The Discharger shall conduct onsite field measurements for pH, turbidity, and total chlorine residual per quality assurance and quality control (QA/QC) protocol that conform to U.S. EPA guidelines, or procedures approved by the American Water Works Association or other professional drinking water industry association.

C. The Discharger shall maintain sufficient resources, including trained personnel and properly calibrated and maintained field instruments to adequately perform all field measurements required in this Order. Onsite field measurements shall be performed using handheld devices by trained personnel acting on the Discharger’s behalf. A manual containing the proper operating procedures for all onsite field monitoring equipment, shall be maintained onsite or at the water purveyor’s office, and shall be available for inspection by State or Regional Water Board staff.

D. Appropriate field meter devices shall be selected consistent with accepted scientific practices and used to ensure the accuracy and reliability of measurements of monitored discharges. All devices shall be properly maintained and calibrated per manufacturer instructions and as necessary to ensure their continued accuracy.

II. MONITORING REQUIREMENTS FOR PLANNED DISCHARGES

A. Event Monitoring Requirements for Superchlorinated, Well development and/or rehabilitation, and Large Volume Discharges.

The Discharger shall monitor all superchlorinated discharges, all discharges from well development and/or rehabilitation activities, and individual discharges greater than 325,850 gallons (one acre-foot) for the constituents specified in Table E-1 and per the frequency specified in Table E-2.

Table E-1. Event Monitoring of Superchlorinated Discharges, Well Development and/or Rehabilitation, and Individual Discharge Events Greater than 325,850 Gallons

Parameter	Units	Sampling [2]	Sample Type
Chlorine, Total Residual [1,3,4]	mg/L	1/Event	Grab[1]
Volume	Gallons	1/Event	Estimate [5]
pH [6]	Standard Units	1/Event	Grab
Turbidity	NTU	1/Event	Visual Estimate
Turbidity for Well Development and/or Rehabilitation Only[1]	NTU	1/Event	Grab[1]

[1] A handheld field meter shall be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer’s instructions. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.
[2] Sampling shall take place downstream of management practices, as feasible.
[3] Total chlorine residual shall be monitored with a method sensitive to and accurate at a minimum level of 0.1 mg/L. False positives are acceptable if explanation of the cause is included.
[4] Total Chlorine Residual monitoring is not required of non-chlorinated discharges.
[5.] Calculated estimate using available meter reading information or visual estimate.
[6] pH monitoring is required for superchlorinated discharges only.

Table E-2. Event Frequency Requirements for Superchlorinated Discharges, Well Development and/or Rehabilitation Discharges to a Water of the U.S., and Discharges Greater than 325,850 Gallons

Duration of Discharge	Sampling Requirements
Less than 20 minutes	One sample is required during the first 10 minutes of the discharge.
20 minutes to 60 minutes	One sample is required during the first 10 minutes of the discharge, plus a second sample is required within the last 10 minutes of the discharge.
Greater than 60 minutes	One sample is required within the first 10 minutes, a second sample is required within the next 50 minutes, and a third sample is required approximately within the last 10 minutes of the discharge or as close to the end of the discharge as is feasible.

B. Annual Representative Monitoring Requirements

This Order allows discharges of similar nature to be monitored on a representative basis. Representative monitoring is the use of monitoring results of one water quality monitoring sample to represent other discharges expected to have the same water quality. A representative monitoring measurement must represent discharges of similar nature, meaning discharges that have all the following items in common:

(a) The same general water source (ground water or surface water of similar water quality), and

(b) The same water treatment, and

(c) The same type of implemented BMPs.

The Discharger shall monitor all planned discharges not listed in Section II.A above, using representative monitoring, as previously defined in this section, for the constituents specified in Table E-3 and per the frequency specified in Table E-4.

Table E-3. Annual Representative Monitoring Requirements

Parameter	Units	Sampling[2]	Sample Type,
Chlorine, Total Residual [3,4]	mg/L	1/Year	Grab[1]
Volume	Gallons	1/Year	Estimate [5]
Turbidity	NTU	1/Year	Visual Estimate

[1] A handheld field meter shall be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.
[2] Sampling shall take place downstream of management practices, as feasible.
[3] Total chlorine residual shall be monitored with a method sensitive to and accurate at a minimum level of 0.1 mg/L. False positives are acceptable if explanation of the cause is included.
[4] Total Chlorine Residual monitoring is not required of non-chlorinated discharges.
[5] Calculated estimate using available meter reading information or visual estimate

Table E-4. Annual Representative Monitoring Frequency Requirements

Duration of Discharge	Sampling Requirements
Less than 20 minutes	One sample is required during the first 10 minutes of the discharge.
20 minutes to 60 minutes	One sample is required during the first 10 minutes of the discharge, plus a second sample is required within the last 10 minutes of the discharge.
Greater than 60 minutes	One sample is required within the first 10 minutes, a second sample is required within the next 50 minutes, and a third sample is required approximately within the last 10 minutes of the discharge or as close to the end of the discharge as is feasible.

In its annual report, the Discharger shall:

(a) Submit a copy of its site schematic submitted in its application for enrollment with labeled representative monitoring locations, and
(b) Identify the portions of its system that the representative monitoring results represent, and
(c) Identify all changes in its representative monitoring locations that have occurred during the monitoring-year.

C. Annual Discharge Volume Monitoring Requirements

The Discharger shall keep:

(a) A record of the number of direct discharges to a water of the U.S. that is greater than 50,000 gallons, during each calendar year,
(b) An estimate of the total volume discharged to surface water during each calendar year, and
(c) An estimate of the total volume of discharge water directed to a reuse or beneficial use in accordance with section VI. of this Order.

D. Monitoring Not Required

Monitoring is not required for any discharges that:

(a) Do not ultimately reach a water of the U.S., and
(b) Are put to multiple uses or beneficial reuse, in accordance with section VI. of the Order, prior to surface water discharge.

E. Increase in Monitoring Requirements

The Deputy Director may increase the monitoring or frequency at any time to ensure the protection of beneficial uses of the receiving water. Any requirement for increased monitoring will be based on site-specific data or information that indicates a site-specific discharge threatens to cause or contribute to an exceedance of a receiving water quality criteria or objective.

III. RECEIVING WATER MONITORING REQUIREMENTS DURING NON-COMPLIANCE WITH THIS ORDER

The receiving water must be monitored for all direct planned discharges that do not comply with the requirements contained in section IV of the Order and the discharge potentially causes or contributes to an adverse effect or impact to beneficial uses. Receiving water monitoring shall be conducted during or immediately after the Discharger became aware of a non-compliant discharge that adversely effects or impacts beneficial uses of the receiving water. The Discharger shall monitor the point of confluence of the discharge and the receiving water. If the receiving water presents hazards to the monitoring personnel, visual monitoring shall be conducted using telephoto lenses and binoculars. If further hazards exist beyond such measures, monitoring is not required, and the hazards shall be documented in the corresponding monitoring report.

Receiving water monitoring shall consist of digital photographs and documentation of observed effects and impacts the discharge has on the receiving water body including the presence or absence of:

- **a.** Erosion;
- **b.** Floating or suspended matter;
- **c.** Discoloration;
- **d.** Impact on aquatic life;
- **e.** Visible films, sheens, or coatings; and
- **f.** Potential nuisance conditions.

Photographs and documented observations of the receiving water conditions shall be included in the annual monitoring report, and made available to State and Regional Water Board staff upon request.

Receiving water monitoring is not required for emergency discharges.

IV. POST-NOTIFICATION OF EMERGENCY OR NON-COMPLIANT DISCHARGES THAT ADVERSELY EFFECT OR IMPACT BENEFICIAL USES

Within 24 hours of the Discharger becoming aware of an adverse effect(s) or impact on beneficial uses of the receiving water body due to non-compliance with this Order, or due to a system failure or emergency involving a discharge from its drinking water system, the Discharger shall notify the corresponding Regional Water Board and the MS4 operator if applicable, and shall confirm this notification in writing within five days.

The notification shall include all of the following:

- **a.** The location and extent of non-compliance or emergency discharge;
- **b.** The cause of the non-compliance or emergency discharge;
- **c.** The date, time and expected duration of the non-compliance or emergency discharge;
- **d.** The estimated volume of discharge;
- **e.** The applicable receiving water body; and
- **f.** The corrective actions taken (or being taken) to prevent future non-compliance or repair the system failure.

V. PRE-NOTIFICATION OF LARGE PLANNED DISCHARGES GREATER THAN ONE ACRE-FOOT (325,850 GALLONS)

Three (3) days prior to initiation of a planned discharge (or retroactively within 24-hours after the Discharger is informed to conduct an urgent planned discharge) of a volume equal to or greater than one acre-foot (325,850 gallons), the Discharger shall notify the MS4 operator if applicable, and the appropriate Regional Water Board and provide:

- **a.** The start date of discharge
- **b.** The location of discharge and the applicable receiving water
- **c.** The estimated volume of discharge, and
- **d.** The reasons for discharge

VI. REPORTING AND RECORDKEEPING REQUIREMENTS

A. Self-Monitoring Report Requirements

1. Self-monitoring reports including compliant and non-compliant discharge monitoring information shall be maintained in the Discharger’s main office and made available upon request of State and Regional Water Board staff.

2. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table E-5 below. Each discharge event that meets the conditions in section II and Table E-1 of this MRP shall be monitored.

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	Record Keeping Due Date
1/Event or Year	January 1 thru December 31	1 March

3. The Discharger shall arrange and summarize any reported numerical data in a tabular format. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

4. If no discharge occurred during the reporting period, the monitoring report shall report that there was no discharge.

5. Authorized Dischargers shall maintain the results for all monitoring specified in this Monitoring and Reporting Program and as specified in this Order. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the self-monitoring report.

B. REPORTING REQUIREMENTS TO STATE WATER BOARD

1. Dischargers shall report to the State Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

2. By March 1 of every year, all non-compliant discharge monitoring information contained in the Discharger's self-monitoring report for the past calendar year shall be submitted to the State Water Board annually and shall include all non-compliant monitoring results required in this Monitoring and Reporting Program. All non-compliant discharge monitoring information shall be accompanied by the corrective actions the Discharger has taken to return the discharge to compliance. Dischargers shall also submit the annual discharge volume monitoring requirements specified in section II.C of this Attachment.

3. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify discharge events of non-compliance with the permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified non-compliance shall include a description of the requirement that was violated and a description of the violation.

4. Monitoring reports shall be submitted to the State Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

   State Water Resources Control Board
   Division of Water Quality
   NPDES Permitting Unit
   1001 I Street, 15th Floor
   Sacramento, CA 95814

5. At any time during the term of this permit, the Deputy Director may notify authorized Dischargers to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Website: (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, each Discharger shall submit a hard copy of its monitoring reports. Subsequent guidance will be provided to the Discharger upon the Deputy Director's notification for electronic submittal of reports. (Direction and guidance for electronic SMR submittals is currently available on the CIWQS Web site at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml

ATTACHMENT F – FACT SHEET

Table of Contents

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section III.B of the Order, the State Water Board incorporates this Fact Sheet as its findings supporting the issuance of the Order.

I. PERMIT INFORMATION

A. Background

Water wholesalers and purveyors are responsible for developing water supplies and providing drinking water to their communities and customers in accordance with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code. Mandatory system-development and system-maintenance activities often result in surface water discharges, either via storm drain systems or other conveyance systems, or directly to a surface water body.

The Federal Water Pollution Control Act (also referred to as the Clean Water Act) section 402 requires that a discharge of any pollutant or combination of pollutants to surface waters that are waters of the United States, with certain exceptions, be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. (For the purpose of this Order, the terms “waters of the United States”, “surface waters” and “receiving waters” are used interchangeably unless noted otherwise.) On September 22, 1989, the U.S. Environmental Protection Agency (U.S. EPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to title 40 Code of Federal Regulations parts 122 and 123.

Discharges to waters of the U.S. required to be regulated with an NPDES permit, in accordance with the Clean Water Act, include discharges of pollutants from drinking water systems. The Clean Water Act does not include an exemption from federal regulation based on volume or flow of discharge; therefore, all sizes of drinking water systems, including very small systems with small volumes of surface water discharges, are required to be regulated with an NPDES permit. Many drinking water system discharges in California that enter waters of the U.S. (either directly or via a storm water conveyance system) are unregulated. The systems that are regulated are permitted with Regional Water Quality Control Board (Regional Water Board) permits.

The State Water Board recognizes that although the quality of the discharges from different locations within a system (raw water, potable water, chlorinated water, etc.) varies, the set of discharges from the different systems throughout the state are fairly uniform. The discharges are of water that must be discarded as water purveyors conduct similar mandatory activities to assure the water that is ultimately delivered is safe for drinking and other potable uses.

Although the discharges are similar in nature, they are regulated differently throughout the state. Some are not regulated at all. Others are regulated by various Regional Water Boards permits, depending on the region the system is located. Some Regional Water Boards regulate the raw and potable drinking water discharges using region-wide low threat-type general NPDES permits that regulate a broad range of constituents through differing regulatory approaches. Other Regional Water Board general permits do not address the constituents of concern from these types of discharges, and/or contain requirements that are not feasible for water purveyors to comply without creating obstacles to the proper operation of drinking water systems. The following table illustrates more detail on part of the Regional Water Boards' differing regulatory approaches for discharges from drinking water systems:

Table F-1. Differences in Existing Regional Water Boards' Permit Requirements Effluent Limitations[0]

Region	Chlorine Residual (mg/L)	Settleable Solids (ml/L)	pH (standard units.)	TDS (mg/L)	BOD_5 (mg/L)	Ammonia	Turbidity (Nep Turbidity Units)	O&G (mg/L)	Temp (˚F)	Priority Pollutant	Acute Toxicity
1	0.11[1] and 0.019[2]	0.1	6.5[3] and 8.5[4]	BPO[17]	--	--	--	--	--	--	--
2[5]	--	--	--	--	--	--	--	--	--	--	--
3	0.02	--	--	BPO[17]	--	--	--	--	--	MCLs	--
4	0.1[6]	0.3[6] and 0.1[7]	6.5[3] and 8.5[4]	150[6] and 50[7]	30[6] and 20[7]	--	150[6] and 50[7]	15[6] and 10[7]	86 ˚F	--	90% Survival
5	0.11[1] and 0.019[2]	0.1[6]	[8]6.5 - 8.5 [9]7.5 – 9.5 [10]6.5 – 8.3	--	[11]30[6], 15[12], and 10[7]	--	--	--	--	MCLs	--
6[14]	0.003[4] and 0.002[13]	--	BPO[17]	--	--	BPO[17]	--	--	--	--	--
7	0.11[1] and 0.019[2]	0.2	6.0[3] and 9.0[4]	--	55 and 95	--	75	25	--	--	--
8	0.1[6]	--	6.5[3] and 8.5[4]	BPO[17]	75[6, 15]	--	--	15	--	--	--
9	0.1[16]	--	6.0[3] and 9.0[4]	--	--	--	--	--	--	--	--

0. TDS=Total Dissolved Solids, BOD5=5-day Biochemical Oxygen Demand, O&G=Oil and Grease, Temp=Temperature
1. 4-day Average
2. 1-hour Average
3. minimum value
4. maximum value

5. Region 2 recently issued a tentative individual NPDES Permit for public review and comment
6. Daily Maximum
7. Monthly Average
8. 6.5 minimum and 8.5 maximum for discharges to Sacramento/San Joaquin River Basins
9. 7.5 minimum and 9.5 maximum for discharges to Goose Creek
10. 6.5 minimum and 8.3 maximum for discharges to Tulare Lake Basin
11. Same effluent limits for Total Suspended Solids (TSS)
12. Weekly Average
13. Median value of daily measurements
14. Also has effluent limits for bacteria and dissolved oxygen based on the basin plan objective
15. TSS only
16. 90 percentile of all samples during discharge
17. Basin Plan Objective
18. Region 1 - North Coast Region, 2 - San Francisco Bay Region, 3 - Central Coast Region, 4 - Los Angeles Region, 5 - Central Valley Region, 6 - Lahontan Region, 7 - Colorado River Region, 8 - Santa Ana Region, 9 - San Diego Region

Additionally, most large and small municipalities have Municipal Separate Storm Sewer System (MS4) NPDES permits for discharge of storm water to waters of the United States (U.S.). Some MS4 permit holders (permittees) allow drinking water system discharges to enter their storm water systems as authorized non-storm water discharges, typically through established local agreements. Other MS4 permittees do not allow such discharges to enter their storm water systems unless the State Water Board or Regional Water Board separately regulates those discharges prior to entering the system.
Title 40 Code of Federal Regulations part 122.28 provides for issuance of general permits to regulate a category of point sources if the sources: (1) involve the same or substantially similar types of operations; (2) discharge the same type of waste; (3) require the same type of effluent limitations or operating conditions; (4) require similar monitoring; and (5) are more appropriately regulated under a general order rather than individual orders. Thus:

1. This Order issues NPDES Permit No. CAG140001 with the intent to provide consistent and efficient regulatory coverage and requirements for drinking water system discharges statewide that have a low threat to water quality when properly mitigated through implementation of best management practices.
2. This Order authorizes drinking water system discharges of water that is dedicated to drinking water facilities for the primary purpose of providing safe and reliable drinking water including, but not limited to treatment facilities, storage and distribution systems, transmission systems, and water supply and monitoring wells in drinking water aquifers. Owners or operators of drinking water systems that apply for coverage under this Order and that are issued a Notice of Applicability are hereinafter referred to as “dischargers”. For the purposes of this Order, references

to "discharger" or "permittee" in applicable federal and State laws, regulations, plans, and policy are considered equivalent to references to the Dischargers herein.

Regulatory coverage under this Order serves as authorization for the Discharger to discharge water from its drinking water system(s) to waters of the United States (U.S.) either directly into waters of the U.S. or via other conveyance, including through a municipal storm sewer system. Coverage under this Order does not authorize discharges into a municipal storm water system. The municipal storm water system owner/operator has authority to allow these non-storm water discharges into the system. A municipal storm water system owner/operator retains authority to impose further conditions, restrictions or limitations, above and beyond the requirements of this Order, on water purveyors, as a condition for discharging into the system.

B. Water Purveyors NOT Required to Enroll in This Order

All water purveyors that have discharges to waters of the U.S. as described in this Order require an NPDES permit to discharge. The State Water Board is not mandating that small systems of less than 1,000 service connections enroll in this Order. However, the State Water Board strongly encourages water purveyors with small systems to obtain the regulatory coverage under this Order to comply with the Clean Water Act. The State Water Board recognizes that some water purveyors have obtained regulatory coverage through MS4 permits, or, due to their discharge contributing to an impairment managed by a previously-adopted Total Maximum Daily Load, the discharge must be regulated by a separate individual NPDES permit.

The State Water Board issues statewide NPDES permits for the regulation of storm water discharges from small communities and non-traditional entities. Regional Water Quality Control Boards issue NPDES permits for the regulation of storm water from large (non-small) municipalities. These storm water orders may authorize non-storm water discharges from fire hydrant flushing, operation, maintenance, or testing of potable water systems, and groundwater dewatering systems, similar to discharges covered under this Order. The State Water Board will not require a water purveyor that holds a local agreement with a municipal storm water permittee to obtain regulatory coverage under this Order provided the corresponding Regional Water Board acknowledges in writing that the local agreement demonstrates coverage under the municipal storm water permit.

This Order requires that, **by September 1, 2015**, water purveyors that meet the criteria **below** submit a Notice of Non-Applicability form (Attachment B2) certifying, in accordance with section V.B., *Signatory and Certification Requirements*, of Attachment D – Standard Provisions, that regulatory coverage from this Order is not required.

- The water purveyor discharges solely to a municipal separate storm sewer system(s) (MS4) and has an established local agreement with the MS4 permittee to discharge into its system(s), **AND** the corresponding Regional Water Board Executive Officer provides written confirmation to the State Water Board Deputy Director of Water Quality that the local agreement provides sufficient regulation of the subject drinking water system discharges through an existing MS4 NPDES permit; or

- The water purveyor is an MS4 permittee, or co-permittee, named on a State Water Board or a Regional Water Board issued MS4 permit that also authorizes discharges from drinking water systems, and all drinking water system discharges solely discharge into its own MS4 system.

Also by **September 1, 2015**, this Order requires water purveyors that meet the criteria **below** to submit a Notice of Non-Applicability form (Attachment B2) certifying, in accordance with section V.B., *Signatory and Certification Requirements*, of Attachment D – Standard Provisions, that regulatory coverage from this Order is not required.

- The water purveyor is regulated under an existing NPDES permit issued by the Regional Water Board because a Total Maximum Daily Load (TMDL) was adopted and the Regional Water Board determined that TMDL-specific permit requirements for its drinking water system(s) discharges are appropriate because those discharges may contribute to the impairment of the water body.

Also by **September 1, 2015**, this Order allows water purveyors that meet the criteria **below** the option of submitting a Notice of Non-Applicability form (Attachment B2) certifying, in accordance with section V.B., *Signatory and Certification Requirements*, of Attachment D – Standard Provisions, that regulatory coverage from this Order is not required.

- All discharges from the drinking water system do not discharge to a water of the U.S.

A water purveyor with multiple drinking water systems in California need only submit one Notice of Non-Applicability for its systems that meet the same criterion.

After review of each submitted Notice of Non-Applicability, the State Water Board's Deputy Director of Water Quality (Deputy Director) will either issue 1) a Notice of Non-Applicability Approval or 2) a response letter to the applicant outlining: (a) the missing information that deems the Notice of Non-Applicability incomplete, or (b) why the described discharge is not eligible and thus the water purveyor must obtain coverage under this Order. The water purveyor will have **60 days from the date of the response letter** to submit the items necessary to complete the Notice of Non-Applicability or to submit a complete application package in accordance with section II.C of this Order. A notice may be issued to a water purveyor that holds a drinking water system permit through the State Water Board Division of Drinking Water, and that has not submitted a Notice of Non-Applicability (or an application package for enrollment, as explained later in this Fact Sheet) by September 1, 2015, if that purveyor discharges from its drinking water system to a water of the U.S.

Drinking water systems that serve less than 1,000 connections that serve end users (this does not include water wholesalers), maintain the option to enroll in this Order and are not required to submit the Notice of Non-Applicability form.

C. Facilities and Discharges Covered Under this Order

This Order covers discharges from drinking water systems that qualify as a “community water system” as defined in the California Health and Safety Code, and wholesalers of water to community water systems. Community water systems provide daily drinking water for at least 15 service connections and at least 25 individuals at least 60 days each year. Community water systems must comply with the California Health and Safety Code per the California Code of Regulations titles 17 and 22. Title 17 ensures that water delivered by community water systems is wholesome and potable. Title 22 contains potable water standards, including the primary and secondary maximum contaminant levels (MCLs), and requires monitoring and reporting on surface water and groundwater drinking water sources.
Community water systems authorized to discharge under this Order include the following facilities:

1. **Transmission Systems.** Transmission systems are the pipes, pumps, canals, pump houses, and other components used to move water from the point of origin to storage reservoirs, treatment facilities, and distribution systems. Transmission systems do not have connections to serve end users. Above ground and underground pipes generally range in diameter from 24 inches to 90 inches. Some facilities are open channels. The water in transmission systems may or may not meet standards for human consumption.

2. **Distribution and Storage Systems.** Distribution systems are the pipes and associated pumps, valves, hydrants, storage facilities and other structures that distribute and store potable water from treatment plants, wells, reservoirs, and transmission systems to end users. Distribution pipes generally range in diameter from 2 inches to 24 inches.

3. **Wells in Drinking Water Aquifers.** Drinking water supply wells are installed in borings advanced into the ground to extract groundwater for use as drinking water. These types of wells are typically 12 inches to 36 inches in diameter. Monitoring wells are also in borings advanced into the ground to gage the depth to groundwater for drinking water aquifer management purposes such as groundwater overdraft protection. In addition monitoring wells serve as access points to sample the aquifer to characterize the water quality and to detect contaminants such as bacteria before the contaminant reaches the water supply. Monitoring wells are typically 12 inches or less in diameter. Discharges from water supply and monitoring wells occur during well development, maintenance (including flushing), rehabilitation, and sampling. This Order covers discharges from wells in unpolluted drinking water aquifers, and discharges from polluted drinking water aquifers that are properly treated to not cause or contribute to an adverse effect or impact to beneficial uses of the receiving waters.

4. **Water Treatment Plant or Facility.** Water treatment facilities treat water to the quality that is suitable for potable drinking water in accordance with the federal Safe Drinking Water Act, California Health and Safety Code and the State Water Board Division of Drinking Water permitting requirements. Water treatment systems range

from large treatment plants to small treatment facilities including well head treatment apparatuses.

D. Discharge Description

This Order provides regulatory coverage for planned and emergency discharges. Planned discharges are part of a water purveyor's essential activities to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and State Water Board Division of Drinking Water permitting requirements for providing reliable and safe drinking water. Planned discharges include scheduled and unscheduled discharges that take place under the control of the Discharger to comply with regulatory mandates. Emergency discharges occur due to system failures and emergencies. This Order serves as a general NPDES permit for the discharge to waters of the U.S. of surface water or groundwater that may be altered by chlorine, corrosion inhibiting agents, algaecides, or addition of other chemicals, but that does not adversely affect or impact beneficial uses of the receiving waters.

E. Discharger's Activities

This Order covers discharges that are essential to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and State Water Board Division of Drinking Water permitting requirements for providing reliable and safe drinking water. Discharges from these activities described in detail below are intermittent, short-term or seasonal in nature.

1. **Maintenance and Repair.** Facility maintenance and repairs occur frequently (e.g., multiple times a day) at different locations within a system. Discharges may be necessary when dewatering the repair or maintenance site. Underground facilities require excavation for access, and dewatering is necessary to prevent flooding. The resulting "trench dewatering" discharges are usually turbid because the discharge velocity may be high enough to dislodge and transport sediment from trenches and pits. Discharges may also be necessary to maintain positive water pressure within the drinking water system. Positive pressure may be necessary during repair and replacement of pipes, valves, and other components to prevent sediment, debris, and microorganisms from entering the system.
2. **System Flushing.** Flushing portions of a system may be necessary to replace stagnant water when demand is low, or to remove poor quality drinking water. Flushing may also be needed to respond to consumer complaints. Fire hydrants serve as access portals for flushing water distribution systems. Flushing can also occur from other valves or standpipe connections. Flushing may be part of routine operations, and can occur daily, weekly, monthly, or annually based on seasonal water use or known water quality trends. New system facilities or facilities that are periodically taken out of service for maintenance or in response to low water demands may necessitate flushing with super-chlorinated water prior to full operation.

3. **Pipeline, Tunnel, and Reservoir Drainage.** Occasionally, pipelines, tunnels, and reservoirs must be taken out of service for maintenance, such as inspections, repairs, and upgrades. Planned discharges may occur as often as once per year or as infrequently as once every 20 years. These facilities may also be drained in emergency circumstances due to unanticipated drinking water quality concerns.
4. **Groundwater Pumping.** The most common type of discharge from a supply well is well “blow-off” or purging water from the well. Well blow-off is required to reactivate a well after it has been out of service, to purge the system to collect a monitoring sample, or to purge the system when monitoring indicates that the water supply does not meet drinking water quality requirements. Discharges from water supply wells also occur as a result of well maintenance, such as unclogging a filter screen from sediment and mineral build-up.

F. Types of Discharges from Discharger’s Activities

This Order covers planned and emergency discharges that occur daily throughout the State. Planned discharges are a part of the Discharger’s essential activities, described in part in the previous section of this Fact Sheet. Emergency discharges occur when pipelines or other infrastructure break or leak, valves malfunction, or other unanticipated events occur, such as noncompliance with drinking water standards or hydraulic releases necessary to prevent pipeline rupture. Planned and emergency discharges may include, but are not limited to the following:

1. **Planned Discharges include discharges from:**
   a. Water treatment plant operations (excluding filter backwash that is discharged to a water of the U.S.)
   b. Distribution system storage tanks
   c. Distribution system dewatering, flushing, and pressure testing
   d. Fire flow/fire hydrant testing
   e. Meter testing
   f. Automated water quality analyzers
   g. Pressure relief valves
   h. Groundwater supply well flushing
   i. Groundwater well development, rehabilitation, and testing.
   j. Groundwater monitoring for purpose of supply well development, rehabilitation, and testing.
   k. Transmission system installation, cleaning, and testing.
2. **Emergency Discharges include discharges from:**
   a. Emergency system repairs, including transmission system failure or leaks, and distribution system pipe breaks.
   b. Trench dewatering.
   c. Catastrophic events.

G. Water Treatment Methods and Additives

This Order covers discharges to waters of the U.S. of surface water or groundwater that may be altered by chlorine, corrosion-inhibiting or algaecides agents containing metals such as zinc and copper, or other chemicals but that do not adversely affect or impact beneficial uses of the receiving water when properly managed. For disinfection, water purveyors treat their water with chlorine to comply with California Code of Regulations title 22 or to control microbial growth that can lead to corrosion. Chlorine removal, (also referred to as dechlorination) and its effectiveness depends in part on chemical dose and contact time. Discharger's disinfection and dechlorination processes may include, but are not limited to the following:

1. **Disinfection Treatment Methods.**
   a. **Chlorination.** Most dischargers use chlorine to disinfect their drinking water in accordance with California Code of Regulations, title 22, or to control microbial growth that can lead to corrosion. Chlorine reacts with organic matter and pipe materials (such as iron). As a result, the total chlorine residual decreases following chlorine treatment as water flows throughout the distribution system, making a system vulnerable to bacterial regrowth. Dischargers manage the lack of adequate chlorine concentrations in the distribution system by occasionally flushing water from dead end areas or other parts of their system with new water that has a sufficient chlorine residual concentration. Dischargers may also use booster stations to inject additional chlorine.
   b. **Chloramination.** Some Dischargers prefer chloramine over chlorine. Chloramine forms when chlorine and ammonia combine. Chloramine's disinfection power is one-hundredth that of free chlorine, but chloramine is also more stable and less reactive. Chloramine is also more persistent when released into the environment. Chloramine provides longer-lasting, more reliable protection against bacterial regrowth.
   c. **Super-chlorination.** Some treatment processes require superchlorinated treatment of the drinking water. Superchlorination is necessary when disinfecting new facilities, when returning facilities to service after taking them offline, and when contamination is detected. Superchlorinated water typically has a total chlorine residual concentration greater than 4.0 mg/L.

2. **Dechlorination Treatment Methods.** During planned discharges, flows may be connected to devices that add dechlorinating chemicals prior to discharge. During emergency discharges, dissolving pellets or mesh bags containing the dechlorinating chemicals may be placed in the path of the flow.

H. Example Drinking Water Discharge Characteristics

The following table illustrates the typical characteristics of the types of discharges covered by this Order. This table is not inclusive of all potential discharges:

Table F-1. Typical Characteristics of Drinking Water System Discharges

Facility and Discharge Category [1]	Planned or Emergency	Flow Rate (gpm) [2]	Duration [2]	Frequency [2]	Total Residual Chlorine (mg/L) Or Turbidity (NTU) [2]
Transmission Systems	**Transmission Systems**	**Transmission Systems**	**Transmission Systems**	**Transmission Systems**	**Transmission Systems**
Dewatering for new construction, maintenance, or inspection [3]	Planned	200 to 3,500	2 hours to 21 days	Once per year to 20 years	0.8 to 2.5 mg/L
Disinfecting of new construction	Planned	200 to 1,350	2 hours to 14 days	Upon start-up	10 to 50 mg/L
Maintenance or construction	Planned	50 to 200	2 to 10 minutes	Once per year to 20 years	0.8 to 2.5 mg/L
Aqueduct dewatering	Planned	250 to 50,000	1 to 2 days	Once per 2 to 10 years	0.8 to 2.5 mg/L
Disinfecting (new pipeline or storage facility after repair) [4]	Both	Up to 3,500	1 hour to 21 days	Upon initial use	25 to 200 mg/L
Water pipeline breaks, pipeline diameter > 24 inches (includes trench dewatering)	Emergency	5 to 3,500	30 minutes to 2 day		0.8 to 2.5 mg/L
Storage Facilities	**Storage Facilities**	**Storage Facilities**	**Storage Facilities**	**Storage Facilities**	**Storage Facilities**
Drain valve testing	Planned	5 to 300	60 to 120 minutes	Once per 5 to 10 years	0.8 to 2.5 mg/L
Reservoir rehabilitation pipe flushing	Planned	Varies	Varies		0.8 to 2.5 mg/L
Tank and reservoir draining for maintenance	Planned	200 to 1,350	1 to 14 days	2 per year to 1 per 5 years	0.8 to 2.5 mg/L
Reservoir overflow	Emergency	Varies	Varies	Varies	0.8 to 2.5 mg/L
Distribution Systems	**Distribution Systems**	**Distribution Systems**	**Distribution Systems**	**Distribution Systems**	**Distribution Systems**
Standpipe cleaning	Planned	500 to 2,000	1 to 2 days		0.8 to 2.5 mg/L

Facility and Discharge Category [1]	**Planned or Emergency**	**Flow Rate (gpm) [2]**	**Duration [2]**	**Frequency [2]**	**Total Residual Chlorine (mg/L) Or Turbidity (NTU) [2]**
Water meter field testing	Planned	50 to 1,000	30 to 60 minutes		0.8 to 2.5 mg/L
Dead-end pumping	Both	200 to 2,000	30 minutes to 1 hour	4 to 12 per year	0.8 to 2.5 mg/L
Line flushing through a hydrant	Both	700 to 1,600	≤10 to 60 minutes	1 to 3 per year per hydrant	0.8 to 2.5 mg/L
Distribution system maintenance or pipe breaks, pipeline diameter < 24 inches (includes trench dewatering)	Both	5 to 1,350	10 to 60 minutes		0.8 to 2.5 mg/L
Water quality management and water quality sampling (e.g., for bacteria; metals; taste; odor; etc.)	Both	100 to 15,000	5 minutes to several hours	1 to 50 (for management); up to 5,000+ events per year (for sampling)	0.8 to 2.5 mg/L
Unauthorized hydrant opening	Emergency	500 to 1,000	60 minutes to 8 hours		0.8 to 2.5 mg/L
Groundwater Well Operations	**Groundwater Well Operations**	**Groundwater Well Operations**	**Groundwater Well Operations**	**Groundwater Well Operations**	**Groundwater Well Operations**
Water supply well development	Planned	500 to 5,000	15 to 40 hours	Upon start-up	500 to 25,000 NTU
Water supply well rehabilitations	Planned	500 to 3,500	7 days	As-needed; up to 4 per year	500 to 20,000 NTU
Monitoring well sampling	Planned	15-60	20 minutes to 3 hours per well	Semi-annual or as needed	500 to 5000 NTU
Water supply well disinfection		500 to 3,500	30 minutes to 24 hours	As needed	≤ 200 mg/L
Monitoring well development	Planned	15-60	3-8 hours	Semi-annual or as needed	500 to 25,000 NTU

Facility and Discharge Category [1]	Planned or Emergency	Flow Rate (gpm) [2]	Duration [2]	Frequency [2]	Total Residual Chlorine (mg/L) Or Turbidity (NTU) [2]
Discharge by water supply well ("blow-off") for reactivation or monitoring	Both	500 to 3,500	30 minutes to 24 hours	Up to 4 per year (planned); or more frequently for emergency circumstances	500 to 20,000 NTU

Unit Abbreviations:

gpm = gallons per minute

mg/L = milligrams per liter

Footnotes:

[1] Source: Tikkanen, Maria, John Schroeter, Lawrence Y.C. Leong, and Rajagopalon Ganesh, 2001. Guidance Manual for the Disposal of Chlorinated Water. Denver, CO. AWWA Research Foundation and American Water Works Association; with modifications by the Alameda County Water District, Alameda County and San Jose Water Company, Santa Clara County, 2013.

[2] Milligrams per liter or Nephelometric Turbidity Units prior to implementation of best management practice. The data presented are typical ranges; actual conditions may vary outside of these ranges.

[3] This information does not apply to raw unaltered water.

[4] The processes to disinfect water pipelines and storage facilities use different chlorination methods, which have different chlorine contact times. Chlorinated water is dechlorinated before discharge under planned operations.

I. Example Discharges, Potential Threat to Receiving Water and Corresponding Permit Requirements.

As shown above, discharges to waters of the U.S. from the discharger's essential activities may have the potential to impact the receiving water. The threat to water quality is from toxicity of chlorination or metal-containing agents, loading of solids, large volume discharges, and discharges having high velocities. This Order contains permit requirements specifically targeted to protect the beneficial uses of the receiving water from impacts due to these threats, as shown in the following examples:

1. Direct discharge to inland surface waters, enclosed bays and estuaries
   Threat: Toxicity to aquatic life; Potential adverse impact on beneficial uses due to:

(1) concentrations of chemical constituents, (2) sediment and turbidity loading from discharge water and erosion, and (3) hydromodification.

Applicable Permit Requirements:

section IV.A Best Management Practices specifications,
section IV.C.1. Total chlorine effluent limitation,
section VI. Receiving water limitations,
Attachment E., section II. Monitoring requirements,
Attachment E., section VII. Reporting and record-keeping requirements.

2. Discharge to a municipal storm water system where the discharge travels less than 300 feet from the point of discharge into the storm drain system to the receiving water body; if the length of the storm drain conveyance is unknown, the distance shall be a direct 300 feet to a water of the U.S.

Threat: Toxicity to aquatic life; Potential adverse impact on beneficial uses due to: (1) concentrations of chemical constituents, (2) sediment, debris, trash and turbidity loading from discharge water and street scouring, and (3) hydromodification.

Applicable Permit Requirements:

section IV.A Best Management Practices specifications,
section IV.C.1. Total chlorine effluent limitation,
section VI. Receiving water limitations,
Attachment E., section II. Monitoring requirements,
Attachment E., section VII. Reporting and record-keeping requirements.

3. Discharge to a municipal storm water system where: (1) the discharge travels more than 300 feet, or (2) the receiving water body outside of a 300-foot radius of the location of discharge into the storm drain.

Threat: Potential adverse impact on beneficial uses due to: (1) sediment, debris, trash and turbidity loading from discharge water and street scouring, and (2) hydromodification.

Applicable Permit Requirements:

section IV.A Best Management Practices specifications,
section VI. Receiving water limitations,
Attachment E., section II. Monitoring requirements,
Attachment E., section VII. Reporting and record-keeping requirements.

4. Discharges of superchlorinated, supply well water due to development and rehabilitation, and large volume discharge, either directly or via a storm water system, to waters of the U.S.

Threat: Toxicity to aquatic life. Potential adverse impact on beneficial uses due to: (1) concentrations of chemical constituents, (2) sediment, debris, trash and turbidity loading from discharge water and street scouring, and (3) hydromodification.

Applicable Permit Requirements:
section IV.A Best Management Practices specifications,
section IV.B.1. Final total chlorine effluent limitation,
Attachment E., section II. Event Monitoring Requirements for Superchlorinated,
Attachment E., section VII. Reporting Requirements.

5. Discharges from portions of the drinking water system that:

(1) Directly discharge into or discharge to a storm water conveyance system that conveys the discharge into:

i. Storm water capture basin(s),

ii. Low impact development features, or

iii. Other groundwater-recharge system(s); and

(2) Are collected and used for landscape irrigation and/or other beneficial reuse.

Threat: No threat to water of the U.S. or water of the state.

Applicable Permit Requirements: Reporting only. No effluent limits or monitoring requirements. No further waste discharge requirements necessary.

J. Discharge Points and Receiving Waters

Although drinking water system discharges potentially occur along any point of the system alignment, and may occur concurrently, the discharges are considered "point source discharges" – discharges of a pollutant from a distinct point source, as defined more fully in title 40 Code of Federal Regulations part 122.2, to a water of the U.S. Discharges flow directly into receiving waters or indirectly to receiving waters via storm drains and other conveyance systems. Discharges into creeks, rivers, lakes, enclosed bays, estuaries, and the ocean occur throughout the State. The application package for coverage under this Order requires the water purveyor to identify the receiving waters for its discharges. If the system discharges into numerous small tributaries prior to discharging into a major water body, the application only requires a general description of the immediate receiving water bodies and the name of the major downstream water body(ies).

II. NOTIFICATION REQUIREMENTS

A. General Order Application

Dischargers enrolling for coverage under this General Order are required to submit a complete application package, including a Notice of Intent (NOI), Attachment B1 of this Order any time after the effective date of the Permit but no later than **September 1, 2015**. A water purveyor with multiple community water systems need only submit one complete application package, containing individual NOIs for each of its water systems and obtain one Notice of Applicability for regulatory coverage of all its systems that discharge to waters of the U.S. The application package must include all of the following items to be deemed complete:

1. A Notice of Intent for each community water system, including general information about the water purveyor and the existing or proposed discharge(s).

2. A site map that identifies:
a. The boundaries of the water purveyor's service areas,
b. The general location of the drinking water system,
c. The approximate general location of groundwater supply wells, and
d. The general identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s).

The intent of the site map is to provide general information regarding where the discharges are originating and their locations relative to receiving waters. The site map is part of the application package. Regulatory coverage applies to discharges identified in the application package. By providing boundaries of service areas and/or approximate locations of facilities, regulatory coverage of all potential discharges is included in the Notice of Applicability.

3. An application fee payable to the State Water Board that shall be in accordance with California Code of Regulations, title 23, or subsequent fee regulations updates. The current fee schedule is available at: (http://www.waterboards.ca.gov/resources/fees.)

4. Evaluation of multiple water use or beneficial reuse options, or the reason(s) that the discharge water cannot be placed for multiple uses or beneficial uses, as encouraged by the State Water Board in accordance with Article X, section 2 of the California Constitution, and Water Code section 100 (prohibition of the waste or unreasonable use of water). Pursuant to these state policies, the State Water Board strongly encourages discharges of water from drinking water systems to be captured for multiple uses prior to surface water discharge, or to be routed to groundwater infiltration facilities. Therefore, to obtain coverage under this Order, a water purveyor is required to evaluate its water reuse options. These options include:

a. Discharging into a storm water system that employs low impact development practices or flows into storm water capture basins to recharge groundwater.

b. Collecting and using the water for landscape or agricultural irrigation or other appropriate uses in lieu of potable drinking water supply.

Discharges to land from drinking water systems that do not drain to waters of the U.S. do not need authorization to discharge under an NPDES permit. Discharges to groundwater may require waste discharge requirements issued by the State and/or Regional Water Boards. As an incentive to promote multiple uses of drinking water system discharges, the State Water Board generally will not require separate waste discharge requirements or monitoring for discharges otherwise regulated under this Order that are beneficially reused because they are intermittent and of relatively-good quality (not including waste that threatens ground water quality). A water purveyor must estimate the quantity of water discharged from its system that is beneficially reused, and report it in the annual report. If the entire drinking water system does not discharge to waters of the U.S., NPDES permit coverage is not needed.

5. Receiving water information, including names of receiving water bodies and major downstream water bodies.

6. For applicable discharges into waters of the U.S. identified in section III.K of this Fact Sheet, a TMDL constituent-specific supplement to the application package that includes: a) laboratory analysis of TMDL-specific constituents listed in section III.K, and b) TMDL-specific Best Management Practices to address the constituents.

B. State Water Board Notice of Applicability or Ineligibility for Coverage Under this Order

After the water purveyor's application package is deemed complete, the State Water Board's Deputy Director of Water Quality (Deputy Director) will issue a Notice of Applicability (NOA). Regulatory coverage for the planned and emergency discharges that occur within the areas identified in the application package commences with the date of issuance of a Notice of Applicability to the water purveyor. If the submitted application package is not complete in accordance with this Order, or the discharge is deemed ineligible for coverage under this Order, the Deputy Director will send a response letter to the applicant outlining: (1) the missing information that renders the application package incomplete, or (2) why the described discharge is not eligible for coverage under this Order. The water purveyor has **60 days from the date of the response letter** to provide State Water Board staff the items necessary to complete the application package.

C. Permit Coverage Termination

1. **Termination of Existing Regional Water Board Permit Coverage.** Upon the issuance of the NOA in accordance with this Order, the State Water Board expects the applicable Regional Water Board to terminate regulatory coverage under an existing non-MS4 Regional Water Board NPDES permit for discharges newly regulated under this Order. The State Water Board expects all Regional Water Board permit coverage of drinking water systems that are not separately regulated due to site-specific TMDL requirements to be terminated within one year of the Adoption Date of this Order.

2. **Termination of Statewide Permit Coverage or Revocation of Notice of Non-Applicability.** The Deputy Director may terminate coverage or revoke a Notice of Non-Applicability Approval (NONAA) under this Order for any of the specified causes, and require application for coverage under an individual or other NPDES permit as set forth in title 40 Code of Federal Regulations part 122.28(b)(3). Causes for permit coverage termination or NONAA revocation include, but are not limited to, the following:
   a. Violation of any term or condition of this Order; or
   b. Misrepresentation or failure to disclose all relevant facts in obtaining permit coverage or non-applicability status under this Order; or
   c. Written request from a Discharger to terminate enrollment because discharge has ceased or that the permit is no longer needed.

   Annual permit fees will be assessed by the State Water Board up to the date of written termination notification from the State Water Board to the Discharger, or the date of a termination request letter from the Discharger to the State Water Board, whichever is applicable.

D. Permit Transfer

A change in ownership of the facilities authorized to discharge through coverage under this Order requires the current owner to provide written notice to the State Water Board at least 30 days in advance of transfer of ownership. The Deputy Director may determine that the new owner must submit an application package to seek coverage under this Order if the nature or location(s) of the discharge(s) have changed from the application package on file.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the applicable plans, policies, and regulations identified in the Findings in section III of this Order. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities

This Order serves as Waste Discharge Requirements pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA, and California Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit for point source discharges from multiple discharge points to surface waters, storm drains, and other conveyances leading to surface waters.

B. State Implementation Policy

The *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) establishes implementation provisions for priority pollutant criteria, and objectives and provisions for chronic toxicity control. However, section 5.3 of the SIP allows the State Water Board to grant categorical exceptions from meeting priority pollutant criteria/objectives for discharges from drinking water systems conducted by the owners or operators to fulfill statutory requirements mandated by the federal Safe Drinking Water Act and the California Health and Safety Code. The California Toxics Rule contains criteria for 126 priority pollutants that may be present in these drinking water systems discharges. In many cases, discharges from drinking water systems do not comply with all of the applicable priority pollutant criteria (such as for the protection of aquatic life) since potable and treated drinking water are only required to comply with maximum contaminant levels (MCLs) for the protection of public health. A review of the 126 priority pollutants found that there are priority pollutant criteria that are more stringent than the established MCLs.

The planned and emergency drinking water systems discharges covered under this Order are in accordance with the exception granted by the State Water Board through Resolution 2014-0067, allowing water purveyors an exception to comply with priority pollutant criteria for the priority pollutants that have an applicable California Toxic Rule (CTR) criterion more stringent than its corresponding MCL, or do not have an adopted pollutant-specific MCL. The exception was granted in accordance with the requirements set forth in Section 5.3 of the State Implementation Policy.

C. California Ocean Plan

In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (hereinafter Ocean Plan), as amended. The latest Ocean Plan amendment became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. To protect the beneficial uses of ocean water, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan and are applicable for those discharges entering directly into the Ocean or indirectly via a storm water system that drains into the Ocean near the location of discharge. This Order does not authorize direct discharges into Areas of Special Biological Significance (ASBS).

Section III.J of the Ocean Plan allows the State Water Board to grant an exception to specified Ocean Plan requirements where the State Water Board determines that the exception will not compromise protection of beneficial uses of ocean waters and the public interest will be served. In many cases, discharges from drinking water systems due to mandated activities do not comply with all of the established Ocean Plan objectives (such as for protection of aquatic life or human health based on more stringent carcinogenic objectives) since these discharges are only required to comply with MCLs for the purpose of public health and safety. A review of the Ocean Plan pollutant water quality objectives shows that there are a number of pollutants that may occur in mandated drinking water system discharges, with Ocean Plan objectives that are more stringent than the MCLs. State Water Board Resolution 2014-0067 granted an Ocean Plan exception to water purveyors for the pollutants that have an Ocean Plan objective more stringent than its corresponding MCL or do not have an adopted pollutant-specific MCL. The exception was granted in accordance with the Ocean Plan exception requirements.

D. California Environmental Quality Act (CEQA).

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

Pursuant to CEQA, Public Resources Code section 21100 et seq., on November 18, 2014 the State Water Board adopted Resolution 2014-0067 approving a Mitigated Negative Declaration (MND) for exceptions from specified requirements of the State Implementation Policy and California Ocean Plan for statewide discharges resulting from mandated activities required by the federal Safe Drinking Water Act and California Health and Safety Code. The MND concludes that discharges from drinking water systems have less than significant impact to the environment with appropriate mitigation incorporated. This Order implements Resolution 2014-0067 and establishes appropriate mitigation requirements for discharges authorized under this Order.

E. Regional Water Boards' Water Quality Control Plans

The Regional Water Boards have adopted Water Quality Control Plans (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. In addition, the Basin Plans implement State Water Board Resolution No. 88- 63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plans identify typical beneficial uses as follows: municipal and domestic supply, agricultural irrigation, stock watering, process supply, service supply, hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, navigation, rare, threatened, or endangered species habitat, groundwater recharge, and freshwater replenishment. Requirements of this Order implement provisions contained in the applicable Basin Plans.

F. Antidegradation Policy

Section 131.12 of 40 C.F.R. requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing high water quality be maintained unless degradation is justified based on specific findings. The State Water Board and Regional Water Board's Water Quality Control Plans implement, and incorporate by reference, both the state and federal antidegradation policies. The permitted discharges must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

Given the nature of a general permit and the broad range of beneficial uses to be protected across the state, it is not feasible to analyze each surface water body in the state to determine which water bodies are of high quality for the constituents in the discharges authorized by this Order. The State Water Board finds that, due to the intermittent, seasonal and temporary characteristics of these discharges, the impact on existing surface water quality from these discharges will be insignificant, as further explained in the MND approved by the State Water Board in Resolution 2014-0067. While surface waters may be temporarily degraded and there may be temporary excursions above water quality objectives in the immediate vicinity of these discharges, any such impacts to surface water quality that may occur are consistent with the maximum social and economic benefit of the people of the state, provided that the discharges comply with this Order. The discharges are a necessary consequence of providing safe, clean, affordable, and accessible drinking water to the people of the state in accordance with the state policy declared in Water Code section 106.3, subdivision (a), and the discharges are mandated by drinking water laws and regulations. The BMPs required under this Order constitute best practical treatment and control of these discharges. Therefore the discharges permitted under this Order are consistent with the antidegradation provision of section 131.12 and the State Water Board Resolution 68-16.

G. Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and title 40 Code of Federal Regulations part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. This Order is a new statewide NPDES permit that regulates discharges from community drinking water systems statewide. Some of these same discharges are currently regulated under existing Regional Water Board NPDES permits. Some of these same discharges are not regulated at all. This Order, when implemented, will provide consistent regulatory requirements that apply to discharges from drinking water systems statewide. The following existing Regional Water Board NPDES permits regulate discharges from community drinking water systems, among other types of discharges, and were used to guide the development of this Order. Existing NPDES permits' effluent limitations and requirements in these Regional Water Board permits were analyzed for the purpose of analyzing backsliding.

The San Francisco Bay Regional Water Board Permit (Order R2-2009-0033) is a general permit applicable only to surface water treatment facilities for potable supply discharges for either long term or short term. The short term discharges include limits for TSS, settleable matter, pH, total chlorine residual, total trihalomethanes (TTHMs), zinc, and acute toxicity. The treatment of any surface waters to make them suitable for drinking includes filtration and disinfection. This treatment is expected to remove any BOD, TSS or settleable matter present in the surface water. For the other effluent limits of TTHMs and zinc, the discharges would be in compliance with MCLs for TTHMs as required by the federal Safe Drinking Water Act, the California Health and Safety Code, and the State Water Board's Division of Drinking Water permitting requirements. In addition, pursuant to the SIP and Ocean Plan exceptions, the discharges covered under this Order are not required to comply with zinc objectives. Therefore, there is no need to establish TSS, TTHMs and zinc effluent limitations, nor an effluent limitation for pH.

The Los Angeles Regional Water Board Permit (Order R4-2003-0108) is a general permit for discharges of groundwater from potable water supply wells to surface waters and it includes limits of TSS, turbidity, BOD, settleable solids, chlorine residual, pH, TTHMs, Methyl tertiary butyl ether (MTBE) and a list of 15 volatile organic compounds (VOCs) that are also considered priority pollutants, PCBs, and various limits for TDS, Sulfate, Chloride, Boron and Nitrogen applicable per watershed/stream reach. Groundwater that is suitable for drinking water purposes receives natural or well-head treatment so it is not expected to have BOD, TSS, or settleable solids. For this reason and as previously discussed, there is no need to impose limits for BOD, TSS, settleable solids, pH, and TTHMs. In the case of PCBs and the 15 VOCs, as these are priority pollutants that are granted exceptions, it is not necessary to establish limits for these pollutants. With regards to the limits for TDS, Sulfate, and chloride, compliance with the federal Safe Drinking Water Act, the California Health and Safety Code, and the State Water Board's Division of Drinking Water permitting requirements, should result in compliance with the TDS, sulfate, and chloride limits, so there is no need to impose the same limitations in this Order. With regards to nitrogen, compliance with the nitrate MCL should ensure compliance with the nitrogen limitations. During the effective period of R4-2003-0108 there were no issues of non-compliance with the boron limitations. This is new information to justify that there is no reasonable potential to exceed the boron limits. Therefore, there is no need to impose a boron limitation.

The Central Valley Regional Water Board Permit (Order R5-2013-0074) is a general permit applicable to dewatering activities and other types of low threat discharges to surface waters including discharges from drinking water systems. It includes limitations for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), settleable solids, pH, and total chlorine residual. Since this Permit applies to a large set of what the Central Valley Water Board considered low threat discharges, it established a wide range of effluent limitations to ensure protection of beneficial uses.

This statewide Order and its requirements are specifically applicable to drinking water systems that discharge either groundwater and/or surface water that have/has received treatment per state regulations. As previously discussed, treated surface water and groundwater suitable for drinking water purposes are not expected to have BOD, TSS, or settleable solids. In addition, sedimentation and erosion control BMPs are required to be implemented to prevent the discharges authorized by this Order from carrying sediment and causing soil erosion that would add TSS and settleable solids in their discharge prior to entering a storm drain or receiving water directly. It is therefore unnecessary to establish effluent limits for BOD, TSS, or settleable solids in this Order.

Community drinking water systems are required to maintain a pH of 7.0 in their distribution systems as part of their corrosion control treatment plans (40 C.F.R. section 141.82(f)). For all other community systems that do not need to maintain a corrosion control plan, it is expected that they will have no issues with pH levels because they have no issues with corrosion of their systems. Including an effluent limitation for pH in this Order would unnecessarily regulate those systems that are already required to comply with a 7.0 pH level and force other community drinking water systems to add additional chemicals prior to discharging, which in turn may add salts and other pollutants that may cause water quality impacts. Therefore, it is unnecessary to include an effluent limitation for pH in this Order.

The San Diego Regional Water Board Permit (Order R9-2010-0003) is a general permit for discharges of hydrostatic test water and potable water to surface waters and storm drains or other conveyance systems. It establishes limits for total chlorine residual and pH. As previously discussed there is no need to include an effluent limit for pH.

This statewide Order requires that discharges be managed by the use of multiple BMPs, and also contains effluent limitations for chlorine residual and turbidity and receiving water limitations for pH, chemical constituents, sediment and total suspended solids, and toxicity, among other requirements. This Order does not include specific effluent limitations for BOD, TSS, settleable solids or settleable matter, pH, TTHMs, zinc, acute toxicity, MTBE, 15 priority pollutants VOCs, PCBs, TDS, sulfate, chloride, boron and nitrogen, which are included in some of the comparable Regional Water Board permits, as described above. To the extent that this Order may impose less stringent limitations than those contained in the existing Regional Water Board permits, applicable exceptions to the anti-backsliding prohibition that are supported by the analysis above include: waters in attainment, where permit requirements are consistent with antidegradation (§ 303(d)(4)(B)); new information available (§ 402(o)(2)(B)(i)); and events beyond dischargers' control (§ 402(o)(2)(C)), due to the mandatory or emergency nature of the discharges. All requirements under this Order, when implemented, will increase the regulatory requirements over drinking water system discharges on a statewide basis. The effluent limitations for chlorine residual and numerical threshold of 100 NTU for turbidity in this Order are as stringent as the Regional Water Board permits. Effluent limits in broader Regional Board General Permits for discharges to inland waters, enclosed bays and estuaries consist of monthly averages of 50 NTU or 75 NTU. The 100 NTU numerical threshold in this Order is an instantaneous numeric action level that requires further implementation of BMPs when exceeded. An instantaneous action level of 100 NTU for applicable discharges that are short term and intermittent is as protective, if not more protective, than a monthly average of 50 NTU or 75 NTU.

H. Monitoring and Reporting Requirements

Title 40 Code of Federal Regulations part 122.48, requires that all NPDES permits specify requirements for recording and reporting monitoring results. Section 13267 and section 13383 of the Water Code authorize the regional boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) in this Order establishes monitoring, recordkeeping, notification, and reporting requirements to implement State and federal requirements. This MRP is provided in Attachment E.

To address the cost of compliance to dischargers and the cost of implementation to the Water Boards, the monitoring and reporting requirements in this Order are designed to provide necessary information for the discharger to make informed decisions regarding implementation of best management practices, and for the reporting of information that has pertinent value to the protection of water quality. This Order implements representative monitoring requirements, allowing one monitoring sample to represent the quality of other repetitive discharges that are similar in nature. Discharges that are considered to be similar in nature include those that have the following elements in common: (1) the same general water supply, (2) undergo the same water treatment, and (3) are managed through the same series of best management practices. This Order additionally requires annual monitoring and reporting of non-compliant discharges, mandatory recordkeeping, Regional Water Board notification of high volume discharges, reporting of estimated annual volumes discharged to surface water and reporting of the estimated volume of water put to multiple uses prior to surface water discharge or routed to ground water infiltration.

I. Endangered Species Act

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code § 2050 et. seq) or the Federal Endangered Species Act (16 U.S.C.A. § 1531 et. seq). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

J. Impaired Water Bodies on CWA 303(d) List

Under section 303(d) of the 1972 CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after discharges of point sources of pollution have installed the minimum required levels of pollution control technology. On October 11, 2011, U.S. EPA gave final approval to California's 2010 section 303(d) List of Water Quality Limited Segments. The Basin Plans reference this list of Water Quality Limited Segments (WQLSs), which are defined as "…*those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources* (40 C.F.R. part 130.2(j))." The Basin Plans also state, "*Additional treatment beyond minimum federal standards will be imposed on dischargers to [WQLSs]. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment*." Impaired waters are those waters not meeting quality standards pursuant to section 303(d) of the CWA, thus do not support beneficial uses. States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality. California impaired waters, as approved by the State Water Board, are listed on: http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/2010_combo303d.xls.

This Order does not authorize discharges from new drinking water systems (not an expansion of an existing system) into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body.

K. Applicable Total Maximum Daily Loads (TMDLs) with Waste Load Allocations (WLAs) to Water Purveyors

TMDLs in California are developed either by the Regional Water Boards or by U.S. EPA. TMDLs developed by Regional Water Boards are designed as Basin Plan amendments and include implementation provisions. TMDLs developed by U.S. EPA typically contain the total load and load allocations required by section 303(d), but do not contain comprehensive implementation provisions. This stems from the fact that U.S. EPA authorities related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by CWA section 319. TMDLs are currently required for all waters and pollutants on the 303(d) list. TMDLs must consider and include allocations to both point sources and nonpoint sources of listed pollutants. Although the abbreviation stands for "Total Maximum Daily Load," the limitations contained in a TMDL may be other than "daily load" limits. There also can be multiple TMDLs on a particular water body, or there can be one TMDL that addresses numerous pollutants. The basis for grouping pollutants into one TMDL is typically whether or not there can be a common analytical approach to the assessment or a common management response to the impairment.

A review of Regional Water Board TMDLs found that, as of the adoption date of this Order, only the Los Angeles Regional Water Board and the San Diego Regional Water Board have existing (previously adopted) TMDLs in their basin plans that may indirectly imply that waste load allocations are applicable to the discharges from drinking water systems regulated under this General Order. In many of the existing TMDLs, waste load allocations apply to general categories of discharges (such as “other NPDES discharges”, “general NPDES discharges” or “minor NPDES discharges”) that indirectly include discharges from drinking water systems.

The State Water Board is required to ensure that the effluent limits in this Order are “consistent with the assumptions and requirements of any available waste load allocation for the discharge.” (40 C.F.R. § 122.44(d)(1)(vii)(B).) Although these TMDLs apply to the discharges that are authorized under this Order, none of the TMDLs or supporting staff reports indicate that the discharges from drinking water systems authorized under this Order are significant sources of the relevant pollutants. Based on the data that is currently available, and due to the high quality and intermittent and short-term nature of the discharges from drinking water systems authorized under this Order, it is unlikely that these discharges contribute to the impairment of the TMDL-related water bodies. The State Water Board has determined that the intermittent, short-term and seasonal discharges regulated under this Order do not contribute to the impairment, and requirements more stringent than those included in this Order will not contribute to the actions needed to address the impairment. Therefore, it is consistent with the assumptions and requirements of the waste load allocation in these TMDLs for this Order to not include any TMDL-specific effluent limitations. However, due to the existing language in the TMDLs identified in this section, the State Water Board is requiring laboratory sampling to be included in the application process of this Order, to confirm that pollutants in the subject drinking water system discharges are not at levels that are contributing to the existing impairment. The State Water Board is also requiring that applicants describe and implement applicable TMDL pollutant-specific management practices to reduce the subject pollutant concentration to the maximum extent possible. The data submitted will be evaluated on a case by case basis and in consultation with Regional Board staff. The evaluation will be based on specific factors such as the amount of discharge, duration of discharge, type of pollutant, and consideration of the applicable established Waste Load Allocations for each TMDL to determine whether the conditions of this Order address the applicable TMDL requirements.

If the Deputy Director determines that any of these TMDLs, or any newly approved TMDLs, establish waste load allocations that should be implemented through TMDL-specific permit requirements for the discharges from drinking water systems that are authorized under this Order, the water purveyor will be required to enroll in this Order and maintain enrollment unless and until the Regional Water Board issues an individual or general permit for those discharges contributing to the impairment. Alternatively, if further TMDLs are adopted that address pollutants that are likely to be in discharges from drinking water systems, and allocate waste loads specifically to water purveyors regulated under this Order, the State Water Board may consider adding additional TMDL-specific permit requirements to Attachment G of this Order in a subsequent permit amendment or renewal.

To facilitate a water purveyor's identification of an applicable TMDL in the Los Angeles and San Diego regions, the following table has been provided to identify the receiving water bodies and corresponding pollutants for which an applicant must provide an application supplement, in accordance with Section II.C.4 of this Order. The table below includes only the TMDL-specific constituents that may pertain to drinking water discharges and/or additional pollutants the discharges assimilate as they flow into receiving waters. A summary providing general information regarding each TMDL adopted by U.S. EPA or the Regional Water Boards for the Los Angeles and San Diego regions that are applicable to the discharges from drinking water systems authorized under this Order, is provided following the table.

Table F-2. Los Angeles Regional Water Boards' 303(d) list Waterbodies and applicable TMDL-specific constituents

TMDL WATERBODY	TMDL CONSTITUENT
Ballona Creek	Copper Lead Zinc
Ballona Creek Estuary	Cadmium Copper Lead Silver Zinc TSS Chlordane DDTs DDD Total PCBs
Ballona Creek, Ballona Estuary and Sepulveda Channel	Total Coliform E. coli
Calleguas Creek	Boron Total Dissolved Solids Sulfate Chloride Chronic Toxicity Unit (TU_c) Chlorpyrifos Diazinon Chlordane 4,4-DDD 4,4,-DDE 4,4,-DDT Dieldrin PCBs Toxaphene
Calleguas Creek, Reach 1, 2, 3, 4, 5, 9, 10, 11, 12, and 13	Copper Nickel
Calleguas Creek, Reach 4 and 5	Selenium

Colorado Lagoon	Chlordane Dieldrin Lead Zinc PAHs PCBs DDT
Dominguez Channel	Toxicity
Dominguez Channel and Torrance Lateral	Copper Lead Zinc
Dominguez Channel Estuary	PAHs Chlordane Dieldrin
Dominguez Channel Estuary and Greater Harbor Waters	Copper Lead Zinc 4-4-DDT Total PCBs
Compton Creek	Copper Lead
Echo Lake	Total Nitrogen Total Phosphorus
El Dorado Park Lake	Total Nitrogen Total Phosphorus Mercury
Lake Calabasas	Total Nitrogen Total Phosphorus
Lincoln Lake	Total Nitrogen Total Phosphorus
Long Beach City Beaches and the Los Angeles River Estuary	Total Coliform
Los Angeles Harbor	Total Coliform

Los Angeles River	Nitrate-nitrogen Nitrite-nitrogen Nitrate-nitrogen + nitrite-nitrogen Cadmium Copper Lead Zinc E. coli
Los Angeles River above LA-Glendale WRP	Ammonia
Los Angeles River below LA-Glendale WRP	Ammonia
Los Angeles River Reach 1	Copper Lead
Los Angeles River Reach 2 and Arroyo Seco	Copper Lead
Los Angeles River Reach 3 above LA- Glendale WRP and Verdugo	Copper Lead
Los Angeles River Reach 3 below LA- Glendale WRP	Copper Lead
Los Angeles River Reach 4	Copper Lead
Los Angeles River Reach 5,6 and Bell Creek	Copper Lead Selenium
Los Angeles River Burbank Western Channel, above WRP	Copper Lead
Los Angeles River Burbank Western Channel, below WRP	Copper Lead
Los Angeles River tributaries	Ammonia
Los Cerritos Channel	Copper Lead Zinc
Macado Lake	Total PCB DDD (all congeners) DDE (all congeners) DDT (all congeners) Total DDT Chlordane Dieldrin

Malibu Creek	E. coli
Malibu Creek Lagoon	Total Coliform
Marina Del Rey Mothers Beach and Back Basins	Total Coliform
Park Lake, Peck Rd	Total Nitrogen Total Phosphorus
Rainbow Creek	Total Nitrogen Total Phosphorus
Rio Hondo Reach 1	Copper Lead Zinc
San Gabriel River Estuary	Copper
San Gabriel River, Reach 1	Copper
San Gabriel River, Reach 2	Lead
San Gabriel River, Coyote Creek	Copper Lead Zinc
San Gabriel River, San Jose Creek, Reach 1 and 2	Selenium
Santa Clara River	Total Coliform E. coli
Santa Clara River, Reach 7	Ammonia as Nitrogen Nitrate plus Nitrite as Nitrogen
Santa Clara River, Reach 3	Ammonia as Nitrogen Nitrate plus Nitrite as Nitrogen
Santa Fe Dam Park Lake	Total Nitrogen Total Phosphorus
Santa Monica Bay	Total Coliform
Upper Santa Clara River, Reach 3	Chloride
Upper Santa Clara River, Reaches 4B, 5 and 6	Chloride
Ventura Coastal (Miscellaneous)	Total Coliform
Ventura River	Total Nitrogen Total Phosphorus

Table F-3. San Diego Regional Water Boards' 303(d) list Waterbodies and applicable TMDL-specific constituents

TMDL WATERBODY	POLLUTANT
Alisa Hydrologic Subarea	Total Coliform
Chollas Creek	Copper Lead Zinc
Chollas Hydrologic Subarea	Total Coliform
Dana Point Hydrologic Subarea	Total Coliform
Lower San Juan Hydrologic Subarea	Total Coliform
Miramar Reservoir Hydrologic Subarea	Total Coliform
Mission San Diego Hydrologic Subarea & Santee Hydrological Subarea	Total Coliform
Rainbow Creek	Total Nitrogen Total Phosphorus
San Clemente Hydrologic Subarea	Total Coliform
San Dieguito Hydrologic Subarea	Total Coliform
San Joaquin Hills Hydrologic Subarea & Laguna Hills Hydrologic Subarea	Total Coliform
San Marcos Hydrologic Subarea	Total Coliform
San Luis Rey Hydrologic Subarea	Total Coliform
Scripps Hydrologic Subarea	Total Coliform
Tecolote Hydrologic Subarea	Total Coliform

Summary of Los Angeles Region Water Quality Control Board TMDLs

The following is a summary of TMDLs in the Los Angeles region that have waste load allocations for general NPDES discharge categories, followed by a general description. Table F-2 in this section lists the 303(d) list water bodies and TMDL-specific constituents. These TMDLs have been adopted by the Regional Water Board, and approved by the State Water Board and/or the U.S. EPA under Clean Water Act section 303(c), prior to the adoption date of this Order. This Order solely implements the requirements of existing TMDLs; this Order does not modify an existing TMDL or basin plan language. Further detailed information on the summary of listed TMDLs below, as adopted by the Regional Water Quality Control Boards or U.S. EPA, can be found at the following websites:

Los Angeles Regional Board TMDL website
(http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/)
or
U.S. EPA TMDL website
(http://epa.gov/region09/water/tmdl/final.html)

1. **Total Maximum Daily Load for Nitrogen, Phosphorus, Mercury, Trash, Organochlorine Pesticides and Polychlorinated Biphenyls (PCBs) in the Los Angeles Area Lakes**

U.S. EPA established TMDLs in the following nine lakes in the Los Angeles region, for the following pollutants:

- Peck Road Park Lake: nitrogen, phosphorus, chlordane, DDT, dieldrin, PCBs, trash
- Lincoln Park Lake: nitrogen, phosphorus, trash
- Echo Park Lake: nitrogen, phosphorus, chlordane, dieldrin, PCBs, trash
- Lake Calabasas: nitrogen, phosphorus
- El Dorado Park Lakes: nitrogen, phosphorus, mercury
- Legg Lakes (North, Center and Legg): nitrogen, phosphorus
- Puddingstone Reservoir: nitrogen, phosphorus, chlordane, DDT, PCBs, mercury, dieldrin
- Santa Fe Dam Park: nitrogen, phosphorus
- Lake Sherwood: mercury

The NPDES permits in the watersheds draining to the impaired lakes include municipal separate storm sewer system (MS4) permits, a California Department of Transportation (Caltrans) storm water permit, general construction storm water permits, general industrial storm water permits, and a general NPDES permit. Other than the MS4 and Caltrans storm water permits, there are no major individual NPDES permits in the watersheds draining to the impaired lakes. Sources of pollutants include discharges of potable water used to maintain lake levels.

2. **Total Maximum Daily Load for Chloride in the Upper Santa Clara River**

Chloride levels in Reach 3 of the Santa Clara River exceed the water quality objective (WQO) of 80 mg/L for chloride in Reach 3 established in the Water Quality Control Plan, Los Angeles Region (Basin Plan). U.S. EPA established a TMDL for Reach 3. There are two major point sources that discharge into Reach 3, the Santa Paula and Fillmore Water Reclamation Plants. Minor point source discharges to Reach 3 include:

- storm water regulated under the NPDES municipal stormwater permit
- runoff from construction sites regulated under the statewide construction general NPDES permit,
- storm water regulated under the Caltrans statewide NPDES permit,

- runoff from industrial sites regulated under the statewide industrial facility general NPDES permit, and
- dewatering operations regulated under NPDES permits

In addition, elevated chloride concentrations are causing impairments of the water quality objective of 100 mg/L in Reach 5 (EPA 303(d) list Reach 7) and Reach 6 (EPA 303(d) list Reach 8) of the Santa Clara River (SCR). These reaches were on the 1998 and 2002 Clean Water Act (CWA) 303(d) lists of impaired water bodies as impaired due to chloride. The objectives for these reaches were set to protect all beneficial uses; agricultural beneficial uses have been determined to be most sensitive, and not currently attained at the downstream end of Reach 5 (EPA 303(d) list Reach 7) and Reach 6 (EPA 303(d) list Reach 8) in the Upper Santa Clara River (USCR). Irrigation of salt sensitive crops such as avocados, strawberries, and nursery crops with water containing elevated levels of chloride results in reduced crop yields. Chloride levels in groundwater in Piru Basin underlying the reach downstream of Reach 5 are also rising.

3. Total Maximum Daily Load for Bacteria in the Santa Monica Bay

Many of the beaches along Santa Monica Bay (SMB) were listed on the California's 1998 section 303(d) List, due to impairments for coliform or for beach closures associated with bacteria generally. The Los Angeles Regional Board adopted TMDLs to address bacteriological water quality impairments for 44 beaches along Santa Monica Bay located in Los Angeles County, California. WLA(s) are expressed as the number of sample days at a shoreline monitoring site that may exceed the following single sample numeric targets:

- Total coliform density shall not exceed 10,000/100ml.
- Fecal coliform density shall not exceed 400/100ml
- Enterococcus density shall not exceed 104/100ml
- Total coliform density shall not exceed 1000/100 ml if the ratio of fecal-to-total coliform exceeds 0.1.

With the exception of isolated sewage spills, storm water runoff conveyed by storm drains and creeks is the primary source of elevated bacterial indicator densities to the SMB beaches during wet weather. Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. All responsible jurisdictions and responsible agencies (local agencies that are responsible for discharges from a publicly owned treatment works to the SMB watershed or directly to the Bay, permittees or co-permittees on a municipal storm water permit, the California Department of Transportation, and other agencies that have jurisdiction over a beach adjacent to SMB) within a subwatershed are jointly responsible for complying with established allowable number of exceedance days.

4. Total Maximum Daily Load for Nutrients in the Los Angeles River

Reaches of the Los Angeles River and its tributaries were listed as impaired for nitrogen compounds (ammonia, nitrate, and nitrate) and related effects such as algae, pH, odor, and scum on the 2002 303(d) list. These reaches were listed because numeric and narrative water quality objectives for nitrogen compounds and related effects were exceeded, thereby impairing warm, freshwater, and wildlife habitats, and recreation beneficial uses.

The principal source of nitrogen compounds to the Los Angeles River is discharges from the Donald C. Tillman Water Reclamation Plant (WRP), the Los Angeles-Glendale WRP, and the Burbank WRP. During dry weather period, the major POTWs contribute 84.1% of the total dry weather nitrogen load. Urban runoff, storm water, and groundwater discharge may also contribute nitrate loads. Further evaluation of these sources is set forth in the Implementation Plan

Concentration based WLAs for nitrogen compounds are allocated to minor point sources enrolled under NPDES or WDR permits including but not limited to Tapia Water Reclamation Plant (WRP), Whittier Narrows WRP, Los Angeles Zoo WRP, industrial and construction storm water, and municipal storm water and urban runoff from municipal separate storm sewer systems (MS4s). The WLA(s) are listed by receiving water and established as the applicable one-hour and thirty-day average effluent limitations at the point of discharge.

5. Total Maximum Daily Load for Nutrients in the Santa Clara River

Discharge of wastes containing nitrite, nitrate and ammonia to the Santa Clara River causes exceedances of water quality objectives for ammonia, nitrate and nitrite established in the Basin Plan. The Santa Clara River is listed as impaired by ammonia in Reach 3 and by nitrate plus nitrite in Reach 7 on the 2002 303(d) list of impaired water bodies. Reach 8 of the Santa Clara River is included on the State Monitoring List for organic enrichment/dissolved oxygen, which may be caused by excessive nitrogen. Nitrate and nitrate are biostimulatory substances that can cause eutrophic effects such as low dissolved oxygen and algae growth. Excessive ammonia can cause aquatic life toxicity.

The principal source of ammonia, nitrite, and nitrate to the Santa Clara River is discharges from the Saugus and Valencia Water Reclamation Plants (WRPs) and the Fillmore and Santa Paula Publicly Owned Treatment Works (POTWs). Agricultural runoff, storm water discharge and groundwater discharge may also contribute nitrate loads. Further evaluation of these sources is set forth in the Implementation Plan.

Concentration-based waste loads are allocated to major point sources of ammonia and nitrate+nitrite in Reach 3, which include the Fillmore and Santa Paula POTWs; concentration-based waste loads are allocated to major point sources of ammonia and nitrite+nitrate in Reaches 7 and 8, which include the

Valencia and Saugus WRPs. Concentration-based waste loads are also allocated to municipal, industrial and construction storm water sources regulated under NPDES permits and minor discharges enrolled under NPDES or WDR permits. The allocations for minor point sources are based on the water quality objectives for ammonia, nitrite, nitrate and nitrite plus nitrate. The WLAs are established as one-hour and thirty day average concentrations.

6. Total Maximum Daily Load for Bacteria in the Marina del Rey Mothers Beach and Back Basins

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Marina del Rey Harbor (MdRH) Mothers' Beach and back basins. Dry-weather urban runoff and storm water conveyed by storm drains are the primary sources of elevated bacterial indicator densities to MdRH Mothers' Beach and back basins during dry and wet-weather. As of December 2002, there were seven dischargers located within the Marina del Rey watershed. These dischargers were issued general NPDES permits, general industrial and/or general construction storm water permits. The bacteria loads associated with these discharges are largely unknown, since most do not monitor for bacteria. However, these discharges are not expected to be a significant source of bacteria.

The Los Angeles County MS4 and Caltrans storm water permittees and co-permittees are assigned waste load allocations (WLAs) expressed as the number of daily or weekly sample days that may exceed the single sample targets identified under "Numeric Target" at a monitoring site. Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.

According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

7. Total Maximum Daily Load for Bacteria in the Los Angeles Harbor

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use of Inner Cabrillo Beach and the potential REC-1 uses of the Main Ship Channel in the Los Angeles Harbor.

Dry-weather urban runoff and storm water conveyed by storm drains are major sources of elevated bacterial indicator densities to Inner Cabrillo Beach and the Main Ship Channel during dry and wet-weather. As of March 2004, there are 15 active individual and 15 active general, NPDES permits for discharges to the Inner or Outer Los Angeles Harbor including the Terminal Island Treatment Plant. While the fecal coliform counts in the wastewater field indicate a contribution of bacteria to the Harbor by the Terminal Treatment Plant, the wastewater field is sufficiently diluted and the bacterial densities are so much lower in the Harbor than the high bacterial densities and exceedances at the sites at Cabrillo Beach and in the Main Ship Channel that it appears that the Treatment Plant is not a significant source of bacteria to the Beach or to the Ship Channel.

Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

8. Total Maximum Daily Load for Bacteria in Malibu Creek and Lagoon

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Malibu Creek, Lagoon, and adjacent beach. Fecal coliform bacteria may be introduced from a variety of sources including storm water runoff, dry-weather runoff, onsite wastewater treatment systems, and animal wastes. Waste Load Allocations (WLAs) are expressed as the number of daily sample days that may exceed the single sample limits as identified under “Numeric Target.” WLAs are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.

The responsible jurisdictions and responsible agencies are the County of Los Angeles, County of Ventura, the cities of Malibu, Calabasas, Agoura Hills, Hidden Hills, Simi Valley, Westlake Village, and Thousand Oaks; Caltrans, and the California Department of Parks and Recreation. The responsible jurisdictions and responsible agencies include the permittees and co-permittees of the municipal storm water (MS4) permits for Los Angeles County and Ventura County, and Caltrans. In addition, according to the TMDL, discharges from Tapia WWRF and effluent irrigation, and general construction storm water permits are not expected to be a significant source of bacteria.

9. Total Maximum Daily Load for Metals in the Los Angeles River

Segments of the Los Angeles River and its tributaries are on the Clean Water Act section 303(d) list of impaired waterbodies for copper, cadmium, lead, zinc, aluminum and selenium. The metals subject to this TMDL are toxic pollutants, and the existing water quality objectives for the metals reflect national policy that the discharge of toxic pollutants in toxic amounts be prohibited. When one of the metals subject to this TMDL is present at levels exceeding the existing numeric objectives, then the receiving water is toxic. The beneficial uses impaired by metals in the Los Angeles River and its tributaries are those associated with aquatic life and water supply, including wildlife habitat, rare, threatened or endangered species, warm freshwater habitat, wetlands, and groundwater recharge.

There are significant differences in the sources of metals loadings during dry weather and wet weather. During dry weather, most of the metals loadings are in the dissolved form. The three major publicly owned treatment works (POTWs) that discharge to the river (Tillman WRP, LA-Glendale WRP, and Burbank WRP) constitute the majority of the flow and metals loadings during dry weather. The storm drains also contribute a large percentage of the loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. The remaining portion of the dry weather flow and metals loadings represents a combination of tributary flows, groundwater discharge, and flows from other permitted NPDES discharges within the watershed.

TMDLs are developed for reaches on the 303(d) list and for reaches where recent data indicate additional impairments. Addressing the impairing metals throughout the Los Angeles River watershed will ensure that the metals do not contribute to an impairment elsewhere in the watershed. Metals allocations are therefore developed for upstream reaches and tributaries that drain to impaired reaches. These TMDLs address wet- and dry-weather discharges of copper, lead, zinc and selenium and wet-weather discharges of cadmium.

Impairments related to cadmium only occur during wet weather. Impairments related to selenium are confined to Reach 6 and its tributaries. Dry-weather impairments related to zinc only occur in Rio Hondo Reach 1. The aluminum listing was based on water quality objectives set to support the municipal water supply beneficial use (MUN). MUN is a conditional use in the Los Angeles River watershed. The United States Environmental Protection Agency (U.S. EPA) has determined that TMDLs are not required for impairments of conditional uses.

10. Total Maximum Daily Load for Metals in Ballona Creek

Ballona Creek is on Clean Water Act Section 303(d) list of impaired waterbodies for dissolved copper, dissolved lead, total selenium, and dissolved zinc and Sepulveda Canyon Channel is 303(d) listed for lead. TMDLs are developed for reaches on the 303(d) list and metal allocations are developed for tributaries that drain to impaired reaches. Recent data indicates that selenium is not present at levels exceeding existing numeric targets and is not impairing the designated beneficial uses. Therefore a TMDL for selenium is not included. This TMDL address dry- and wet-weather discharges of copper, lead, and zinc in Ballona Creek and Sepulveda Canyon Channel.

There are significant differences in the sources of copper, lead, and zinc loadings during dry weather and wet weather. During dry weather, most of the metals loadings are in the dissolved form. Storm drains convey a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During dry years, dry weather loadings account for 25-35 percent of the annual metals loadings. Additional sources of dry weather flow and metals loading include groundwater discharge and flows from other permitted NPDES discharges within the watershed. During wet weather, most of the metals loadings in Ballona Creek are in the particulate form and are associated with wet-weather storm water flows.

Concentration-based dry- and wet-weather waste load allocations are assigned to the minor NPDES permits and general non-storm water NPDES permits that discharge to Ballona Creek or its tributaries.

11. Total Maximum Daily Load for Toxic Pollutants in the Ballona Creek Estuary

Ballona Creek Estuary (Estuary) is on the Clean Water Act Section 303(d) list of impaired water bodies for cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, PAHs and toxicity in sediments. Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, zinc, and to a lesser degree cadmium) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in estuarine sediments where they may pose a risk of toxicity.

TMDLs are developed for cadmium, copper, lead, silver, zinc, chlordane, DDT, and PCBs within the sediments of the Ballona Creek Estuary. WLAs are assigned to point sources for the Ballona Creek watershed. A grouped mass-based waste load allocation is developed for the storm water permittees (Los Angeles County MS4, Caltrans, General Construction and General Industrial permittees) by subtracting the load allocations from the total loading capacity.

Sediment based waste load allocations are assigned to minor NPDES permits and general non-storm water NPDES permits that discharge to Ballona Creek or its tributaries. The Los Angeles Water Board implements an approach for compliance for these waste load allocations by establishing a total suspended solids (TSS) effluent limitation together with a concentration-based limit for the each specific TMDL pollutant.

12. Total Maximum Daily Load for Toxicity in Calleguas Creek

Discharge of wastes containing chlorpyrifos, diazinon, other pesticides and/or other toxicants to Calleguas Creek, its tributaries and Mugu Lagoon cause exceedances of water quality objectives for toxicity established in the Basin Plan. Source analysis determined that agricultural and urban uses are the largest sources of chlorpyrifos and diazinon in the watershed.

A waste load of 1.0 TUc is allocated to the major point sources (POTWs) discharging to the Calleguas Creek Watershed. Minor sources include NPDES permittees other than wastewater treatment plants, and urban storm water co-permittees (MS4s) discharging to the Calleguas Creek watershed.

A WLA of 1.0 TUc is allocated to minor point sources. In addition, WLAs for acute and chronic toxicity for diazinon and chloropyrifos are allocated to the minor point sources.

13. Total Maximum Daily Load for Organochlorine (OC) Pesticides and Polychlorinated Biphenyls (PCBs) in Calleguas Creek

Eleven of fourteen reaches in the Calleguas Creek Watershed (CCW) were identified on the 2002 303(d) list of water-quality limited segments as impaired due to elevated levels of organochlorine (OC) pesticides and/or polychlorinated biphenyls (PCBs) in water, sediment and/or fish tissue. Additionally, Mugu Lagoon was listed as impaired for sedimentation/siltation. OC pesticides and PCBs can bioaccumulate in fish tissue and cause toxicity to aquatic life in estuarine and inland waters. Siltation may transport OC Pesticides and PCBs to surface waters and impair aquatic life and wildlife habitats.

Monitoring data from major NPDES discharges and land use runoff were analyzed to estimate the magnitude of OC pesticides and PCBs loads to Calleguas Creek, its tributaries and Mugu Lagoon. The largest source of OC pesticides in the listed waters is agricultural runoff. Most PCB residues are due to past use of PCBs as coolants and lubricants in transformers, capacitors, and other electrical equipment. Atmospheric deposition is also a potential source of PCBs. Urban runoff and POTWs are minor sources of OC pesticides and PCBs.

14. Total Maximum Daily Load for Toxics in the Marina del Rey Harbor

The back basins of Marina del Rey Harbor are on the Clean Water Act Section 303(d) list of impaired water bodies for chlordane, copper, lead, zinc, PCBs, DDT, dieldrin, sediment toxicity and a fish consumption advisory. Review of available data during the development of this TMDL indicated that dieldrin and DDT are no longer causes of impairment. The following designated beneficial uses are impaired by chlordane, copper, lead, zinc, PCBs, and toxicity: water contact recreation (REC1); marine habitat (MAR); wildlife habitat (WILD); commercial and sport fishing (COMM); and shellfish harvesting (SHELL).

Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates.

Waste load allocations (WLA) are assigned to point sources for the Marina del Rey watershed. A grouped mass-based waste load allocation is developed for the storm water permittees (Los Angeles County MS4, Caltrans, General Construction and General Industrial) by subtracting the load allocations from the total loading capacity. Sediment concentration-based waste load allocations are developed for other point sources in the watershed.

15. Total Maximum Daily Load for Bacteria in Ballona Creek, the Ballona Estuary, and the Sepulveda Channel

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use designated for Ballona Estuary and Sepulveda Channel, limited water contact recreation (LREC) designated for Ballona Creek Reach 2, and non-contact recreation (REC-2) beneficial uses of Ballona Creek Reach 1.

The major contributors of flows and associated bacteria loading to Ballona Creek and Estuary are dry- and wet-weather urban runoff discharges from the storm water conveyance system. Run-off to Ballona Creek is regulated as a point source under the Los Angeles County MS4 Permit, the Caltrans Storm Water Permit, and the General Construction and Industrial Storm Water Permits. In addition to these regulated point sources, the Ballona Estuary receives input from the Del Rey Lagoon and Ballona Wetlands through connecting tide gates.

The Los Angeles County MS4 and Caltrans storm water permittees and co-permittees are assigned waste load allocations (WLAs) expressed as the number of daily or weekly sample days that may exceed the single sample targets equal to the TMDLs established for the impaired reaches.

Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

16. Total Maximum Daily Load for Metals in the Calleguas Creek Watershed

Three of fourteen reaches in the Calleguas Creek Watershed (CCW) including Revolon Slough, Lower Calleguas Creek – Reach 2, and Mugu Lagoon are identified on the 2002 Clean Water Act Section 303(d) list of water-quality limited segments as impaired due to elevated levels of metals and selenium in water. The 303(d) listings, which were approved by the State Water Resources Control Board in February 2003, require the development of Total Maximum Daily Loads (TMDLs) to establish the maximum amount of pollutants a water body can receive without exceeding water quality standards.

Significant sources of metals and selenium include urban runoff, agricultural runoff, groundwater seepage, and POTW effluent. For mercury, open space was also a significant source. Sources were also analyzed as a function of wet and dry weather. Higher loads were delivered during wet weather for all constituents, due to the association between metals and particulate matter.

In the case of copper, nickel, and selenium, waste load allocations (WLAs) were developed for both wet and dry-weather. The dry-weather WLAs apply to days when flows in the stream are less than the 86th percentile flow rate for each reach. The wet-weather WLAs apply to days when flows in the stream exceed the 86th percentile flow rate for each reach. Annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories. Final WLAs were established for POTWs, permitted storm water dischargers, and for all other NPDES dischargers.

17. Total Maximum Daily Load for Salts in the Calleguas Creek Watershed

Eleven of fourteen reaches in the Calleguas Creek Watershed (CCW) are identified on the 2002 Clean Water Act Section 303(d) list of water quality limited segments as impaired due to elevated levels of boron, chloride, sulfate, or total dissolved solids (TDS) (these constitutions are commonly referred to as salts). Sources of salts in the watershed include water supply (water imported from the State Water Project or Freeman Diversion and deep aquifer groundwater pumping), water softeners that discharge to publicly owned treatment works (POTWs), POTW treatment chemicals, atmospheric deposition, pesticides and fertilizers, and indoor water use (chemicals, cleansers, food, etc.). Salts that are transported during dry weather to the surface water are quantified via the following mechanisms: groundwater pumping, groundwater exfiltration, POTWs, dry weather urban and agricultural runoff. Wet weather loadings from each of these sources have the potential to be significant, but tend to be lower in concentration and do not occur during the critical conditions for salts. Wet weather loads are significant from the perspective of transporting stranded salts off the watershed.

The TMDL includes WLAs for five POTWs, permitted storm water dischargers, and all other NPDES dischargers. Concentration-based WLAs are assigned to all other NPDES dischargers based on the Basin Plan objectives.

18. Total Maximum Daily Load for Bacteria in the Harbor Beaches of Ventura County

Elevated bacteria indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Kiddie Beach and Hobie Beach. Kiddie and Hobie Beach are referenced in the Staff Report as the Harbor Beaches of Ventura County. Bacteria sources in the Harbor Beaches of Ventura County include anthropogenic and non-anthropogenic sources and point and non-point sources. Each of these sources contributes to the elevated levels of bacteria indicator densities at the Harbor Beaches of Ventura County during dry- and wet-weather.

WLAs are expressed as allowable exceedance days. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

19. Total Maximum Daily Load for OC Pesticides, Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCB), and Metals in the Colorado Lagoon

Colorado Lagoon is identified on the 1998, 2002, and 2006 Clean Water Act Section 303(d) lists of water quality limited segments as impaired due to elevated levels of OC pesticides, PCBs, sediment toxicity, PAHs, and metals in fish tissue and sediment. The point sources of OC pesticides, PCBs, PAHs, and metals discharged to Colorado Lagoon are urban runoff and storm water discharges from MS4s and the California Department of Transportation (Caltrans).

Mass-based WLAs for MS4 permittees including the City of Long Beach, Los Angeles County Flood Control District, and Caltrans are allocated to the five major storm drain outfalls that currently discharge to the lagoon. Concentration-based WLAs for sediment are also assigned to these mentioned permittees. For all other point sources such as minor NPDES permits, other storm water and non-storm water permittees, sediment concentration-based WLAs are also assigned.

20. Total Maximum Daily Load for Bacteria in the Santa Clara River

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use designated for the Santa Clara River (SCR) Estuary and Reaches 3, 5, 6, and 7. Recreating in waters with elevated bacterial indicator densities has long been associated with adverse human health effects. The significant contributors of bacteria loading to the SCR and Estuary are dry- and wet-weather urban runoff discharges from the storm water conveyance system.

General NPDES permits, individual NPDES permits, the Statewide Industrial Stormwater General Permit, the Statewide Construction Activity Storm Water General Permit, and the Statewide Stormwater Permit for Caltrans Activities are assigned WLAs of zero (0) allowable exceedance days of the single sample targets for both dry and wet weather and no exceedances of the geometric mean targets.

Discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

21. Total Maximum Daily Load for Toxics in Machado Lake

Machado Lake is identified on the 1998, 2002, 2006, and 2008 Federal Clean Water Act Section 303(d) lists of impaired water bodies due to chlordane, DDT, dieldrin, Chem A, and PCBs in fish tissue. Chem A (the abbreviation for 'chemical group A') is a suite of bio-accumulative pesticides that includes chlordane and dieldrin. The 1998 303(d) listing (and subsequent listings) for Chem A was predominately based on fish tissue concentrations of chlordane and dieldrin; there was only minimal detection of other Chem A pollutants in 1983 and 1984. Chlordane and dieldrin have been recently detected in fish tissue, while other Chem A pollutants have not been detected in 25 years. Therefore, this TMDL only addresses the Chem A pollutants (chlordane and dieldrin) that are causing impairment.

Because of potential harm to human health and the environment, the use of these pollutants has been banned for many years; however, the physiochemical properties of the pollutants cause them to persist in the environment. These pollutants, bound to soil particles, are easily transported with surface runoff to water bodies. Contaminated sediments accumulate in the receiving water bodies and aquatic organisms are exposed to the toxic pollutants. Sediment toxicity has been documented at Machado Lake, and it is likely that pesticides and PCBs contribute to the toxic condition of the sediments. Moreover, all of these pollutants biomagnify as they move up the food chain, thereby increasing concentrations in higher trophic-lever aquatic organisms and wildlife.

22. Total Maximum Daily Load for Bacteria in the Los Angeles River

General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR permittees in the Los Angeles River Watershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample target for both dry and wet weather.

Discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria. Therefore, the WLAs for these discharges are zero (0) days of allowable exceedances for all three time periods and for single sample limits.

23. Total Maximum Daily Load for Metals and Toxics in the Los Angeles and Long Beach Harbors

The waters of Dominguez Channel and the Greater Los Angeles and Long Beach Harbor area are impaired by heavy metals and organic pollutants. These water bodies are included on the State's Clean Water Act 303(d) impaired waters list for one or more of the following pollutants: cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, certain PAH compounds, benthic community effects and toxicity. These impairments exist in one or more environmental media—water, sediment, or tissue. Impairments in fish tissue are for DDT, PCBs, toxaphene, chlordane and dieldrin.

Beneficial uses designated in these waters to protect aquatic life include the marine habitat use (MAR) and rare, threatened or endangered species habitat use (RARE). In addition, the estuaries (EST) are recognized as areas for spawning, reproduction and/or early development (SPWN), migration of aquatic organisms (MIGR), and wildlife habitat (WILD). Dominguez Channel also has an existing designated use of warm freshwater habitat (WARM) and the Los Angeles River Estuary has the designated use of wetland habitat (WET). Beneficial uses associated with human use of these waters include recreational use for water contact (REC1), non-contact water recreation (REC2), industrial service supply (IND), navigation (NAV), commercial and sport fishing (COMM), and shellfish harvesting (SHELL).

24. Total Maximum Daily Load for Algae, Eutrophic Conditions and Nutrients in the Ventura River and its Tributaries

The Ventura River Estuary and Reaches 1 and 2 are on the Clean Water Act (CWA) section 303(d) list as impaired for algae and eutrophic conditions. San Antonio Creek and Cañada Larga are on the CWA section 303(d) list as impaired for nitrogen and dissolved oxygen, respectively. Recent data confirm these impairments and demonstrate additional impairments for low dissolved oxygen in the Estuary, San Antonio Creek, and Reaches 1-4. The algae and nutrient related impairments are caused by excessive loading of nutrients, particularly nitrogen and phosphorus, to Ventura River and its tributaries. The water quality impairments due to eutrophication and increased nutrient loading occur during the dry season when algae growth primarily occurs. For purposes related to this TMDL, the dry season is defined as occurring from May 1 to September 30.

Waste load allocations addressing point and non-point sources of nutrients are assigned to discharges to the Ventura River watershed.

25. Total Maximum Daily Load for Metals in the San Gabriel River

Segments of the San Gabriel River and its tributaries are on the Clean Water Act section 303(d) list of impaired water bodies for copper, lead, zinc, and selenium. The constituents subject to this TMDL are toxic pollutants, and the existing water quality objectives for these constituents reflect national policy that the discharge of toxic pollutants in toxic amounts be prohibited. When one of the constituents subject to this TMDL is present at levels exceeding the existing numeric objectives, then the receiving water is toxic. The beneficial uses impaired by metals and selenium in the San Gabriel River and its tributaries are those associated with aquatic life and water supply, including wildlife habitat, rare, threatened or endangered species, warm freshwater habitat, wetlands, and groundwater recharge.

TMDLs are developed for reaches on the 303(d) list and for reaches where recent data indicate additional impairments. Addressing the impairing metals and selenium throughout the San Gabriel River watershed will ensure that they do not contribute to impairments elsewhere in the watershed. Metals and selenium allocations are therefore developed for upstream reaches and tributaries that drain to impaired reaches.

These TMDLs address dry-weather impairments of copper in the estuary and selenium in San Jose Creek Reach 1 and wet-weather impairments of lead in San Gabriel River Reach 2 and copper, lead, and zinc in Coyote Creek.

26. Total Maximum Daily Load for Metals in the Los Cerritos Channel

Los Cerritos Channel was included on the 1998, 2002 and 2006 California 303(d) lists as an impaired water body for copper, zinc, and lead. (Regional Board, 1998 and California State Water Resources Control Board, 2002 and 2006.)

The NPDES permits in the Los Cerritos Channel Freshwater Watershed include municipal separate storm sewer system (MS4) permits, the California Department of Transportation (Caltrans) storm water permit, general construction storm water permits, general industrial storm water permits, minor NPDES permits, and general NPDES permits.

Concentration based waste load allocations are established for minor NPDES permits and general non-storm water permits that discharge to the Los Cerritos Channel to ensure that these discharges do not contribute to exceedances of the California Toxic Rule criteria. The waste load allocation for these metals is based on dry and wet weather flows.

27. Total Maximum Daily Load for Indicator Bacteria in the Long Beach City Beaches and Los Angeles River Estuary

General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, the Statewide General Waste Discharge Requirements for Sanitary Systems, and the Vessel General Permit in the Long Beach City Beaches Watershed are assigned WLAs of zero (0) days of allowable exceedances for all time periods for the single sample targets and no exceedances of the 30-day geometric mean targets because they are not expected to be a significant source of indicator bacteria.

San Diego Regional Board TMDLs

Continuing the listing from above, the following is a summary of the TMDLs in the San Diego region that have waste load allocation for general NPDES discharge categories, followed by a general summary. Further detailed information on the already adopted

TMDLs can be found at the following website:

San Diego Regional Board TMDL website:
(http://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/index.shtml)

28. Total Maximum Daily Load for Metals in Chollas Creek

Chollas Creek was placed on the Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments (List of Water Quality Limited Segments) in 1996 for the metals copper, lead, and zinc. Storm water samples from Chollas Creek collected between 1994 and 2003 periodically exceeded California Toxics Rule (CTR) water quality criteria for copper, lead, and zinc, dissolved copper, lead and zinc concentrations in Chollas Creek violate numeric water quality criteria for copper, lead, and zinc promulgated in the California Toxics Rule, and the narrative objective for toxicity. Concentrations of these metals in Chollas Creek threaten and impair the designated beneficial uses of warm freshwater habitat (WARM), and wildlife habitat (WILD). For Chollas Creek, essentially all metals sources (point and nonpoint) are discharged through municipal separate storm sewer systems (MS4) that are regulated under waste discharge requirements (WDRs), NPDES Permits. The point source discharges that could affect Chollas Creek are the MS4 discharges, storm water discharges from industrial sites, and discharges of extracted groundwater. All point source discharges to Chollas Creek will be required to achieve this WLA.

This TMDL establishes concentration-based WLAs set equal to 90 percent of the numeric water quality objectives for copper, lead, and zinc, as defined in the California Toxics Rule. Because the concentration of these metals resulting in toxic effects varies significantly with hardness, the resulting WLAs are hardness dependent.

29. Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek

Nitrate, total nitrogen, and total phosphorus concentrations in Rainbow Creek exceed the inorganic chemicals nitrate and biostimulatory substances water quality objectives. These exceedances threaten to unreasonably impair the municipal supply (MUN), warm freshwater habitat (WARM), cold freshwater habitat (COLD), and wildlife habitat (WILD) beneficial uses of Rainbow Creek. Excessive nutrient levels in Rainbow Creek promote the growth of algae in localized areas, creating a nuisance condition, that unreasonably interferes with aesthetics and contact and non-contact water recreation (REC1, REC2) and threatens to impair WARM, COLD and WILD beneficial uses. State highways, agricultural fields and orchards, commercial nurseries, residential and urban areas, and septic tank disposal systems contribute to increased nutrient levels in Rainbow Creek as a result of storm water runoff, irrigation return flows, and ground water contributions to the creek.

WLAs for the discharge of total nitrogen and total phosphorus into Rainbow Creek were established. Identified dischargers of total nitrogen and total phosphorus loading include Caltrans, County of San Diego and nonpoint sources. The TMDL provides WLAs of 2 percent of the total annual TMDL for both total nitrogen and total phosphorus for additional point sources, however the TMDL Implementation Action Plan does not provide for the assignment of WLAs to unidentified point source discharges, effectively resulting in the prohibition of discharges of total nitrogen and total phosphorus into Rainbow Creek.

30. Total Maximum Daily Load Indicator Bacteria in Twenty Beaches and Creeks in the San Diego Region for Direct Discharges Only

Bacteria densities in the Pacific Ocean at various beach and coastal creek mouth segments (referred to hereafter as "beaches") exceed water quality objectives (WQOs) for indicator bacteria. Bacteria densities in ocean water at these beaches unreasonably impair and threaten to impair the water quality needed to support the contact water recreation (REC-1) designated beneficial use. Bacteria densities in the waters of Aliso Creek, San Juan Creek, Tecolote Creek, Forrester Creek, the (lower) San Diego River, and Chollas Creek exceed WQOs for indicator bacteria. Bacteria densities in these creeks unreasonably impair and threaten to impair the water quality needed to support REC-1. The federal Clean Water Act requires the establishment of Total Maximum Daily Loads (TMDLs) for pollutants that exceed the WQOs needed to support designated beneficial uses, i.e., that cause or contribute to exceedances of state "water quality standards".

Unidentified point sources have not been assigned WLAs, which is equivalent to being assigned a WLA of zero. No discharges of bacteria are expected or allowed from unidentified point sources under the dry or wet weather TMDLs.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS AND EFFLUENT LIMITATIONS

The Clean Water Act (CWA) requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into waters of the United States. The control of pollutants discharged during drinking water system discharge events is established primarily through required Best Management Practices specifications established to require water purveyors to implement a minimum level of pollutant control through best management practices that are proven to be effective in the water supply industry. Numeric effluent limitations are established for chlorine in circumstances where the water discharged from a drinking water system poses an immediate threat to aquatic life with receiving waters. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable water quality objectives and criteria to protect the beneficial uses of receiving waters.

A. Applicable Objectives and Criteria

This Order authorizes discharges to inland surface waters, enclosed bays, estuaries and the ocean, statewide. The water quality objectives and criteria applicable to these receiving waters are contained in the corresponding Basin Plan(s), other water quality control plans, and policies, such as the State Implementation Plan and the California Ocean Plan, that implement federal and state water quality objectives.

1. **Regional Boards Basin Plans Objectives.** Basin Plans specify various narrative and numeric water quality objectives, including the maximum contaminant levels (MCLs) in California Code of Regulations, title 22. Typical narrative objectives most relevant to this Order are listed below:

   a. **Toxicity.** The toxicity objective typically states, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms." U.S. EPA water quality criteria were used to translate this objective with respect to chlorine. U.S. EPA's recommended 1-hour average acute criterion for chlorine is 0.019 mg/L and its 4-day average chronic criterion is 0.011 mg/L (the acute or chronic criteria are not to be exceeded more than once every three years on average in any single location).

   b. **pH.** The pH objective in basin plans vary; some objectives are fixed numeric objectives while others provide a numeric range such as *"the pH shall not to be depressed below 6.5 nor raised above 8.5. This encompasses the pH range usually found in waters. Controllable water quality factors shall not cause changes greater than 0.5 units in normal ambient pH levels."*

   c. **Sediment.** Sediment objectives in basin plans vary; however, the basin plans typically provide a narrative objective such as, *"The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses."*

   d. **Settleable Material.** The settleable material objectives in basin plans vary; however, the basin plans typically provide a narrative objective such as, *"Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses."*

   e. **Suspended Material.** The suspended material objectives in basin plans vary; however, the basin plans typically provide a narrative objective that typically states, *"Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses."*

   f. **Turbidity.** The turbidity objectives in basin plans vary; some objectives are fixed numeric objectives while others provide a narrative objective such as, *"Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity* *relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU."*

2. **California Toxic Rule (CTR) Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. Some human health criteria are for consumption of "water and organisms" and others are for consumption of "organisms only." The criteria applicable to "water and organisms" apply to many receiving waters subject to this Order because they are potential drinking water sources with the municipal and domestic supply (MUN) beneficial use. In accordance with Resolution 2014-0067, this Order implements a SIP exception to the CTR criteria for a number of priority pollutants on the basis that these discharges are less than significant with mitigation, and that mandated activities to protect public safety and health are held paramount.

3. **Ocean Plan Water Quality Objectives.** The Ocean Plan specifies in Table 1 of the Ocean Plan numeric water quality objectives for the protection of Marine Aquatic Life and Human Health (Carcinogens and non-carcinogens) for numerous priority pollutants. In accordance with Resolution 2014-0067, this Order implements an exception to the Ocean Plan water quality objectives for a number of priority pollutants on the basis that these discharges are less than significant with mitigation, and that mandated activities to protect public safety and health are held paramount.

4. **Sediment Quality Objectives.** The *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* contains a narrative water quality objective: "Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California." This objective is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The policy requires that if the Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this objective, it is to impose the objective as a receiving water limit.

B. Technology-Based Effluent Specifications and Effluent Limitations

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The CWA requires U.S. EPA to develop effluent limitations guidelines (ELGs), and standards representing application of best practicable treatment control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and best available demonstrated control technology for new sources (NSPS). CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of Best Professional Judgment to derive technology-based requirements and effluent limitations on a case-by-case basis when ELGs are unavailable.

1. Technology-Based Best Management Practices Effluent Specifications

This Order does not establish technology-based effluent limitations because U.S. EPA has not established ELGs for the types of discharges this Order authorizes. Moreover, data necessary to develop technology-based effluent limitations on a case-by-case basis for each water body in California, using Best Professional Judgment, are unavailable. The State Water Board finds that the technology-based effluent limitations in Regional Water Board Basin Plans apply to discharges that are continuous in nature and contain “wastes”. This statewide Order regulates intermittent and seasonal discharges of drinking water that are short-term, and in and of themselves do not contain the degree of “waste” contained in municipal or industrial wastewater or storm water. Therefore technology-based effluent limitations are not included.

The State Water Board finds that technology is available to control solids in drinking water system discharges, and chemical constituents such as chlorine and other chemical agents added to the water supply source, treatment, and distribution process. Therefore numeric and narrative technology-based best management practices specifications are included in this Order. Attachment C of this Order provides example of such BMPs.

To assure that implemented BMPs are effective, this Order requires:

- Dischargers to assure that quality assurance and quality control protocol is implemented to assure best management practices, monitoring, and reporting are effective, valid, and in compliance with this Order. A Discharger shall train all personnel operating the drinking water system and responding to emergency discharges to assure the quality assurance and quality control protocol is properly implemented.
- For planned discharges, a Discharger shall implement BMPs prior to and during discharges that enter a water of the U.S. For planned but unscheduled or automated discharges from pressure relief valves and unchlorinated pump-to waste wells, BMPs shall be implemented unless infeasible (e.g., inaccessible, inadequate space). For emergency discharges, the BMPs shall be implemented as soon as feasible following assurance that public safety, property, and infrastructure are protected.
- In fulfilling the requirements of this section, the Discharger may implement the example BMPs contained in Attachment C, or proven BMPs per updated approved guidance established by industry experts, professional associations, or entities (e.g. *2014 Edition of the BMP Manual for Drinking Water System Releases* published by the California-Nevada Section of the American Water Works Association).
- The Discharger shall maintain a documented log of all BMPs implemented for its different types of discharges that enter a water of the U.S, and make it available to State and Regional Water Board staff upon request.

- The Discharger shall modify its BMPs as necessary to maintain compliance with the requirements of this Order. If monitoring results or other available information demonstrates that the discharge is not in compliance, the Discharger shall determine the source of non-compliance, and develop and implement new or revised BMPs as necessary. As part of this process, the Discharger shall validate the effectiveness of any new or revised BMPs to comply with the requirements of this Order. All non-compliance and corresponding corrective actions to address non-compliance are required to be reported to the State Water Board in the annual report, as required in the Monitoring and Reporting Program (Attachment E) of this Order. A log documenting the additional or revised BMPs shall be made available upon request by staff of the State and/or Regional Water Board.

2. **Toxicity (Chlorine and other chemical agents).** This Order translates the narrative toxicity objective with respect to chlorine by using U.S. EPA's water quality criteria for chlorine. Water distribution systems are usually chlorinated to meet the minimum total chlorine residual requirements in California Code of Regulations, title 22. According to the most recent Annual Consumer Confidence Reports from various water agencies, the typical average total chlorine residual concentration in a distribution system is about 2.0 mg/L, which is roughly 100 times U.S. EPA's acute water quality criterion of 0.019 mg/L. However, chlorine in water discharges can dissipate from volatilization and reaction with dirt and organic matter on streets and storm drain systems. Based on the analysis in section IV.C. below, reasonable potential for toxicity exists only for superchlorinated waters and other chlorinated waters that are in closer proximity to receiving waters (within 300 feet). For all other discharges, this Order establishes narrative technology-based specifications, specifying that proven management practices must be implemented to treat or control pollutants from its discharges to maintain compliance with this Order.

   At minimum, this Order requires that dischargers properly manage all planned discharges and implement proven dechlorination or chemical-control BMPs provided by professional associations or institutes such as the American Water Works Association, to assure that beneficial uses of the receiving water body(ies) are not adversely affected or impacted. Such BMPs include natural dissipation of chlorine in the discharge prior to it reaching the surface water body. For emergency discharges, the Discharger shall implement BMP procedures as soon as feasible while concurrently protecting public health and safety. Attachment C of this Order provides example of such dechlorination BMPs.

   Copper and zinc are known constituents in chemical agents used for to control algae in water supplies and control corrosion in drinking water facilities. Management practices proven to control copper and other metals during pesticide applications are not the same management practices needed to control these metals in drinking water system discharges. Although the State Water Board has granted a regulatory exception to CTR constituents including copper and zinc, the State Water Board expects dischargers to implement BMPs to reduce metals concentrations to the best extent possible. Attachment C of this Order provides example BMPs for copper and zinc concentration reduction specifically in drinking water system discharges.

3. Solids (Sediment, Settleable Material, Suspended Material, Debris, and Turbidity)

Various discharges from drinking water systems may contain sediment as follows:

- Sediment accumulates at the dead ends of distribution systems during periods of low water demand. The sediment within a system must be flushed periodically.
- Raw transmitted water may contain sediment due to naturally occurring minerals and organic debris.
- Trench dewatering can result in relatively high sediment loads, depending on soil type, flow rate and duration, and excavation size.
- Discharges from new well development and inactive well rehabilitation may have high sediment loads due to drilling mud, cuttings, and removal of solids from the bottom of the well and around the screen casing.

Discharges can also contribute to sediment loading, solids loading and erosion within receiving waters due to high flows and volumes. Such discharges can dislodge sediment and transport it to receiving waters, or destabilize and erode shorelines or other natural receiving water features.

At minimum, this Order requires that dischargers implement BMP for planned discharges to:

- Prevent riparian erosion and hydromodification by implementing flow dissipation, erosion control, and hydromodification-prevention measures; and
- Minimize sediment discharge, turbidity and color impacts by implementing sediment, turbidity, erosion and color control measures.

For groundwater supply well operations, this Order requires dischargers to implement treatment systems or BMPs for all groundwater well development, rehabilitation, or operation discharges to waters of the U.S. to assure these discharges:

- Do not cause or contribute to an exceedance of the receiving water limitation for turbidity in Section V.G. of this Order, and
- Comply with a turbidity action level of 100 Nephelometric Turbidity Units (NTUs) or less in the discharge. An exceedance of the turbidity numeric action level of 100 NTU is not a violation of this Order, but any exceedance does require the Discharger take action to modify, change, or enhance BMPs when the turbidity level is greater than 100 NTU, until the turbidity level is 100 NTU or less.

4. **Instream Sediment Quality.** Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. Efforts are underway to identify stressors causing such conditions. Due to the relative clean nature of potable water, it is unlikely that these discharges contribute to sediment toxicity. However, to date there is no evidence either way; therefore, the State Water Board cannot draw a definitive conclusion about reasonable potential for these discharges to cause or contribute to exceedances of the sediment quality objectives.

C. Water Quality Based Effluent Limitations

1. Scope and Authority

This Order contains water quality-based effluent limitations (WQBELs) that implement water quality objectives and criteria that protect beneficial uses. CWA section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than federal technology-based requirements where necessary to achieve applicable water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, WQBELs must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting a narrative criterion, supplemented with relevant information (40 C.F.R. § 122.44[d][1][vi]). The process for determining reasonable potential and calculating WQBELs is intended to establish effluent limitations for discharges to comply with applicable water quality objectives established to protect designated beneficial uses of receiving waters.

2. Need for Water Quality Based Effluent Limitations (Reasonable Potential Analysis)

Assessing whether a pollutant has reasonable potential to exceed a water quality objective or criterion is the fundamental step in determining whether a water quality based effluent limitation is required. As explained below, this Order finds reasonable potential for toxicity due to the chlorinated drinking water system discharges.

a. **Analysis for Numeric Objectives and Promulgated Criteria.** The State Implementation Plan (SIP), section 1.3 sets forth the method used in this Order for assessing whether a pollutant has reasonable potential to exceed a numeric water quality objective or promulgated criterion. The analysis begins with identifying the maximum effluent concentration (MEC) observed for each pollutant based on available effluent concentration data and the ambient background concentration (B). The SIP, section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential and the need for a numeric effluent limitation:

- Trigger 1 is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective (MEC ≥ water quality objective).

- Trigger 2 is activated if the ambient background concentration observed in the receiving water (B) is greater than the water quality objective (B > water quality objective) *and* the pollutant is present in any effluent sample.

- Trigger 3 is activated if a review of other information indicates that a WQBEL is needed to protect beneficial uses.

The Ocean Plan provides a similar method for assessing reasonable potential as described in Appendix V of the Ocean Plan.

Water in drinking water systems is required to comply with maximum contaminant levels (MCLs) per state regulations; therefore for pollutants that have MCLs more stringent than the CTR or Ocean Plan water quality objectives, this Order finds those priority pollutants do not have reasonable potential to exceed a water quality objective. However for the remaining priority pollutants for which the MCL is not the most stringent applicable water quality objective, an exception to those objectives has been granted through Resolution 2014-0067.

b. **Analysis for Toxicity due to Chlorine.** This Order translates the narrative toxicity objective with respect to chlorine by using U.S. EPA's water quality criteria for chlorine. Water distribution systems are usually chlorinated to meet the minimum total chlorine residual requirements in California Code of Regulations title 22. According to the most recent Annual Consumer Confidence Reports from various water agencies, the typical average total chlorine residual concentration in a distribution system is about 2.0 mg/L, which is roughly 100 times U.S. EPA's acute water quality criterion of 0.019 mg/L. However, chlorine in water discharges can dissipate from volatilization and reaction with dirt and organic matter on streets and storm drain systems. Based on the analysis below, reasonable potential for toxicity exists only for superchlorinated waters and other chlorinated waters that are in closer proximity to receiving waters (within 300 feet). Therefore this Order contains numeric chlorine water quality based effluent limitations for superchlorinated discharges and chlorinated water discharged within 300 feet of a surface water body.

Numeric effluent limitations are not included in this Order for sediment, settleable material, and suspended material, as there is no readily available means to translate the sediment, settleable material, and suspended material objectives into numeric WQBELs appropriate for the many receiving waters that could be affected by the discharges covered by this Order. This Order controls sediment, settleable material, and suspended material through BMPs as discussed above in this fact sheet.

All 126 priority pollutants in the California Toxic Rule and pollutants with Ocean Plan water quality objectives have also been considered. The pollutants with MCLs as the most stringent water quality objective have shown no reasonable potential because these discharges are already required to comply with MCLs per state regulations and State Water Board Division of Drinking Water permits. For the remaining pollutants, a categorical SIP and Ocean Plan exception has been granted, therefore there is no reasonable potential since the exceptions lead to no applicable numeric criteria for these discharges.

3. Calculation of Water Quality Based Effluent Limitations (WQBELs)

Regulations at 40 C.F.R. section 122.44(k)(3) require numeric WQBELs unless numeric WQBELs are infeasible. This Order imposes numeric WQBELs for total residual chlorine because it is feasible and necessary to calculate numeric WQBELs for this toxic pollutant in order to protect beneficial uses in the receiving water bodies. Field chlorine meters are readily available and used to measure chlorine in drinking water system discharges, therefore it is feasible to collect representative total residual chlorine concentration data to determine compliance.

The total chlorine residual WQBEL established in this Order for discharges to inland surface waters, enclosed bays and estuaries is 0.019 mg/L based on U.S. EPA's acute water quality criterion for chlorine, which is expressed as a one-hour average. The total chlorine residual WQBEL established in this Order for discharges to the ocean is 0.008, mg/L based on the Ocean Plan criteria for chlorine. The numeric WQBELs for total residual chlorine are applicable to: (1) all superchlorinated discharges, and (2) chlorinated discharges located within 300 feet of a receiving water body.

According to a controlled field study conducted by East Bay Municipal Utilities District (EBMUD), when dechlorination BMPs are properly implemented, the total chlorine residual concentration in chlorinated discharges is fully neutralized within 200 feet to concentrations below a minimum level of 0.1 mg/L (Tikkanen et. al, 2001, *Guidance Manual for Disposal of Chlorinated Water*). The study analyzed samples from nine fire hydrants discharging at varying flow rates and treated with dechlorination BMPs within the EBMUD jurisdiction. Similarly, the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) analyzed samples from ten fire hydrants discharging at varying flow rates and treated with dechlorination BMPs in the Cities of Palo Alto, San Jose and Sunnyvale. Based on the SCVURPPP study, eight of the discharge events monitored achieved full neutralization (to concentrations below 0.1 mg/L) by 160 feet. The two remaining discharge events spiked above the minimum level of 0.1 mg/L, but ultimately achieved full neutralization within 425 feet. The spike in concentration was suspected to be due to turbidity interference.

Based on these data and adding an additional safety factor due to the immediate toxicity to aquatic life from chlorine, the State Water Board determines that discharges where dechlorination BMPs (chemically or naturally) have been properly implemented that are more than 300 feet from a receiving water body do not pose a reasonable potential to exceed the applicable total residual chlorine water quality objective. Thus, the numeric WQBEL is not applicable to such discharges.

The turbidity numeric WQBEL established in this Order for discharges to the ocean is 225 NTU based on the Ocean Plan criteria for turbidity. The numeric WQBELs for turbidity is applicable to all discharges located within 300 feet of the ocean. These discharges pose a reasonable potential to cause exceedance of ocean turbidity water quality objective due to high solids levels in drinking water systems discussed in detail above in this fact sheet.

V. DISCHARGES NOT AUTHORIZED BY THIS ORDER

This Order implements the regulatory exceptions granted to water purveyors by Resolution 2014-0067. Requirements in this Order are designed for discharges described in the corresponding Mitigated Negative Declaration (attached to Resolution 2014-0067) that, when properly mitigated through the implementation of BMPs, monitoring, and reporting, do not pose a significant threat to the environment.

Discharges not authorized by this Order include:

- Discharges other than those authorized in the Notice of Applicability issued by the Deputy Director of Water Quality; or
- Discharges to a water of the U.S. with a total maximum daily load (TMDL) that prescribes a waste load allocation to a water purveyor, where the Deputy Director determines that the requirements of this Order are not consistent with the assumptions and requirements of the TMDL, and thus compliance with this Order is not sufficient for the water purveyor to comply with the imposed TMDL requirements; or
- Discharges from new drinking water systems (not an expansion of an existing system) into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body; or
- Direct discharges into areas designated by the State Water Board as Areas of Special Biological Significance (ASBS).

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in this Order are established in accordance with federal and State water quality standards per the CWA and regulations adopted thereunder, and narrative and numeric water quality objectives in the Regional Water Boards' Basin Plans and State Water Board water quality control plans and policies.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Title 40 Code of Federal Regulations part 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) of this Order, establishes monitoring, recordkeeping and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in Attachment E of this Order.

A. Effluent Monitoring

Pursuant to the requirements of title 40 Code of Federal Regulations part 122.44(i)(2), reporting of effluent monitoring is required for all constituents with effluent limitations and specifications. Effluent monitoring is necessary to assess compliance with effluent limitations and specifications, assess the effectiveness of the implemented BMPs and treatment process (where applicable), and to assess the impacts of the discharge on the receiving water.

Effluent monitoring requirements have been established in this Order to provide: (1) the Discharger with necessary information to make informed decisions regarding the implementation of effective management practices, and (2) the State Water Board to determine compliance with effluent specifications and limitations. Required effluent monitoring includes event monitoring and representative monitoring as follows:

1. **Event Monitoring.** This Order requires monitoring of all superchlorinated discharges, all discharges from well development and rehabilitation activities, and individual discharge events that are greater than 325,850 gallons (one acre-foot). The Discharger shall monitor all such events per the sample types and frequencies specified in Attachment E.

2. **Annual Representative Monitoring.** This Order allows discharges of similar nature to be monitored on a representative basis. Representative monitoring is the use of monitoring results of one water quality monitoring sample to represent other discharges expected to have the same water quality. A representative monitoring measurement must represent discharges of similar nature, meaning discharges that have all the following items in common:
   (i) The same general water source (ground water or surface water of similar water quality), and

(ii) The same water treatment, and

(iii) The same type of implemented BMPs.

The Discharger shall monitor all planned discharges not defined as events (Item 1. above) using representative monitoring per the sample types and frequencies specified in Attachment E. In its annual report, the Discharger shall:

(a) Submit a copy of its site schematic submitted in its application for enrollment with labeled representative monitoring locations, and
(b) Identify the portions of its system in which the representative monitoring results represent, and
(c) Include any changes in its representative monitoring locations that have occurred during the monitoring-year, as applicable.

3. Annual Discharge Volume Monitoring Requirements

This Order requires the Discharger to monitor and keep record of:

(a) The number of direct discharge to a water of the U.S that is greater than 50,000 gallons, during each calendar year,
(b) An estimate of the total volume discharged to surface water during each calendar year, and
(c) An estimate of the total volume of discharge water directed to a reuse or beneficial use in accordance with section VI. of this Order.

4. Monitoring Not Required

This Order does not establish monitoring requirements for any discharges that: (a) do not ultimately reach a water of the U.S., (b) are implemented for multiple uses or routed to a beneficial reuse, in accordance with section V. of the Order, prior to surface water discharge, or (c) are emergency discharges.

B. Receiving Water Monitoring

This Order requires visual receiving water monitoring for all direct planned discharges that do not comply with the requirements contained in section IV of the Order, and that may potentially adversely affect or impact beneficial uses of the receiving waters. Receiving water monitoring shall be conducted during or immediately after the Discharger became aware of a non-compliant discharge that adversely effects or impacts beneficial uses of the receiving water. The Discharger shall monitor the point of confluence of the discharge and the receiving water. If the receiving water presents hazards to the monitoring personnel, visual monitoring shall be conducted using telephoto lenses and binoculars. If further hazards exist beyond such measures, monitoring is not required, and the hazards shall be documented in the corresponding monitoring report.

C. Post-Notification Requirements

Within 24 hours of the Discharger becoming aware of an adverse effect(s) or impact on beneficial uses of the receiving water body due to non-compliance with this Order, or due to a system failure or emergency involving a discharge from its drinking water system, the Discharger shall notify the corresponding Regional Water Board and the MS4 operator, and the Discharger shall confirm this notification in writing within five days. The notification shall include all of the following:

1. The location and extent of non-compliance or emergency discharge;
2. The cause of the non-compliance or emergency discharge;
3. The date, time and expected duration of the non-compliance or emergency discharge;
4. The estimated volume of discharge;
5. The applicable receiving water body; and
6. The corrective actions taken (or being taken) to prevent future non-compliance or repair the system failure.

D. Pre-Notification Requirements

Three (3) days prior to initiation of a planned discharge (or retroactively within 24-hours after the Discharger is informed to conduct an urgent planned discharge) of a volume equal to or greater than one acre-foot (325,850 gallons), the Discharger shall notify the MS4 operator, if applicable, and the appropriate Regional Water Board and provide:

1. The start date of discharge
2. The location of discharge and the applicable receiving water
3. The estimated volume of discharge, and
4. The reasons for discharge

E. Reporting and Recordkeeping Requirements

1. This Order requires the Discharger to maintain self-monitoring reports, including compliant and non-compliant discharge monitoring information, in its main office and to make those reports available upon request of State and Regional Water Board staff.

2. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Attachment E.

3. The Order requires the Discharger to arrange and summarize any reported numerical data in a tabular format.

4. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the self-monitoring report.

5. The Order requires the Discharger to report to the State Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

6. This Order requires the Discharger to report, by March 1 of every year, all non-compliant discharge monitoring information contained in the Discharger's self-monitoring report for the past calendar year. All non-compliant discharge monitoring information shall be accompanied by the corrective actions the Discharger has taken to return the discharge to compliance. Identified non-compliance must include a description of the requirement that was violated and a description of the violation.

7. The Discharger is required to attach a cover letter to the report that clearly identifies discharge events of non-compliance with the permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions.

F. Increase in Monitoring Requirements

The Deputy Director may modify the monitoring and reporting requirements at any time to ensure the protection of the beneficial uses of the receiving water. The modified requirements will be based on site-specific data or information indicating that a site-specific discharge threatens to cause or contribute to an exceedance of a receiving water quality criteria or objective.

At any time during the term of this permit, the Deputy Director may notify authorized Dischargers to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, each Discharger shall submit a hard copy of its monitoring reports. Subsequent guidance will be provided to the Discharger upon the Deputy Director's notification for electronic submittal of reports. Direction and guidance for electronic SMR submittals is currently available on the CIWQS Web site at (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml)

VIII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 Code of Federal Regulations part 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 Code of Federal Regulations part 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 Code of Federal Regulations part 122.42.

Title 40 Code of Federal Regulations part 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Title 40 Code of Federal Regulations part 123.25(a) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 Code of Federal Regulations part 123.25, this Order omits federal conditions that address enforcement authority specified in 40 Code of Federal Regulations part 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Reopener Provisions

The reopener provisions in this Order provide an explanation of the State Water Board authority to reopen this Order in accordance with 40 Code of Federal Regulations part 122.62. For example, the State Water Board is developing a Proposed Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California, which when adopted is intended to establish consistent standards and implementation procedures for regulating chlorine statewide. This provision is the avenue by which the State Water Board may reopen this Order to include a revised reporting level to determine compliance with effluent limitations for total residual chlorine if a statewide policy for total residual chlorine is adopted during the term of this Order.

IX. PUBLIC PARTICIPATION

The State Water Board adopted this Order that serves as a statewide general NPDES permit for low threat discharges from drinking water systems on November 18, 2014. State Water Board staff developed the draft Order using input from water purveyors and other interested parties over the course at least two years. The language and requirements in the draft order were developed to eliminate, where possible, unnecessary interference with mandated activities to protect public health. State Water Board staff held nine stakeholder meetings statewide and other verbal correspondences to incorporate the most crucial concerns related to small systems, and the feasibility and cost of permit compliance. The State Water Board encouraged public participation at the August 5, 2014 public hearing, the October 21, 2014 workshop meeting and the November 18, 2014 adoption meeting for this item.

A. Notification of Interested Parties

The State Water Board notified interested agencies, parties, and persons of its intent to consider adoption of this general Order for low threat discharges from drinking water systems and provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested parties through specific mailings, distribution through the Water Board Lyris Email System and through publication in the following newspapers for the following communities:

- Inter-City Express - Alameda County

- Tahoe Daily Tribune - Alpine County
- Fresno Bee - Fresno County
- Imperial Valley Press - Imperial County
- Los Angeles Daily Journal - LA County
- Orange County Recorder - Orange County
- Daily Recorder - Sacramento County
- San Diego Commerce - San Diego County
- New Times - San Luis Obispo County
- Record Searchlight - Shasta County
- Sonoma County Herald - Sonoma County

B. Public Comments

A draft Order was issued for public comment and review on June 6, 2014. Interested persons were invited to submit written comments concerning the draft Order. A revised draft Order was issued on July 3, 2014, mainly incorporating TMDL implementation language to the previously issued draft Order. For State Water Board staff and the State Water Board to be fully responsive and consider public comments, all comments were required to be submitted to the State Water Board by noon on August 19, 2014.

C. Public Hearing

The State Water Board held a public hearing on the draft Order during its regular Board meeting on the following date and time and at the following location:

Date:	August 5, 2014
Time:	9:00 a.m.
Location:	California Environmental Protection Agency Headquarters Office 1001 I Street, 2nd Floor Sacramento, CA 95814

Interested persons were invited to attend. At the public hearing, the State Water Board heard testimony pertinent to the subject discharges, and this Order. Oral testimony was heard; however, for accuracy of the record, important testimony was required to be submitted in writing.

The State Water Board considered comments that were provided orally at the public hearing, and in writing in accordance with the public notice issued for this Order, for the development of the final draft permit. Due to the numerous changes to the draft permit, a subsequent public workshop was held on October 21, 2014, and further oral comments were heard as the final draft permit was considered for adoption on November 18, 2014.

All pertinent dates, documents and agendas were kept updated and accessible on the NPDES Program Page of the State Water Board website at the following web address: (http://www.waterboards.ca.gov/water_issues/programs/npdes/).

D. Waste Discharge Requirements

This Order serves as statewide Waste Discharge Requirements (WDRs) pursuant to California Water Code, article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA), and California Water Code chapter 5.5, division 7 (commencing with § 13370). This Order shall serve as a statewide general NPDES permit for point source discharges from single or multiple discharge points to surface waters, storm drains, and other storm water conveyances leading to waters of the U.S.

Due to the drought conditions and the State of California water conservation goals, the State Water Board strongly encourages water purveyors with a discharge authorized under this Order to place the discharge water to multiple uses prior to surface water discharge, or to a beneficial reuse. The multiple use or beneficial reuse of the discharges authorized under this Order generally does not require coverage under waste discharge requirements if the discharge is collected and reused for landscape irrigation or other uses in a manner that augments the existing supply, or if the discharge is directly or indirectly discharged to:

- Storm water capture basin(s),
- Low impact development features
- Other groundwater-recharge system(s), or

Discharges from drinking water systems to land that do not drain to waters of the U.S. do not need authorization to discharge under an NPDES permit. Although discharges to groundwater may require waste discharge requirements issued by the State and/or Regional Water Boards, as an incentive to promote multiple uses of drinking water system discharges, the State Water Board generally will not require waste discharge requirements or monitoring for such drinking water system discharges that are beneficially reused rather than discharged to a water of the U.S. A water purveyor must estimate and report in its annual report, the quantity of water that would otherwise have been discharged but is used multiple times or is beneficially reused for this provision to apply.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this Order must register on the Drinking Water Systems Discharge Permit lyris listing at the State Water Board subscription website (http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml), by selecting ‘Water Quality Topics’, then selecting ‘Drinking Water Systems Discharges’.

F. Additional Information

Requests for additional information or questions regarding this Order should be directed to Ms. Diana Messina, staff of the State Water Board, at Diana.messina@waterboards.ca.gov.

ATTACHMENT G – WATER BODIES WITH TOTAL MAXIMUM DAILY LOADS (TMDLs) AND WASTE LOAD ALLOCATIONS (WLAs) TO WATER PURVEYORS

As of the adoption date of this Order, no already-adopted TMDLs have established WLAs that apply exclusively to discharges from drinking water systems regulated under this Order. Due to the nature of the discharges authorized under this Order, it is unlikely that these discharges contribute to the impairment of the TMDL-related water bodies; therefore existing TMDL-related requirements that include WLAs to general categories of discharges are not applicable.

This Attachment is reserved for the State Water Board to include additional permit requirements in a subsequent permit renewal to implement future TMDLs that:

1) address pollutants likely to be in discharges from drinking water systems, and

2) allocate waste loads specifically to water purveyors regulated under this Order.

ATTACHMENT H - MAP OF THE REGIONAL WATER QUALITY CONTROL BOARDS

To find the Regional Water Board for a particular location, click on the map or enter a street address at the following Regional Water Board map website: (*http://www.waterboards.ca.gov/waterboards_map.shtml#rwqcbs)*

Or click on the map below: