State Water Resources Control Board
Division of Drinking Water

August 15, 2016

James Barrett
General Manager
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236

Dear Mr. Barrett:

COACHELLA VALLEY WATER DISTRICT-COVE SYSTEM, SYSTEM NO. 3310001 &
IMPROVEMENT DISTRICT NO. 8, SYSTEM NO. 3310048
REVISED HEXAVALENT CHROMIUM COMPLIANCE PLANS

The State Water Resources Control Board, Division of Drinking Water, has reviewed the
Coachella Valley Water District’s (CVWD) revised-Hexavalent Chromium Compliance
Plans submitted for its Cove Community (hereinafter, Cove) and Improvement District No. 8 (hereinafter, ID No. 8) water systems, on June 29, 2016. The revised-Compliance Plans
provide updated milestone dates for actions CVWD will take to comply with the Hexavalent Chromium MCL at the earliest feasible date. A Copy of the revised-Compliance Plans is
attached for reference.

The Division hereby accepts the revised-Compliance Plans and requests the following
information:

1.) Please provide a Hexavalent Chromium Public Notice to the Division for review and
approval no later than September 10, 2016. CVWD shall also provide the dates by
which the required public notices will be delivered to its customers each year and a
proposed method of delivery that will ensure each customer receives each notice.
(Please note that public notices must be distributed to customers at least two times
per year). Information regarding hexavalent chromium public notice language is
posted on the Division website at:

   http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml

2.) CVWD shall also submit an initial status report on or before October 10, 2016 for
each water system. Please note that CVWD must submit a subsequent status
report to the Division on or before the 10th day of the first month of each calendar
quarter (i.e. January, April, July, October). The status report must contain the status
of all Compliance Plan activity which took place in the previous calendar quarter
which includes but it’s not limited to:
a. A description of the work completed on each task/subtask identified in the compliance plan since the last status report,
b. The percentage of completion for each task/subtask,
c. A description of any factors which could prevent the system from achieving compliance by the date specified in the approved compliance plan,
d. Any requests for revision of the approved compliance plan found necessary to achieve compliance with the hexavalent chromium MCL by the earliest feasible date, and
e. Results of all hexavalent chromium source monitoring and running annual average determinations since the last status report.

If you have any questions regarding this letter, please contact Manuel Delgado, or me, at (619) 525-4408.

Sincerely,

J. Steven Williams, P.E.
District Engineer

Enclosure: Cove Community and Improvement District No. 8’s Approved Revised-Hexavalent Chromium Compliance Plans, dated June 29, 2016

County of Riverside, Department of Environmental Health (via email w/o attachments)
File – Correspondence (w/o attachments)

Steve Bigley, Director of Environmental Services, Coachella Valley Water District, P.O. Box 1058, Coachella, CA 92236 (via email w/ attachments)
Hexavalent Chromium Compliance Plan

For

Coachella Valley Water District
Cove Community Public Water System
(CA3310001)

DATE SUBMITTED:
September 30, 2015
DATE REVISED:
June 29, 2016

NAME OF RESPONSIBLE ORGANIZATION:
Coachella Valley Water District

PREPARED BY:
Steve Bigley, Director of Environmental Services
Coachella Valley Water District
Wilfred G. Gonzalez, Water Quality Supervisor
Coachella Valley Water District
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EXECUTIVE SUMMARY

Coachella Valley Water District (CVWD) has prepared a compliance plan for State Water Resources Control Board – Division of Drinking Water (DDW) approval to allow the Cove Community PWS time to achieve compliance with the new hexavalent chromium (Cr6) drinking water standard. The compliance plan provides compelling reasons why it is not feasible for CVWD to presently comply with the Cr6 standard. The compliance plan also provides a summary of CVWD’s review of funding, treatment technology, and other options to achieve compliance with the Cr6 standard by the earliest feasible date. A description of actions CVWD is taking and will take is included in the compliance plan and milestone dates to comply with the Cr6 standard by the earliest feasible date are included below in Table 1.

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1. BACKGROUND

Coachella Valley Water District (CVWD) is a public agency governed by a five-member board of directors. The district provides domestic and irrigation water, agricultural drainage, wastewater treatment and reclamation services, regional storm water protection, groundwater management and water conservation. It serves approximately 108,000 residential and business customers across 1,000 square miles, located primarily in Riverside County, but also in portions of Imperial and San Diego counties. CVWD’s Cove Community Public Water System (PWS) serves the communities of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta, Mecca, Bombay Beach, North Shore, Hot Mineral Spa, portions of Bermuda Dunes, Cathedral City, Indio, Oasis, Riverside County, Thermal, and Valerie Jean. The CVWD Cove Community PWS is comprised of ninety (90) permitted groundwater wells with a total pumping capacity of approximately 232 MGD. Cr6 levels are observed above the primary drinking water standard in twenty seven (27) wells serving the Cove Community PWS.
2. **COMPELLING REASON WHY NOT FEASIBLE FOR COVE COMMUNITY PWS TO PRESENTLY COMPLY WITH THE HEXAVALENT CHROMIUM PRIMARY DRINKING WATER STANDARD**

A. Insufficient time was provided to install facilities needed to implement best available technologies required for the Cove Community PWS to presently comply with the Cr₆ standard.

On April 15, 2014, the California Department of Public Health (CDPH) announced a new drinking water standard for hexavalent chromium (Cr₆) of 0.010 milligrams per liter (mg/L). The regulation went into effect three months later on July 1, 2014, and public water systems were required to begin monitoring for Cr₆ within six months by January 1, 2015. With quarterly monitoring triggered by initial monitoring results above the new standard and compliance based on an annual average concentration for each source, all compliance determinations must be completed by the end of 2015.

Anticipating that many Cove Community PWS wells would not meet the proposed standard, CVWD began work needed to evaluate best available technologies (BAT) soon after CDPH released the draft Cr₆ standard in 2013. Even with this advanced work effort, the best treatment for the Cove Community PWS wells could not be determined until completing pilot testing for several ion exchange processes including one test that took over one year of operation to complete. Once the standard was finalized in July 2014, CVWD was able to begin developing capital improvement project plans for implementing BAT. These plans are needed to begin evaluating the impacts of the project and any alternatives in accordance with the California Environmental Quality Act (CEQA). Due to the large scale of the project and potential project impacts including those occurring on conservation lands, CVWD is preparing an Environmental Impact Report (EIR) that will satisfy CEQA plus requirements in accordance with California’s Drinking Water State Revolving Fund (DWSRF) loan program. The earliest that the EIR process can be completed is during 2016. Since the EIR must be completed in accordance with CEQA before starting construction, it is infeasible for CVWD to presently comply with the new drinking water standard for Cr₆.

B. **Cove Community PWS cannot presently comply with Cr₆ standard by operating without impacted wells.**

CVWD considered non-treatment options to comply with the new Cr₆ standard. These options included operating the system without the 27 impacted wells with Cr₆ levels above the standard. CVWD determined that operating the system without impacted wells would cause significant domestic water supply deficiencies in some pressure zones. These deficiencies could not be overcome during peak daily demand periods with storage or transfer from other zones, making this approach infeasible.

C. **Cove Community PWS cannot presently comply with Cr₆ standard by modification of existing wells.**
CVWD considered modifying existing wells to minimize Cr6 levels. Historical depth-specific monitoring performed for wells during construction indicate Cr6 concentrations are relatively uniform with depth in CVWD wells impacted by Cr6. Therefore, the modification of well screens is not an option.

D. **Cove Community PWS cannot presently comply with Cr6 standard by drilling replacement wells in areas less impacted by Cr6.**

Drilling replacement wells in an area less impacted by Cr6 and turning off impacted wells is feasible from a supply and aquifer impact standpoint. Analysis showed that the aquifer could sustain the yield required for the replacement wells. However, this approach was ruled out due to the significant demands that this number of wells would have on groundwater in the area and the large diameter and costly pipelines that would be necessary to accommodate such a large portion of the supply coming from one pressure zone. The large amount of pipelines that would need to be installed to implement this approach would have caused significant impact within multiple Coachella Valley cities, taking many years to implement and at greater cost than installing BAT.

E. **Cove Community PWS cannot presently comply with Cr6 standard by installing package groundwater treatment facilities at impacted well sites.**

Installing a large number of package groundwater treatment facilities would also be considered a project under CEQA and would require an analysis of the project impacts and alternatives similar to the process needed to install permanent BAT treatment facilities. In addition, CVWD’s experience has shown that package treatment facilities are not as reliable as permanently installed treatment facilities. CVWD installed one package groundwater treatment facility in the eastern Coachella Valley for arsenic removal which has had maintenance problems that include chemical corrosion of the enclosure. This facility also is more difficult to maintain due to tight access within the enclosure and is less efficient in regards to brine management and water use.

F. **Cove Community PWS cannot presently comply with Cr6 standard by installing point of use (POU) devices directly to water faucets in customer homes for drinking and cooking.**

While the implementation of POU devices is technically feasible, their use would be challenging due to implementation and maintenance requirements and California regulations currently do not allow POU devices for long-term compliance with primary drinking water standards. In addition, the large number of installations that would be required could not have been completed in time to comply with the new Cr6 standard.
3. SUMMARY OF COVE COMMUNITY PWS REVIEW OF AVAILABLE FUNDING SOURCES, BEST AVAILABLE TECHNOLOGIES FOR TREATMENT, AND OTHER OPTIONS TO ACHIEVE AND MAINTAIN COMPLIANCE WITH THE PRIMARY DRINKING WATER STANDARD FOR HEXAVALENT CHROMIUM BY THE Earliest Feasible Date

CVWD’s Domestic Water Fund’s projected reserves are $86 million and $61 million as of June 30, 2015, and June 30, 2016, respectively. Although reserves decline in fiscal 2016 due to a $25.5 million capital improvement program, the Domestic Water Fund’s ending reserves are within the appropriate targets prescribed by the Reserve Policy adopted by CVWD Board of Directors. In December 2014, CVWD contracted with Public Financial Management, Inc. (PFM) for comprehensive financial advisory services. CVWD will utilize these services in coordinating and securing a credit rating and in issuing debt or complex financings to fund the capital improvement program as needed. The Chromium-6 Water Treatment Facilities Project (Project) includes $7.5 million for design in the fiscal 2016 budget and a total of $200 million over the five year period ending June 30, 2020. For the Cove Community PWS, the preliminary estimated capital cost to implement BAT to comply with the Cr6 standard is $173 million. CVWD plans to fund the Project using California DWSRF loans or grants, and if needed available domestic water reserve funds. Bond proceeds would be used only if needed. CVWD is working closely with Maria Pang, DWSRF program staff, to complete the DWSRF Application to fund CVWD’s Chromium-6 Water Treatment Facilities Project.

CVWD has pilot tested and evaluated several Best Available Technologies (BAT) for removing Cr6 from its groundwater sources including ion exchange - both strong base anion exchange (SBA) and weak base anion exchange (WBA), reduction /coagulation/filtration (RCF), and reduction/coagulation/microfiltration (RCMF). In addition, CVWD has reviewed emerging technologies such as biological treatment, adsorptive media, and electrodialysis reversal (EDR) for Cr6 removal.

CVWD has also reviewed Colorado River surface water treatment, and point of use (POU/POE) treatment options. These options were found to be significantly more costly than groundwater treatment.

Findings from CVWD’s pilot testing and evaluation of BAT show individual well groundwater SBA treatment facilities and a central resin regeneration facility for processing the SBA resin collected from these sites as the preferred treatment approach for 23 existing wells in the Cove Community PWS based on costs, waste disposal, operations and maintenance complexity, space requirements and compatibility with neighborhoods, water loss, and flexibility of the technology for removing Cr6. The proposed project also includes a centralized groundwater WBA treatment facility to treat groundwater from 2 wells with higher sulfate levels. Whereas, Alternative 3, the Less Intense Project Alternative, evaluated for the proposed project would eliminate this WBA treatment facility and associated pipelines. One (1) well (Well 6723-1) will have its water blended with distribution system water to achieve compliance with the Cr6 standard. One (1) well (4628-2) will not be treated and inactivated due to its small site size.
4. DESCRIPTION OF ACTIONS COVE COMMUNITY PWS IS TAKING AND WILL TAKE BY MILESTONE DATES TO COMPLY WITH THE PRIMARY DRINKING WATER STANDARD FOR HEXAVALENT CHROMIUM BY THE EARLIEST FEASIBLE DATE

CVWD’s compliance plan is comprised of seven major tasks: study, funding, design and permitting, CEQA certification, contractor selection and preconstruction services, construction and start-up, and commissioning. It is planned that all wells that are out of compliance will be addressed in parallel during each project phase.

Task 1 – Study
CVWD conducted a study to identify Cr6 treatment requirements, recommend the most applicable approaches (treatment and non-treatment) for impacted wells, and develop preliminary cost estimates that can be used for project budgeting. The treatment approaches selected are based on effectiveness of the technology for the water quality, cost, and minimizing water losses during treatment. The study recommended individual well groundwater SBA treatment facilities for 23 existing wells and a central resin regeneration facility for processing the SBA resin collected from these sites as the preferred treatment approach for these wells in the Cove Community PWS. This recommendation was based on costs, waste disposal, operations and maintenance complexity, space requirements and compatibility with neighborhoods, water loss, and flexibility of the technology for removing Cr6. The proposed project also includes a centralized groundwater WBA treatment facility to treat groundwater from 2 wells with higher sulfate levels. Whereas, Alternative 3, the Less Intense Project Alternative, evaluated for the proposed project would eliminate this WBA treatment facility and associated pipelines. One (1) well (Well 6723-1) will have its water blended with distribution system water to achieve compliance with the Cr6 standard. One (1) well (4628-2) will be inactivated due to its small site size.

Task 2 – Project Funding
CVWD has started the application process for DWSRF loans and grants to fund this project as stated in item 3 above. Domestic water reserve funds and bond proceeds will be used if the DWSRF is unable to fully fund the project costs.

Task 3 – Design and Permitting
The detailed design is underway and CVWD has received 90% design construction documents. Evaluation of permitting requirements has been conducted in a permitting plan and permitting coordination has been identified to potentially impact the project schedule.

Task 4 – CEQA Certification
In parallel with the design, the certification process for the California Environmental Quality Act (CEQA) is underway. CVWD filed a notice of preparation (NOP) for the Chromium-6 Water Treatment Facilities Project on July 10, 2015, and conducted a public scoping meeting on July 27, 2015. The Draft EIR for the proposed project was released on April 15, 2016, for public comment and on May 19, 2016, CVWD held a public meeting to receive comments on the Draft
EIR. CVWD’s Board is scheduled to consider certifying the proposed project EIR on or before June 30, 2016.

**Task 5 - Contractor Selection and Preconstruction Services**
CVWD elected to deliver the construction using the Construction Manager at Risk (CMAR) process. The bidding and selection process for the contractor is complete. PCL Construction, Inc. was selected on August 25, 2015, and has begun work on the project in September 2015. PLC’s preconstruction services will include constructability and value engineering reviews, coordination with the design, development of a guaranteed maximum price (GMP) for construction, and bidding to trade contractors and vendors.

**Task 6 – Construction and Start-up**
Construction will begin upon completion of the design phase. Considering the work is extensive, construction duration is planned for 3 years. Upon successful start-up of the facilities, commissioning and operations of the facilities will be turned over to CVWD.

**Task 7 - Commissioning**
Upon completion of construction and start-up, facilities will go through a commissioning period by CVWD to demonstrate performance. Compliance with Cr6 standard is planned by December 31, 2019.

Remaining project milestones and dates for Cr6 compliance are shown in Table 1.

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Hexavalent Chromium Compliance Plan

For

Coachella Valley Water District
Improvement District No. 8 Public Water System
(CA3310048)

DATE SUBMITTED:
September 30, 2015
DATE REVISED:
June 29, 2016

NAME OF RESPONSIBLE ORGANIZATION:
Coachella Valley Water District

PREPARED BY:
Steve Bigley, Director of Environmental Services
Coachella Valley Water District
Wilfred G. Gonzalez, Water Quality Supervisor
Coachella Valley Water District
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1. BACKGROUND

Coachella Valley Water District (CVWD) is a public agency governed by a five-member board of directors. The district provides domestic and irrigation water, agricultural drainage, wastewater treatment and reclamation services, regional storm water protection, groundwater management and water conservation. It serves approximately 108,000 residential and business customers across 1,000 square miles, located primarily in Riverside County, but also in portions of Imperial and San Diego counties. CVWD’s Improvement District No. 8 (I.D. No. 8) Public Water System (PWS) serves the communities of Indio Hills, Sky Valley & areas adjacent to Desert Hot Springs. I.D. No. 8 PWS is comprised of four (4) permitted groundwater wells with a total pumping capacity of approximately 9.0 MGD. Cr6 levels are observed above the primary drinking water standard in all four (4) wells serving the I.D. No. 8 PWS.
2. COMPPELLING REASON WHY NOT FEASIBLE FOR I.D. NO. 8 PWS TO PRESENTLY COMPLY WITH THE HEXAVALENT CHROMIUM PRIMARY DRINKING WATER STANDARD

A. Insufficient time was provided to install facilities needed to implement best available technologies required for I.D. No. 8 PWS to presently comply with the Cr6 standard.

On April 15, 2014, the California Department of Public Health (CDPH) announced a new drinking water standard for hexavalent chromium (Cr6) of 0.010 milligrams per liter (mg/L). The regulation went into effect three months later on July 1, 2014, and public water systems were required to begin monitoring for Cr6 within six months by January 1, 2015. With quarterly monitoring triggered by initial monitoring results above the new standard and compliance based on an annual average concentration for each source, all compliance determinations must be completed by the end of 2015.

Anticipating that all four (4) I.D. No. 8 PWS wells would not meet the proposed standard, CVWD began work needed to evaluate best available technologies (BAT) soon after CDPH released the draft Cr6 standard in 2013. Even with this advanced work effort, the best treatment for the I.D. No. 8 PWS wells could not be determined until completing pilot testing for several ion exchange processes including one test that took over one year of operation to complete. Once the standard was finalized in July 2014, CVWD was able to begin developing capital improvement project plans for implementing BAT. These plans are needed to begin evaluating the impacts of the project and any alternatives in accordance with the California Environmental Quality Act (CEQA). Due to the large scale of the project and potential project impacts including those occurring on conservation lands, CVWD is preparing an Environmental Impact Report (EIR) that will satisfy CEQA plus requirements in accordance with California’s Drinking Water State Revolving Fund (DWSRF) loan program. The earliest that the EIR process can be completed is during 2016. Since the EIR must be completed in accordance with CEQA before starting construction, it is infeasible for CVWD to presently comply with new drinking water standard for Cr6.

B. I.D. No. 8 PWS cannot presently comply with Cr6 standard by operating without impacted wells.

CVWD considered non-treatment options to comply with the new Cr6 standard. These options included operating the system without impacted wells with Cr6 levels above the standard. Since all four wells in this system are impacted by the Cr6 standard, operating the system without impacted wells is not an option.

C. I.D. No. 8 PWS cannot presently comply with Cr6 standard by modification of existing wells.

CVWD considered modifying existing wells to minimize Cr6 levels. Historical depth-specific monitoring performed for wells during construction indicate Cr6 concentrations are relatively uniform with depth in CVWD wells. Data for the recently drilled CVWD Well 3409-2 serving the I.D. No. 8 PWS shows Cr6 levels ranged from 13 to 14 micrograms per liter (ug/L) at depths
ranging from 690 to 980 feet. This data indicates the modification of well screen depths is not an option for compliance with the new Cr6 standard.

D. I.D. No. 8 PWS cannot presently comply with Cr6 standard by drilling replacement wells in areas less impacted by Cr6.

Drilling replacement wells in areas less impacted by Cr6 and turning off impacted wells is not an option for the I.D. No. 8 PWS. The groundwater aquifer within CVWD’s service boundaries in this area is similar in regards to Cr6 levels.

E. I.D. No. 8 PWS cannot presently comply with Cr6 standard by installing package groundwater treatment facilities at impacted well sites.

Installing package groundwater treatment facilities would also be considered a project under CEQA and would require an analysis of the project impacts and alternatives similar to the process needed to install permanent BAT treatment facilities. In addition, CVWD’s experience has shown that package treatment facilities are not as reliable as permanently installed treatment facilities. CVWD installed one package groundwater treatment facility in the eastern Coachella Valley for arsenic removal which has had maintenance problems that include chemical corrosion of the enclosure. This facility also is more difficult to maintain due to tight access within the enclosure and is less efficient in regards to brine management and water use.

F. I.D. No. 8 PWS cannot presently comply with Cr6 standard by installing point of use (POU) devices directly to water faucets in customer homes for drinking and cooking.

While the implementation of POU devices is technically feasible, their use would be challenging due to implementation and maintenance requirements and California regulations currently do not allow POU devices for long-term compliance with primary drinking water standards. In addition, the large number of installations that would be required could not have been completed in time to comply with the new Cr6 standard.
3. SUMMARY OF I.D. NO. 8 PWS REVIEW OF AVAILABLE FUNDING SOURCES, BEST AVAILABLE TECHNOLOGIES FOR TREATMENT, AND OTHER OPTIONS TO ACHIEVE AND MAINTAIN COMPLIANCE WITH THE PRIMARY DRINKING WATER STANDARD FOR HEXAVALENT CHROMIUM BY THE EARLIEST FEASIBLE DATE

CVWD’s Domestic Water Fund’s projected reserves are $86 million and $61 million as of June 30, 2015, and June 30, 2016, respectively. Although reserves decline in fiscal 2016 due to a $25.5 million capital improvement program, the Domestic Water Fund’s ending reserves are within the appropriate targets prescribed by the Reserve Policy adopted by CVWD Board of Directors. In December 2014, CVWD contracted with Public Financial Management, Inc. (PFM) for comprehensive financial advisory services. CVWD will utilize these services in coordinating and securing a credit rating and in issuing debt or complex financings to fund the capital improvement program as needed. The Chromium-6 Water Treatment Facilities Project (Project) includes $7.5 million for design in the fiscal 2016 budget and a total of $200 million over the five year period ending June 30, 2020. For the I.D. No. 8 PWS, the preliminary estimated capital cost to implement BAT to comply with the Cr6 standard is $27 million. CVWD plans to fund the Project using California DWSRF loans or grants, and if needed available domestic water reserve funds. Bond proceeds would be used only if needed. CVWD is working closely with Maria Pang, DWSRF program staff, to complete the DWSRF Application package to fund CVWD’s Chromium-6 Water Treatment Facilities Project.

CVWD has pilot tested and evaluated several Best Available Technologies (BAT) for removing Cr6 from its groundwater sources including ion exchange - both strong base anion exchange (SBA) and weak base anion exchange (WBA), reduction/coagulation/filtration (RCF), and reduction/coagulation/microfiltration (RCMF). In addition, CVWD has reviewed emerging technologies such as biological treatment, adsorptive media, and electrodialysis reversal (EDR) for Cr6 removal.

CVWD has also reviewed Colorado River surface water treatment, and point of use (POU/POE) treatment options. These options were found to be significantly more costly than groundwater treatment.

Findings from CVWD’s pilot testing and evaluation of BAT show centralized groundwater WBA treatment as the preferred treatment approach for I.D. No. 8 wells based on costs, waste disposal, operations and maintenance complexity, space requirements and compatibility with neighborhoods, water loss, and flexibility of the technology for removing Cr6. CVWD will construct the centralized WBA treatment facility at an alternate location in proximity to existing wells and 1 well (3405-1) will be decommissioned and a new well drilled at the alternate site.
4. DESCRIPTION OF ACTIONS I.D. NO. 8 IS TAKING AND WILL TAKE BY MILESTONE DATES TO COMPLY WITH THE PRIMARY DRINKING WATER STANDARD FOR HEXAVALENT CHROMIUM BY THE EARLIEST FEASIBLE DATE

CVWD’s compliance plan is comprised of seven major tasks: study, funding, design and permitting, CEQA certification, contractor selection and preconstruction services, construction and start-up, and commissioning. It is planned that all wells that are out of compliance will be addressed in parallel during each project phase.

Task 1 – Study
CVWD conducted a study to identify Cr6 treatment requirements, recommend the most applicable approaches (treatment and non-treatment) for impacted wells, and develop preliminary cost estimates that can be used for project budgeting. The treatment approaches selected are based on effectiveness of the technology for the water quality, cost, and minimizing water losses during treatment. The study recommended centralized WBA treatment for four (4) I.D. No. 8 wells (one of 4 existing wells will be decommissioned and a new well drilled at the centralized WBA treatment site). Approximately 10 miles of pipelines will be installed to convey water to the WBA site from the transfer wells, and then reconnect to the distribution system.

Task 2 – Project Funding
CVWD has started the application process for DWSRF loans and grants to fund this project as stated in item 3 above. Domestic water reserve funds and bond proceeds will be used if the DWSRF is unable to fully fund the project costs.

Task 3 – Design and Permitting
The detailed design is underway and CVWD has received 90% design construction documents. Evaluation of permitting requirements has been conducted in a permitting plan and permitting coordination has been identified to potentially impact the project schedule.

Task 4 – CEQA Certification
In parallel with the design, the certification process for the California Environmental Quality Act (CEQA) is underway. CVWD filed a notice of preparation (NOP) for the Chromium-6 Water Treatment Facilities Project on July 10, 2015, and conducted a public scoping meeting on July 27, 2015. The Draft EIR for the proposed project was released on April 15, 2016, for public comment and on May 19, 2016, CVWD held a public meeting to receive comments on the Draft EIR. CVWD’s Board is scheduled to consider certifying the proposed project EIR on or before June 30, 2016.

Task 5 - Contractor Selection and Preconstruction Services
CVWD elected to deliver the construction using the Construction Manager at Risk (CMAR) process. The bidding and selection process for the contractor is complete. PCL Construction, Inc. was selected on August 25, 2015, and has begun work on the project in September 2015. PLC’s preconstruction services will include constructability and value engineering reviews,
coordination with the design, development of a guaranteed maximum price (GMP) for construction, and bidding to trade contractors and vendors.

Task 6 – Construction and Start-up
Construction will begin upon completion of the design phase. Considering the work is extensive, construction duration is planned for 2.5 years. Upon successful start-up of the facilities, commissioning and operations of the facilities will be turned over to CVWD.

Task 7 - Commissioning
Upon completion of construction and start-up, facilities will go through a commissioning period by CVWD to demonstrate performance. Compliance with Cr6 standard is planned by December 31, 2019.

Remaining project milestones and dates for Cr6 compliance are shown in Table 1.

Table 1. Project Milestones for I.D. No. 8 PWS (CA3310048) Cr6 Compliance Plan

<table>
<thead>
<tr>
<th>Remaining Project Milestones</th>
<th>Date to Achieve Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete CEQA Certification</td>
<td>June 30, 2016</td>
</tr>
<tr>
<td>Design Substantially Complete</td>
<td>August 31, 2016</td>
</tr>
<tr>
<td>Complete Preconstruction</td>
<td>November 30, 2016</td>
</tr>
<tr>
<td>Complete Drinking Water State Revolving Fund Construction Grant/Loan</td>
<td>August 31, 2016</td>
</tr>
<tr>
<td>Funding Application</td>
<td></td>
</tr>
<tr>
<td>Start Construction</td>
<td>December 1, 2016</td>
</tr>
<tr>
<td>Complete Construction</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Submit DDW Permit Amendment Application</td>
<td>November 30, 2019</td>
</tr>
<tr>
<td>Receive Amended DDW Permit/Begin Operating Facilities in Compliance</td>
<td>December 31, 2019</td>
</tr>
<tr>
<td>with Cr6 Standard</td>
<td></td>
</tr>
</tbody>
</table>