## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

In the matter of:

CITY OF VICTORVILLE	Order No. R6V-2020-0001
No. R6V-2016-0042 for Administrative Civil Liability	Settlement Agreement and Stipulation for Entry of Order; Order

#### **Section I: Introduction**

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Settlement Agreement and Stipulation for Order) is entered into by and between the California Regional Water Quality Control Board, Lahontan Region Prosecution Team (Prosecution Team) and the City of Victorville (City) (collectively, "Parties"), and is presented to the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board), for adoption as an Order, by settlement, pursuant to Government Code section 11415.60.

## Section II: Recitals

- The City owns and operates its own wastewater collection system and associated infrastructure facilities within the city limits, in San Bernardino County. The collection system consists of 1.1 miles of force mains/pressure lines, and 437 miles of gravity lines. There are approximately 27,400 service lateral connections. The City discharges an average of 9.6 million gallons per day to the Victor Valley Wastewater Reclamation Authority (VVWRA) interceptor system at six locations.
- 2. The City is subject to the requirements set forth in State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ and its monitoring and reporting program contained in Order No. WQ 2013-0058-EXEC (collectively, the "Permit"). The Permit establishes requirements to operate and maintain collection systems by prescribing statewide general waste discharge requirements for all sanitary sewer systems greater than one mile that collect and/or convey wastewater to a publicly-owned treatment facility. The City is enrolled in the Permit program and is subject to its waste discharge requirements.
- Administrative Civil Liability Complaint No. R6V-2016-0042 (the Complaint) was issued July 1, 2016 and recommends imposing an administrative civil liability totaling \$6,300,250 for alleged violations of the Permit. The Complaint alleges six sanitary sewer overflows spanning March 5, 2014 through May 11, 2016 (Violations 1-6); failure to clean up a sanitary sewer overflow from September 6, 2015 through

March 8, 2016 (Violation 7); and failure to properly manage, operate, and maintain all parts of its sanitary sewer from March 5, 2014 through December 9, 2015 (Violation 8).

- 4. This Settlement Agreement and Stipulation for Order effectively dismisses Violations 7 and 8. The conduct alleged in those violations has been considered in the factor analysis for the discharge violations.
- 5. This Settlement Agreement and Stipulation for Order alleges and resolves three additional violations that occurred after the Complaint was issued and therefore, are not alleged in the Complaint. Violation 9 is for a sanitary sewer overflow that occurred January 26, 2017 in which approximately 68,750 gallons of raw sewage discharged from three manholes into a wash and infiltrated into the soil. Violation 10 is for a sanitary sewer overflow that occurred February 9, 2017 in which approximately 953 gallons of raw sewage discharged from a City sewer cleanout into a modified ephemeral stream tributary to the Mojave River, infiltrating into the soil. Violation No. 11 is for a sanitary sewer overflow that occurred June 12-13, 2017 in which approximately 393,000 gallons of raw sewage discharged from a manhole into an earthen drainage channel (Santa Fe Channel), infiltrating into the soil.
- 6. On November 17, 2009, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy was approved by the Office of Administrative Law and became effective on May 20, 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. The Prosecution Team considered and followed the methodology set forth in the Enforcement Policy for the discharge violations identified by Section II, Paragraphs 3 and 5, above. The methodology for these violations is presented in Attachment A, which is attached hereto and incorporated herein by reference. The methodology also includes information regarding cleanup and maintenance activities that the City provided to the Prosecution Team after the Complaint was issued.
- 7. To resolve by consent and without further administrative proceedings certain alleged violations of the California Water Code and the Permit set forth in the Complaint, amended by Paragraph 4, and alleged in Paragraph 5 of Section II of this Settlement Agreement and Stipulation for Order, the Parties have agreed to the imposition of \$1,500,000 against the City as full settlement for all violations identified and/or amended by Section II, Paragraphs 3 through 5, above. Payment of \$750,000 to the State Water Resources Control Board Cleanup and Abatement Account is due no later than 30 days following the Lahontan Water Board or the Executive Officer issuing the proposed Order as final. The remaining \$750,000 in liability shall be suspended upon completion of a Supplemental Environmental Project (SEP) for Septic System Conversion to Sanitary Sewer Grant or Financial Assistance in conjunction with the Mojave Integrated Regional Water Management Plan.

8. The Parties have engaged in settlement negotiations and agree to settle the matter without administrative or civil litigation and by presenting this Settlement Agreement and Stipulation for Order to the Lahontan Water Board for adoption as an Order pursuant to Government Code section 11415.60. The Prosecution Team contends that the resolution of the alleged violations is fair and reasonable and fulfills its enforcement objectives, that no further action is warranted concerning the specific violations alleged in the Complaint, as amended by this Settlement Agreement and Stipulation for Order, except as provided herein, in this Stipulation, and that this resolution is in the best interest of the public.

#### Section III: Stipulations

The Parties stipulate to the following:

- 9. Administrative Civil Liability: The City hereby agrees to pay the administrative civil liability totaling \$1,500,000 as set forth in Paragraph 7 of Section II herein. Further, the City agrees that \$750,000 of this administrative civil liability shall be suspended pending completion of a SEP as set forth in Paragraph 11 of Section III herein, and Attachment B, incorporated herein by reference.
- 10. **Payment:** The City will make a payment of \$750,000 to the State Water Resources Control Board Cleanup and Abatement Account within 30 days of the Lahontan Water Board or the Executive Officer issuing the proposed Order as final. The check or money order shall reference Administrative Civil Liability Order No. R6V-2020-0001 and be submitted to:

State Water Resources Control Board Accounting Office Attn: ACL Payment P.O. Box 1888 Sacramento, CA 95812-1888

The City shall email a copy of the check to: <u>Lahontan@waterboards.ca.gov</u>. Subject Line: City of VVL ACL Payment

11. **Description of SEP:** The City will establish a grant program to assist residents and commercial property owners in connecting into the City sewer system and properly abandoning their septic systems in the Old Town area of the City. The City will also manage construction activities necessary to connect such properties to the City sewer system. Many of the septic systems in the Old Town area of the City are in close proximity to the Mojave River and/or have high groundwater conditions. Such conditions often result in adverse impacts to groundwater quality and cause potential threats to public health.

The connection fees and construction costs to connect to the City's sewer system have proven cost-prohibitive for several property owners in the project area, identified as disadvantaged by the California Environmental Protection Agency's CalEnviroScreen System (CalEPA, Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0,

https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30.) The sewer connection grant program will assist such property owners, allowing them to connect to the City sewer system and cease discharging domestic wastewater to onsite wastewater treatment systems. Priority projects for this program will include an area in Old Town where properties are adjacent to an existing sewer main and usually only require a lateral connection to connect to the sewer system. Additional criteria elevating a property's priority for connection include those in close proximity to known contaminants (e.g., petroleum hydrocarbons, chlorinated hydrocarbons) and properties with a failing septic system that must connect to the sewer system in accordance with the City's codes.

- 12. **SEP Policy:** The SEP meets the characteristics of an acceptable SEP as specified in the State Water Board's Policy on Supplemental Environmental Projects, December 5, 2017 ("SEP Policy"), as follows:
  - a. Environmentally beneficial The SEP must improve, protect, or reduce risks to public health or the environment.

The SEP will improve groundwater quality by eliminating the septic tank waste discharges and associated pollutants to the groundwater from the properties connecting to the City sewer system. Doing so will reduce the risks to public health and the environment by reducing high nutrient (e.g., nitrogen) and bacteria levels caused by septic tank waste discharges in areas of high groundwater and in close proximity to surface waters (Mojave River).

b. "Voluntarily" agrees to undertake – The SEP shall not be an action, process, or product that is otherwise required of the settling party by any rule or regulation of any federal, state, or local entity, or that is proposed as mitigation to offset the impacts of a settling party's project(s).

The SEP is not otherwise required of the City by any rule or regulation of any federal, state, or local entity. The SEP is also not required as mitigation to offset the impacts of any City project(s).

c. In settlement of an enforcement action – The settling party's commitment to perform the SEP is included in a legally enforceable settlement document; the Water Board has had the opportunity to review and comment on the scope of the project selected by the settling party and recommended by staff before it is implemented; and the project is not commenced until after the Water Board has identified a violation and the stipulated order is in effect.

The City's commitment to implement the SEP is included in this Settlement Agreement and Stipulation for Order, a legally enforceable settlement document. The Lahontan Water Board has been provided an opportunity to review and comment upon the scope of the SEP during the 30-day public comment period and during the Board meeting at which it considered adopting this Settlement Agreement and Stipulation for Order. The project has not commenced and will not commence prior to the adoption of this Settlement Agreement and Stipulation for Order.

d. To offset a portion of a civil penalty – The Water Board may allow a settling party to satisfy up to 50 percent of the monetary assessment imposed in an administrative civil liability order arising out of a settlement by completing or funding one or more eligible SEPs.

The amount of the administrative civil liability being satisfied by the SEP is \$750,000, 50 percent of the total administrative civil liability imposed by this Settlement Agreement and Stipulation for Order.

13. Lahontan Water Board SEP Program: The Lahontan Water Board's SEP Program was established with the adoption of Resolution No. R6T-2014-0014 (February 12, 2014). The SEP Program supports establishing partnerships with independent third parties (partnership organizations) to identify, publicly review and select, and implement SEPs consistent with the SEP Policy and Lahontan Water Board's expressed priorities.

The Lahontan Water Board established such a partnership with the Mojave Integrated Regional Water Management (IRWM) Plan Implementation Support Team through the adoption of Resolution No. R6T-2016-0005 (February 11, 2016). On April 10, 2017, the Mojave IRWM Plan Implementation Support Team submitted to the Lahontan Water Board Executive Officer a request to, in part, add the subject SEP (City of Victorville Septic System Conversion to Sanitary Sewer Grant Program) to its "SEP Approved Project List." On July 31, 2017, the Lahontan Water Board Executive Officer accepted the SEP into the Lahontan Water Board's SEP Program, affirming that the SEP satisfies the Lahontan Water Board's SEP Qualification Criteria. The July 31, 2017 letter also affirms that the City is a Partnership Organization pursuant to Resolution No. R6T-2016-0005; and therefore, authorized to implement the SEP.

14. SEP Completion Date: The SEP shall be completed in its entirety no later than November 29, 2021 ("SEP Completion Date"). If other circumstances beyond the control of the City prevent completion of the SEP by that date, the Executive Officer may extend the SEP Completion Date in writing. The City must send its request for an extension in writing with the necessary justification to the Executive Officer a minimum of 30 days prior to the SEP Completion Date.

- 15. **Representations of the City:** As a material consideration for the Lahontan Water Board's acceptance of this Settlement Agreement and Stipulation for Order, the City represents that it will utilize the funds outlined in Paragraph 9 in accordance with the schedule for performance contained in the SEP proposal in Attachment B. The City understands that its promise to implement the SEP, in its entirety and in accordance with the schedule for implementation, is a material condition of this settlement of liability between the City and Lahontan Water Board. The City represents that it will spend the SEP amount as described in this Settlement Agreement and Stipulation for Order, and that within 30 days of the completing the SEP, it will provide written certification, under penalty of perjury, that the City followed all applicable environmental laws and regulations in implementing the SEP including the California Environmental Quality Act (CEQA) (14 CCR § 15000 et seq.) and the federal Clean Water Act (33 U.S.C. § 1251 et seq.).
- 16. Publicity: Whenever the City or its agents or subcontractors publicizes one or more elements of the SEP, it shall state in a <u>prominent manner</u> that the project is being undertaken as part of the settlement of an enforcement action by the Lahontan Water Board against the City.

Monitoring Period	Report Due Date
January 1 – March 31	May 1
April 1 – June 30	August 1
July 1 – September 30	November 1
October 1 – December 31	February 1

17. **Progress Reports:** The City shall provide quarterly progress reports as follows:

The first quarterly progress report is due May 1, 2020. The progress reports shall at a minimum, provide the following information:

- a. A description of SEP activities conducted during the Monitoring Period;
- b. An accounting of SEP expenditures for the Monitoring Period; and
- c. A description of SEP activities planned for the next Monitoring Period.
- 18. Final SEP Report and Certification of Expenditures: Within 30 days of completing the SEP, the City shall submit a Final SEP Report identifying all completed SEP-related work and providing a certified statement by a responsible official documenting the City's expenditures in implementing the SEP. In making such certification, the official may rely upon normal City project tracking systems that

capture employee time expenditures and external payments to outside vendors or contractors. The City shall provide any additional information requested by the Executive Officer that is reasonably necessary to verify completed SEP-related work and the City's expenditures.

- 19. **Third Party Audit:** Upon completing the SEP, or failure to complete the SEP, and at the discretion of the Executive Officer, the City, at its sole cost, shall submit a report prepared by an independent third party acceptable to the Executive Officer providing such third party's professional opinion that the City has expended money in the amounts claimed. Such information shall be provided to the Executive Officer within three months of the Executive Officer's request for the third-party audit.
- 20. Lahontan Water Board Acceptance of Completed SEP: Upon the City's satisfaction of its obligations under this Settlement Agreement and Stipulation for Order, the completion of the SEP, and any audits, the Executive Officer shall issue a "Satisfaction of Order." The issuance of the Satisfaction of Order shall terminate any of the City's further obligations under this Settlement Agreement and Stipulation for Order.
- 21. Failure to Expend All Suspended Administrative Civil Liability Funds on the Completed SEP: In the event the City is not able to explain to the reasonable satisfaction of the Executive Officer that it has spent the entire SEP amount on the completed SEP, the City shall pay the difference between the suspended \$750,000 and the amount the City can reasonably demonstrate was actually spent on the SEP as an administrative civil liability. Such payment shall be made to the State Water Resources Control Board Cleanup and Abatement Account after service of the Executive Officer's determination.
- 22. Failure to Complete the SEP: If the SEP is not fully implemented within the SEP time schedule required by this Settlement Agreement and Stipulation for Order, or there has been a material failure to satisfy a milestone requirement, the City shall be liable to pay the entire suspended amount of \$750,000, or some portion thereof less the value of the completion of any milestone requirement (e.g., a parcel's completed hookup to the sewer system). Unless otherwise ordered, the City shall not be entitled to any credit, offset, or reimbursement from the Lahontan Water Board for expenditures made on the SEP prior to the failure to complete the SEP. Upon a determination by the Executive Officer that an amount of the suspended liability is due, the amount owed shall be paid to the State Water Resources Control Board Cleanup and Abatement Account after service of the Executive Officer's determination. In addition, the City may be liable for the Lahontan Water Board's legal costs and expert witness fees should the determination require a hearing before the Board. Payment of the assessed amount shall satisfy the City's obligations to implement the SEP in its entirety.

- 23. Lahontan Water Board is not Liable: Neither the Lahontan Water Board members nor the staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from acts or omissions by the City, its officers, employees, agents, representatives, or contractors in carrying out activities pursuant to the Settlement Agreement and Stipulation for Order; nor shall the Lahontan Water Board members or staff be held as parties to or guarantors of any contract entered into by the City, its officers, employees, agents, representatives, or contractors in carrying out activities pursuant to this Settlement Agreement and Stipulation for Order. The City covenants not to sue or pursue any administrative or civil claim against any state agency or the State of California, or their officers, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by this Settlement Agreement and Stipulation for Order or the SEP.
- 24. **Compliance with Applicable Laws:** The City understands that payment of administrative civil liability in accordance with the terms of this Settlement Agreement and Stipulation for Order or compliance with its terms is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged may subject the City to further enforcement, including additional administrative civil liability.
- 25. Attorney's Fees and Costs: Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.
- 26. **Matters Addressed by Stipulation:** Upon the Lahontan Water Board or the Executive Officer issuing the proposed Order as final, this Settlement Agreement and Stipulation for Order represents a final and binding resolution and settlement of all claims, violations, or causes of action alleged in the Complaint and herein. The provisions of this Paragraph are expressly conditioned on the full payment of the administrative civil liability by the deadlines specified in Section III, Paragraph 10, and the City's full satisfaction of the obligations described in Section III, Paragraphs 14-19, and 21-22.
- 27. **Public Notice:** The City understands that this Settlement Agreement and Stipulation for Order will be noticed for a 30-day public review and comment period prior to consideration by the Lahontan Water Board. If significant new information is received that reasonably affects the propriety of presenting this Settlement Agreement and Stipulation for Order to the Lahontan Water Board for adoption, the Prosecution Team Lead may unilaterally declare it void and decide not to present it to the Lahontan Water Board. The City agrees that it may not rescind or otherwise withdraw its approval of this proposed Settlement Agreement and Stipulation for Order.

- 28. Addressing Objections Raised During Public Comment Period: The Parties agree that the procedure contemplated for adopting this Settlement Agreement and Stipulation for Order by the Lahontan Water Board and its review by the public is lawful and adequate. In the event procedural objections are raised prior to the Order becoming effective, the Parties agree to meet and confer concerning any such objections and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.
- 29. **Interpretation:** This Settlement Agreement and Stipulation for Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party. The City is represented by counsel in this matter.
- 30. **Modification:** This Settlement Agreement and Stipulation for Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties and approved by the Lahontan Water Board or the Executive Officer. All approvals and decisions of the Lahontan Water Board and the Executive Officer under the terms of this Settlement Agreement and Stipulation for Order shall be communicated to the City in writing. No oral advice, guidance, suggestions or comments by employees or officials of the Lahontan Water Board regarding submissions or notices shall be construed to relieve the City of its obligation to obtain any final written approval required by this Order.
- 31. If Order Does Not Take Effect: In the event that this Settlement Agreement and Stipulation for Order does not take effect because it is not approved by the Lahontan Water Board or the Executive Officer, or is vacated in whole or in part by the State Water Board or a court, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Lahontan Water Board to determine whether to assess administrative civil liabilities for the underlying alleged violations, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing. The Parties agree to waive any and all objections based on settlement communications in this matter, including, but not limited to:
  - a. Objections related to prejudice or bias of any of the Lahontan Water Board members or their advisors and any other objections that are premised in whole or in part on the fact that the Lahontan Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Settlement Agreement and Stipulation for Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the Complaint in this matter; or
  - b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

-9-

32. **Waiver of Hearing:** The City has been informed of the rights provided by Water Code section 13323, subdivision (b), and hereby waives its right to a hearing before the Lahontan Water Board prior to the adoption of the Settlement Agreement and Stipulation for Order.

-10-

- 33. **Waiver of Right to Petition or Appeal:** The City hereby waives its right to petition the Lahontan Water Board's adoption of the Settlement Agreement and Stipulation for Order for review by the State Water Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court. This explicit waiver of rights includes potential future decisions by the Lahontan Water Board, or its delegate related to this Settlement Agreement and Stipulation for Order, including, but not limited to time extensions, completion of SEP milestones, and other terms contained in this Settlement Agreement and Stipulation for Order.
- 34. **City's Covenant Not to Sue:** The City covenants not to sue or pursue any administrative or civil claim(s) against any state agency or the State of California, their officers, Board Members, employees, representatives, agents, or attorneys arising out of or relating to any matter covered herein.
- 35. **Authority to Bind:** Each person executing this Settlement Agreement and Stipulation for Order in a representative capacity represents and warrants that he or she is authorized to execute it on behalf of and to bind the entity on whose behalf he or she executes it.
- 36. **Effective Date**: The obligations under Section III, Paragraphs 9-11 and 14-22 of this Settlement Agreement and Stipulation for Order are effective and binding on the Parties only upon the entry of an Order by the Lahontan Water Board or the Executive Officer which incorporates the terms of this Stipulation.
- 37. **Severability:** This Settlement Agreement and Stipulation for Order are severable; should any provision be found invalid the remainder shall remain in full force and effect.
- 38. **Counterpart Signatures:** This Stipulation may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

ORDER NO. R6V-2020-0001 (PROPOSED)

IT IS SO STIPULATED.

California Regional Water Quality Control Board Prosecution Team Lahontan Region

By:

Scott C. Ferguson

Supervising Water Resource Control Engineer

Date: 2/13/2020

City of Victorville

By:

Gloria Garcia Mayor

Date:

APPROVED AS TO FORM:

By:

Andre De Bortnowsky City Attorney

Date: \_\_\_\_\_

IT IS SO STIPULATED.

California Regional Water Quality Control Board Prosecution Team Lahontan Region

Garcia

By: Scott C. Ferguson Supervising Water Resource Control Engineer

Date: \_\_\_\_\_

City of Victorville

By:

Gloria Garcia Mayor

Date: February 2020

ATTEST:

By:

Notters

Marcie Wolters Assistant City Clerk

Date: February 14, 2020

ORDER NO. R6V-2020-0001

IT IS SO STIPULATED.

California Regional Water Quality Control Board Prosecution Team Lahontan Region

-11-

By:

Scott C. Ferguson

Supervising Water Resource Control Engineer

62020 2/13 Date:

City of Victorville

By:

Gloria Garcia Mayor

Date: \_\_\_\_\_

APPROVED AS TO FORM: By: Andre De Bortnowsky

City Attorney

Date: <u>2.13</u>, 20 '20

APPROVED AS TO FORM:

By:

By:

Andre De Bortnowsky City Attorney

Date: \_\_\_\_\_

APPROVED AS TO RISK:

Chuck Buquet Risk Manager

2/14/2020 Date:

#### Order of The Lahontan Water Board

- 39. This Order incorporates the foregoing Settlement Agreement and Stipulation for Order.
- 40. In accepting the foregoing Settlement Agreement and Stipulation for Order, the Lahontan Water Board has considered, where applicable, each of the factors prescribed in Water Code section 13385(e). The Lahontan Water Board's consideration of these factors is based upon information obtained by the Lahontan Water Board staff in investigating the allegations in the Complaint or otherwise provided to the Lahontan Water Board.
- 41. Issuance of this Settlement Agreement and Stipulation for Order is being taken for the protection of the environment and to enforce the laws and regulations administered by the Lahontan Water Board. As such, it is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15307, 15308, and 15321. If the Lahontan Water Board determines that implementation of any plan required by this Order will have a significant effect on the environment that is not otherwise exempt from CEQA, the Lahontan Water Board will conduct the necessary and appropriate environmental review prior to approval of the applicable plan. The City will bear the costs, including the Lahontan Water Board's costs, of determining whether implementing the SEP required by this Order will have a significant effect on the environment and, if so, in preparing and handling any documents necessary for environmental review. If necessary, the City and a consultant acceptable to the Lahontan Water Board shall enter into a memorandum of understanding with the Lahontan Water Board regarding such costs prior to undertaking any environmental review.

Pursuant to Water Code section 13323 and Government Code section 11415.60, **IT IS HEREBY ORDERED** on behalf of the California Regional Water Quality Control Board, Lahontan Region.

Patty 3. Konyoundin

Patty Z. Kouyoumdjian Executive Officer

Date: <u>May 14, 2020</u> Attachments:

- A. Administrative Civil Liability Methodology
- B. City of Victorville Supplemental Environmental Project (SEP) Old Town Septic to Sewer Conversion Project August 29, 2019, with Exhibits 1 - 1-0

#### ATTACHMENT A ADMINISTRATIVE CIVIL LIABILITY METHODOLOGY

Administrative civil liability may be imposed pursuant to the procedures described in California Water Code section 13323. The Complaint alleges the acts or failures to act that constitutes a violation of law, the provision of law authorizing civil liability to be imposed, and the proposed civil liability.

Pursuant to Water Code section 13385, subdivision (c), civil liability may be imposed administratively by the Lahontan Regional Water Quality Control Board (Lahontan Water Board) in an amount not to exceed the sum of both of the following:

- (1) Ten thousand dollars (\$10,000) for each day in which the violation occurs; and
- (2) Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged, but not cleaned up, exceeds 1,000 gallons.

Water Code section 13385, subdivision (e) requires the Lahontan Water Board to consider several factors when determining the amount of civil liability to impose. These factors include:

...the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.

On November 17, 2009, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy provides a calculation methodology for determining administrative civil liability. The calculation methodology includes an analysis of the factors in Water Code section 13385, subdivision (e), and it enables fair and consistent implementation of the Water Code's liability provisions.

The Lahontan Regional Water Quality Control Board (Water Board) Prosecution Team prepared this methodology and the Penalty Worksheet in Attachment B to Administrative Civil Liability Complaint No. R6V-2016-0042 (ACL Complaint or the Complaint) consistent with the Enforcement Policy's administrative civil liability calculation methodology.

The City of Victorville (Discharger or City) violations alleged in the Complaint (Violations 1 through 8) are a combination of discharge and non-discharge violations of State Water Resources Control Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge

Requirements for Sanitary Sewer Systems, and its amendment, Order No. WQ 2013-0058-EXEC (Permit), and of the *Water Quality Control Plan for the Lahontan Region* (Basin Plan).

Violations 1 through 6 and Violations 9 through 11 (not included in the Complaint) are discharges resulting from unauthorized Sanitary Sewer Overflows (SSOs) of untreated wastewater (raw sewage) on various dates from March 5, 2014 through June 13, 2017 (see Table 1, below). The associated analysis for each of these discharge violations omits Step No. 3 of the Enforcement Policy's administrative civil liability methodology, which addresses non-discharge violations.

Violations 7 and 8 from the Complaint have been dismissed in the Settlement Agreement and Stipulation for Entry of Order; Proposed Order No. R6V-2020-0001 (Stipulated Order). The violations cited non-compliance with permit conditions that do not include discharges. These violations are therefore not subject to liability under Water Code section 13385.

Violations 9 through 11 have been added in the Stipulated Order. These violations occurred after the Complaint was issued. The violations are discharges resulting from unauthorized SSOs of raw sewage on January 26, 2017 (Violation 9), February 9, 2017 (Violation 10), and June 12-13, 2017 (Violation 11).

Methodology Step Nos. 6 through 10 apply to the Combined Total Initial Base Liability amount for all nine violations. These steps are discussed after the Total Base Liability amounts are discussed for each violation.

Table 1, below, lists the violations alleged in the Complaint and Stipulated Order along with their respective Initial Base Liability amounts (Methodology Step Nos. 1 through Step 5). The final recommended liability amount is provided in Methodology Step Nos. 7 and 10.

Table 1.	Violations	and Initial	Base I	_iability

Violation No.	Description	Date of Violation	Days of Violation	Total Base Liability
1	SSO discharge of <b>89,075 gallons</b> from Manhole No. 149 in undeveloped easement area of Karen Drive, south of Hook Boulevard.	March 5-10, 2014	6	\$206,965.00
2	SSO discharge of <b>211,450</b> gallons from Manhole No. 110 in the dirt easement approximately 350 feet east of Grant Street and Lambert Lane.	March 26, 2015	1	\$665,221.70
3	SSO discharge of <b>11,686,149</b> gallons from GIS Manhole No. 143 (Sewer Atlas Book Manhole No. 120) in sewer easement located in Turner Wash.	September 6-14, 2015	9	\$9,454,500.09
4	SSO discharge of <b>73,200</b> gallons from Manhole No. 131 within the sewer easement west of 16711 Chalon Road.	November 20-25, 2015	6	\$269,223.24
5	SSO discharge of <b>five</b> (5) gallons from an air release valve located on an 8-inch force main under a private railroad trestle and above the Mojave River. Latitude 34.56066, Longitude - 117.29904.	December 9, 2015	1	\$3,080.00
6	SSO discharge of <b>28,925 gallons</b> from Manhole No. 127, on Yates Road approximately 100 feet east of Cypress Avenue.	May 11, 2016	1	\$76,362.00

Violation No.	Description	Date of Violation	Days of Violation	Total Base Liability
7	Failure to cleanup waste and debris within Turner Wash from the September 6-14, 2015 SSO event.	September 14, 2015 through March 8, 2016	4	\$0.00
8	Failure to properly manage, operate, and maintain all parts of the sanitary sewer system	March 5, 2014 through December 9, 2015	465	\$0.00
9	SSO discharge of <b>68,750 gallons</b> from Manhole Nos. 001123 (west of Lambert Lane and Grant Street) and 04426 and 005241 (760 and 1,470 feet east of Hesperia Road, respectively, on Coad Road).	January 26, 2017	1	\$199,485.00
10	SSO discharge of <b>780</b> <b>gallons</b> from Cleanout No. 000719 within the former Pearl Arbor Terrace easement, approximately 775 feet upgradient from Manhole No. 007021 near D Street.	February 9, 2017	1	\$2,640.00
11	SSO discharge of <b>393,000 gallons</b> from Manhole No. 005570 within the easement north of Ottawa Street and west of Santa Fe channel.	June 12-13, 2017	2 TOTAL	\$866,800.00 \$11,744,277.03

#### Violation No. 1 SSO Discharge of 89,075 Gallons

## <u>Synopsis</u>

Based on the City's March 11, 2014 Mainline Stoppage Report, on March 5 through March 10, 2014, an SSO occurred from the City's Manhole No. 149, located within an undeveloped easement area of Karen Drive, south of Hook Boulevard. This synopsis is based on that report.

91,875 gallons of raw sewage were discharged during the event. Of this amount, 2,800 gallons were bermed, recovered, and returned back to the sewer system. The remaining 89,075 gallons flowed across the land surface and into a concrete-lined drainage channel. The channel is tributary to the Mojave River, a water of the United States. The channel did not carry surface water flows at the time of the SSO discharge event.

The City received a report of sewage odors in the area of concern on Thursday, March 6, 2014. City staff investigated the area on March 6, 2014. City staff did not detect any odors or evidence of an SSO. City staff then attempted to contact the complainant later that day and left a voice mail message.

City staff returned to the area four days later on Monday, March 10, 2014 and observed the SSO at 8:30 a.m. City staff constructed a berm to contain the discharge until the discharge could be stopped. It was determined that the SSO was caused by a blockage formed by non-dispersible wipe towels/rags. The blockage was cleared by 8:50 a.m. on March 10, 2014. 2,800 gallons were recovered from the bermed area and from catchment basins, and the affected catchment basins and concrete drainage channel were disinfected.

The City estimates that the SSO event began approximately 24 hours prior to the time of day the reporting party detected the odor (7:00 a.m.). Based on this assumption, the City calculated the total discharge quantity based upon an average flow rate of 245 gallons per day per unit for the 75 residential units serviced by this segment of sewer main pipe.

## Step 1: Potential for Harm for Discharge Violations

Actual or threatened impacts to beneficial uses are determined using a three-factor scoring system. The three factors include: (a) the harm or potential harm to beneficial uses; (b) the physical, chemical, biological, or thermal characteristics of the discharge; and (c) the susceptibility to cleanup or abatement of the discharge(s). A numeric score is determined for each of the three factors. These scores are then added together to determine a final Potential for Harm score. Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **6** (six) is assigned to Step 1 of the calculation methodology.

#### A. Factor 1: Harm or Potential Harm to Beneficial Uses

This factor evaluates direct or indirect harm or potential for harm to beneficial uses that may result from exposure to the pollutants or contaminants in the unauthorized discharge of raw sewage. A score between 0 (negligible) and 5 (major) is assigned in accordance with the statutory factors of the nature, circumstances, extent and gravity of the violation.

The Basin Plan was adopted pursuant to Water Code section 13243 on March 31,1995 and was most recently amended on January 14, 2016. Chapter 2 of the Basin Plan (Table 2.1, Pages 2-38 and 2-39) lists the designated beneficial uses for the Mojave River and its tributaries. The designated beneficial uses of the Mojave River and its tributaries that could be impacted by the unauthorized discharge include municipal and domestic supply, agricultural supply, groundwater recharge, water contact recreation (swimming, water skiing, wading, and fishing), non-contact recreation (picnicking, sunbathing, hiking, boating, kayaking, sightseeing, aesthetic enjoyment), commercial and sportfishing, warm and cold freshwater habitats, and wildlife habitat.

As noted in Finding No. 2 of the Permit, domestic wastewater, as well as industrial and commercial wastewater, "...often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants." Discharges of raw sewage, "...may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high pubic exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation." Discharges of raw sewage can also, "...pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters."

The discharge of raw sewage occurred within an unlined catchment area and in a concretelined drainage channel. The channel is tributary to the Mojave River. The drainage channel was dry at the time of the raw sewage discharge, and a portion of the discharge infiltrated into the unlined catchment basin. It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. The Water Board is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts.

The discharge of 89,075 gallons of raw sewage on March 5-10, 2014 resulted in below moderate harm to the beneficial uses of the Mojave River and its tributary areas. The Enforcement Policy defines below moderate as:

Below Moderate – less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial uses is minor).

Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

#### B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

This factor evaluates the degree of toxicity of the discharge by evaluating the physical, chemical, biological, and/or thermal nature of the discharge. Toxicity is the degree to which a substance can damage a living or non-living organism. Toxicity can refer to the effect on a whole organism, such as an animal, bacterium, or plant, as well as the effect on a substructure of the organism, such as a cell or an organ. A score between 0 (negligible risk) and 4 (significant risk) is assigned based on a determination of the risk or threat of the discharged material on potential receptors. Potential receptors are those identified considering human, environmental, and ecosystem health exposure pathways.

Raw sewage typically has elevated concentrations of biochemical oxygen demand (BOD), total suspended solids, high levels of pathogens (e.g., viruses and bacteria), and toxic pollutants (e.g., heavy metals, pesticides, personal care products, and pharmaceuticals). These pollutants exert varying levels of impact on water quality and beneficial uses of receiving waters. High BOD reduces the amount of dissolved oxygen available for fish habitat. Just one virus, bacterium, or worm can reproduce to cause a serious infection, especially in individuals with impaired immune systems. These considerations suggest a potential significant risk for this factor.

The high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. The Enforcement Policy defines above-moderate as:

Discharged material poses an above-moderate risk or a direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors and/or there is substantial concern regarding receptor protection).

Accordingly, a score of **3** (three) is assigned to Factor 2.

#### C. Factor 3: Susceptibility to Cleanup or Abatement

Pursuant to the Enforcement Policy a score of 0 is assigned for this factor if 50 percent or more of the discharge is susceptible to cleanup or abatement. A score of one is assigned if less than 50 percent or more of the discharge is susceptible to cleanup or abatement.

The City was able to recover 2,800 gallons (approximately three (3) percent) of the 91,875 gallons initially discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

### Step 2: Assessments for Discharge Violations

The Enforcement Policy provides that the initial liability amount shall be determined on a per day and a per gallon basis per Water Code section 13385, subdivision (c), using the Potential for Harm score from Step 1 in conjunction with the Extent of Deviation from the Requirement of the violation. (See Enforcement Policy, Tables 1 and 2.)

#### A. Extent of Deviation from the Requirement

Permit Order No. C.1 prohibits, "Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States..."

The Basin Plan prohibits, "The discharge of untreated sewage, garbage, or other solid wastes into surface waters of the Region ..." (Basin Plan, page 4.1-1.)

Section 301 of the Clean Water Act (Federal Water Pollution Control Act, 33 U.S.C. § 1311) prohibits the discharge of pollutants to waters of the United States except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated.

The Enforcement Policy defines a major deviation as,

The requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

## B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1,000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

[(0.22) x (88,075 gallons) x (\$10/gallon)] + [(0.22) x (6 days) x (\$10,000/day)] = **\$206,965.00** 

## Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

### Step 4: Adjustment Factors

The Enforcement Policy describes three factors related to the discharger's conduct that should be considered for modification of the amount of initial liability: the discharger's culpability, the discharger's efforts to clean up or cooperate with regulatory authorities after the violation, and the discharger's compliance history. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

#### A. Adjustment for Culpability

For culpability, the Enforcement Policy suggests an adjustment resulting in a multiplier between 0.5 to 1.5, with the lower multiplier for accidental incidents, and the higher multiplier for intentional or negligent behavior. In this case, a neutral culpability multiplier of **1.0** has been selected. Water Board staff acknowledges that blockages caused by wipes occur in even the most well-maintained systems. The City, therefore, has no heightened culpability for the March 2014 SSO event.

#### B. Adjustment for Cleanup and Cooperation

For cleanup and cooperation, the Enforcement Policy suggests an adjustment should result in a multiplier between 0.75 and 1.5. A lower multiplier is for situations where there is a high degree of cleanup and/or cooperation and a higher multiplier is for situations where cleanup and/or cooperation is minimal or absent. In this case, a neutral Cleanup and Cooperation multiplier of **1.0** has been selected.

Lower values are typically reserved for dischargers who immediately identify a discharge and implement exceptional cleanup measures, abatement, or mitigation beyond what is expected. As noted in the synopsis discussion, while the City initially responded to the call received regarding potential odors, the City failed to adequately follow up with the caller and identify the active discharge until four days later. Once identified, the City then stopped the discharge and cleaned up what it could recover.

## C. Adjustment for History of Violations

The Enforcement Policy suggests that where there is a history of repeat violations, a minimum multiplier of 1.1 should be used for this factor. There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

# Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$206,965.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (206,965.00) x (1.0) x (1.0) x (1.0) = 226,965.00

#### Violation No. 2 SSO Discharge of 211,450 Gallons

# <u>Synopsis</u>

On March 26, 2015, an SSO occurred from the City's Manhole No. 110, located within an undeveloped easement area east of the intersection of Grant Street and Lambert Lane. 214,450 gallons of raw sewage were discharged into a wash during the event. The City constructed three dirt berms in the wash to contain the raw sewage discharge. 3,000 gallons were collected behind the berms and returned back to the sewer system. The remaining 211,450 gallons infiltrated into the ground surface of the wash. Based upon a GIS Map of the effluent flow provided by the City, the raw sewage flowed over more than 4,500 feet of the wash's bed. The wash is tributary to the Mojave River, but it did not carry surface water flows at the time of the SSO discharge event. (City of Victorville – SSO Technical Report, CIWQS Spill Event ID No. 814130.)

A City employee initially observed the discharge on Thursday, March 26, 2015 at approximately 9:30 a.m. The employee observed water flowing on Coad Road. The employee thought the water was from a meter flushing or from the City's Water Department and did not report the observed discharge until after the SSO event had been resolved. (Mainline Stoppage Report, March 26, 2015, and Tom Morales, Employee Statement, March 31, 2015.)

Another City employee directly observed the discharge occurring at approximately 3:00 p.m. on Thursday, March 26, 2015 in the earthen drainage channel east of Grant Street and Lambert Lane, along Coad Road. City cleanup crews arrived at the scene at approximately 3:20 p.m. A front-end loader was brought to the scene at approximately 3:45 p.m. to install dirt berms at three locations within the wash. The discharge ended at approximately 4:00 p.m., when the blockage was removed from the sewer system downgradient from the point of discharge. The raw sewage that had been collected behind the constructed berms was recovered by a vacuum truck and directed back into the City's sewer collection system. (Mainline Stoppage Report, March 26, 2015.)

City crews returned on Friday, March 27, 2015 at 6:30 a.m. to continue the cleanup and disinfection process. Solids were raked, collected, and properly disposed at the Victor Valley Wastewater Reclamation Authority (VVWRA) treatment plant. Disinfectant was applied to all remote spill areas throughout the flow path of the discharge. The constructed berms were removed from the drainage channels, and the soil was scarified. Sewer manholes that were surcharged from the SSO event were rinsed down and cleaned up. (Mainline Stoppage Report, March 26, 2015.)

The City determined the cause of the SSO event to be a buildup of fats, oils, and greases. This was determined based upon the City's observation of grease and debris on the shelves of the downstream sewer manholes (Nos. 116 and 117) that were surcharged during the event. (Mainline Stoppage Report, March 26, 2015.)

The City calculated the spill volume based upon an electronic meter that had been installed downgradient from the point of discharge. The City has a total of six locations where the City's

sanitary sewer system connects to VVWRA's trunk line. These connection points are continuously metered. The City, as a member of the Joint Powers Authority of VVWRA, has access to each of these electronic metering stations. The diurnal graphs plotted from the metering station identify the discharge start and end times on March 26, 2015. Comparing the flow data from March 26, 2015 to typical flows that occur during the time of day that the SSO event occurred, the City calculated a total loss of 214,450 gallons of raw sewage during the SSO event. (Final Technical Report - Grant Street and Lambert, January 21, 2016.)

In its Final Technical Report for this discharge, the City states on page 5, "...not knowing an overflow was occurring was the biggest deficiency." The report goes on to state that City staff has met with VVWRA staff and their flow meter vendor to implement an alarm system to alert the City of unusually low flow or high-level readings from the continuous-read flow meters.

The City did not report the SSO event to the Lahontan Water Board until April 7, 2015, 12 days after the event occurred. Additionally, the City failed to report the SSO event to the California Office of Emergency Services (CAL-OES) until December 21, 2015, almost nine months after the SSO event. A City employee did make two attempts to call Cal-OES twice on March 26, 2015, but the employee reported that there was no answer when he placed the calls<sup>1</sup>. (Mainline Stoppage Report, March 26, 2015.)

# Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of 6 (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The discharge of raw sewage occurred over an approximately 4,500-foot length of earthen wash, which is tributary to the Mojave River. The wash was dry at the time of the raw sewage discharge and all but 3,000 gallons of the 214,450-gallon discharge infiltrated into the earthen wash.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts. Further, impacts to wildlife resources from the discharge of the raw sewage along the 4,500-foot length of its flow path within the earthen wash may be reasonably expected.

<sup>&</sup>lt;sup>1</sup> These delayed reports also violate the Permit subject to Water Code section 13267. In light of the already significant penalties associated with the alleged violations, the Prosecution Team is exercising its discretion in not seeking administrative civil liability for the reporting violations. The Water Board reserves the right to take any enforcement action authorized by law.

The discharge of 211,450 gallons of raw sewage on March 26, 2015 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. The Enforcement Policy defines below moderate as:

Below Moderate – less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial uses is minor).

Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

# B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

# C. Factor 3: Susceptibility to Cleanup or Abatement

The City was able to recover 3,000 gallons (approximately one percent) of the 214,450 gallons initially discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

# Step 2: Assessments for Discharge Violations

## A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

# B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1,000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $[(0.22) \times (210,450 \text{ gallons}) \times (\$10/\text{gallon})] + [(0.22) \times (1 \text{ day}) \times (\$10,000/\text{day})] = \$465,190.00$ 

# Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

### A. Adjustment for Culpability

In this case, a culpability multiplier of **1.3** has been selected.

The City commissioned a Gap Analysis for its sewer collection system and associated infrastructure facilities, which was completed on September 30, 2014 (Gap Analysis for Waste Discharge Requirements Compliance (Final Report) prepared by Hall & Foreman, Inc.). The purpose of the Gap Analysis was to examine systemic factors that have contributed to, or caused, a gap between the current state of the system and the future and desired state outlined by the Permit compliance requirements. The Gap Analysis identified several areas that the City needed to address in order to come into compliance with the Permit.

The Gap Analysis indicated the City had failed to properly manage, operate, and maintain all parts of the collection system since 2009. The City's failure to manage and maintain its system likely contributed to this SSO event. Adequately maintaining a sewer collection system, including routine system cleaning, is critical to preventing SSO events caused by accumulating fats, oils, and greases, such as the March 26, 2015 SSO event.

The Gap Analysis noted (page 28) that the City had adopted an Operations and Maintenance (O&M) Plan pursuant to its 2009 Sewer System Management Plan (SSMP), more than five (5) years prior to this SSO event. The O&M Plan stipulated the cleaning and inspection of all sewer segments within a seven (7)-year cycle. However, the Gap Analysis stated that <u>the City</u> <u>does not own the necessary cleaning and inspection equipment</u>. The City only conducts the required maintenance, cleaning, and inspections, "…when there is a specific need to do so."

Additionally, the Gap Analysis identified the need for the City to develop and implement an effective FOG (fats, oils, greases) program based on the requirements described in the Permit and in accordance with the City's own ordinances (pages 38-39). The Gap Analysis recommended the City to inventory and characterize potential FOG sources, develop legal authority to impose FOG program requirements, and to develop and implement an associated monitoring and enforcement program.

Upon completion of the Gap Analysis, the City immediately effectuated a contract to update the Sewer Master Plan in November 2014 (City of Victorville Letter, May 4, 2017). The Sewer Master Plan was scheduled to be completed in July 2015, at which time, the City would have identified capital improvement projects to be implemented. However, the Sewer Master Plan was not completed until December 2016 due to consultant staff turnover beyond the control of the City. This delay resulted in a subsequent delay in the City's ability to effectively identify and implement capital improvement projects. (City of Victorville Letter, May 4, 2017.)

Regional and State Water Board staff conducted a compliance inspection of the City's sewer collection system on December 9, 2015. The inspection included an audit of the City's procedures and documents for complying with the Permit. It was not until after the Water Board issued the December 2015 Compliance Inspection Report that the City reassured Water

Board staff in its response letter received May 23, 2016 that significant investments and program changes would be made in the near future.

Permit Order No. D.8 requires the City to, "...properly manage, operate, and maintain all parts of the sanitary sewer system..." Observations during the December 2015 inspection, and findings regarding documents provided by the City, indicate an ongoing failure to comply with this permit requirement.

To maintain compliance with Permit Order No. D.8, it is expected that the City have an adequate SSMP that is effectively implemented and managed. Specifically, the SSMP is required to meet the minimum subparts described in Permit Order No. D.13. During the December 2015 inspection, Regional and State Water Board staff found the City's SSMP to be outdated and ineffective. The 2009 SSMP provided by the City was found to be significantly deficient in the following areas:

- Operation and Maintenance Program
- Rehabilitation and Replacement Plan (Capital Improvement Plan)
- Overflow Emergency Response Plan
- System Evaluation and Capacity Assurance Plan (SECAP)
- Communication Program

As noted, the 2009 SSMP stipulates an inspection and cleaning cycle for the entire collection system to be once every seven years. During the inspection, City staff described the cleaning cycle to be longer, approximately once every 10 years. Water Board staff learned during the inspection that, due to limited staff resources, cleaning was focused primarily on "hot spots," or areas previously identified as problematic. This prioritized scheduling combined with limited staff resources may have resulted in significantly longer cleaning cycles for those pipe segments that have not experienced any historical issues. For example, the pipe segment containing Manhole No. 106 located on Coad Road was reportedly cleaned in November 2003 and May 2015, with nearly 12 years between cleaning events. The City indicated during the audit that changes to this schedule (e.g. increased frequency of cleaning) do not occur unless a problem is identified in a line segment (e.g. SSO is observed).

The 2009 SSMP also failed to adequately describe routine preventative operation and maintenance activities. No specific details were provided as to maintenance practices at the seven lift stations owned and operated by the City. Although the City explained during the December 2015 inspection that staff inspect the stations at least once per week, maintenance records only documented the weekly visits, with no additional information/documentation regarding the activities performed during each visit. Additionally, Water Board staff observed solids accumulation in the lift station wet wells, indicative of a lack of maintenance.

The Rehabilitation and Replacement Plan is required as part of the Operation and Maintenance Program of the SSMP (Permit Order No. D.13.(iv)(c) on page 11 of 20). The Plan

is required to address the identification and prioritization of system deficiencies through regular visual and video inspection. At the time of the December 2015 inspection, the City had yet to complete a condition assessment of the collection system since at least 2007. Although the 2009 SSMP described an inspection goal of once every seven years for the system, the City had only inspected approximately 25 miles (less than four percent of entire collection system) of pipe via closed-circuit television at the time of the December 2015 inspection. As a result, a detailed plan for short and long-term rehabilitation actions had not been prepared, and capital improvement projects related to structural deficiencies were only being completed on an "as-identified" basis at the time of the inspection.

Failing to accurately budget and undertake capital improvement projects is an illustration of the City's failure to properly manage the collection system. For example, only \$40,000 was spent on capital improvements in the fiscal year preceding the December 2015 inspection, and the City admitted during the inspection that it was likely the \$1.7 million capital improvements budget for the current fiscal year also would not be fully spent.

However, the City did begin implementing a seven-year cleaning cycle in Fiscal Year 2013/14. During the three-year period covering Fiscal Years 2013/14, 2014/15, and 2015/16, the City cleaned over 188 miles of the City's 441 miles of gravity sewer main. Additionally, the City has completed a collection system video inspection and condition assessment program, under which, nearly the City's entire gravity main collection system was video inspected and assessed as of March 2018 at an expense of approximately \$4.2 million. (City Email, December 20, 2017.) The results of this program identified pipe segments with structural deficiencies, prioritized rehabilitation projects, and provided planning-level construction cost estimates. Based upon the program's results, the City prepared a five-year Capital Improvement Program that was used in the City's Sewer Rate Study, supporting the City's rate increase program starting with the 2018/2019 fiscal year. (City Email, May 6, 2019.)

The System Evaluation and Capacity Assurance Plan (SECAP) is also required as part of the SSMP (Permit Order D.13.(viii) on page 13 of 20). As a part of the SECAP, the City initially developed a Sewer Master Plan in 2008 that identified capacity-enhancing projects to meet projected system demands for 2014 and 2030 with a proposed budget of \$43 million. (December 2015 Compliance Inspection Report, February 19, 2016, page 3.) The City contended that as a result of economic downturn, the Master Plan was no longer relevant or necessary; however, the most recent capital improvement projects were related to capacity enhancement.

At the time of the December 2015 inspection, the City did not have an effective SECAP in place, as no flow monitoring had been conducted since the 2008 Sewer Master Plan was prepared, and was instead addressing capacity issues on an as-needed and as-identified basis. Additional monitoring was necessary to more accurately determine the City's capacity issues.

The City did complete its updated Sewer Master Plan/System Evaluation and Capacity Assurance Plan in December 2016. The updated plan was based upon new flow monitoring data, modeling sewer flows and identifying capacity deficiencies for existing conditions (2016) and for future conditions through 2040. The updated plan also identified specific capital improvement projects for existing and future conditions.

The City's failure to implement an acceptable and current SSMP likely caused or contributed to more frequent, high-volume SSOs. Internal performance metrics such as cleaning and inspection frequencies, capital improvements, and condition assessment actions developed by the City consistently went unfulfilled. The City made few changes to the program until the Gap Analysis was prepared in 2014, which identified critical deficiencies in the collection system program and proposed significant investments in both the City's operations and maintenance program, as well as a system-wide condition assessment program. Modifications to the SSMP should have also been completed in 2014, as part of the required five-year update.

Prior to the March 26, 2015 SSO event, the City also had the ability to collect data from the continuous-read flow meters installed at their connection points to the VVWRA trunk line. As discussed above, the City did review the flow data after the March 26, 2015 SSO event to determine the spill volume. However, the City failed to develop an appropriate communication system with VVWRA to implement an alarm system to alert City staff of unusually low flow or high-level readings from the flow meters. The City did not begin to explore this option until after the March 26, 2015 SSO event occurred, as noted in the associated Final Technical Report prepared by the City. Although the City had voluntarily installed smart manhole covers at key locations to detect high water levels and alert City staff, this effort did not reduce the need to develop an effective flow meter communication alert system with VVWRA. Doing so would have increased the City's ability to more quickly identify and respond to SSOs across a greater percentage of its service area, further reducing the extent and impacts of such events.

The City's failure to (1) properly maintain its sewer collection system in accordance with the Permit and in accordance with its own plans and procedures, (2) to implement an effective FOG program in accordance with the Permit and the City's own ordinances, and (3) the City's failure to recognize that a spill was occurring resulting in a much larger discharge volume, justifies a culpability factor that is higher than neutral.

## B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.1** has been selected.

As noted in the synopsis discussion, City crews quickly implemented appropriate containment, cleanup, and corrective measures once the SSO had been identified as an SSO. Unfortunately, the SSO was identified approximately six hours after a City employee first observed the discharge, but failed to recognize the discharge as an SSO. With some additional investigation, the City employee would have likely discovered that the running water he observed was originating from a sewer manhole and the discharge volume could have been greatly reduced.

The City also did not report the SSO event to the Water Board until April 7, 2015, twelve days after the event occurred. Additionally, the City did not report the SSO event to the California Office of Emergency Services (CAL-OES) until December 21, 2015, almost nine months after the SSO event.

The City's failure to recognize that a spill was occurring directly resulted in a much larger discharge volume. The City's failure to properly notify the Water Board and Cal-OES also increased the risk of receptor exposure and violated Permit notification requirements.

## C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

# Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$665,221.70** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (465,190.00) x (1.3) x (1.1) x (1.0) = 665,221.70

#### Violation No. 3 SSO Discharge of 11,686,149 Gallons

## <u>Synopsis</u>

Based on the City of Victorville – SSO Report (CIWQS Spill Event ID No. 818116), on September 6 through 14, 2015, an SSO occurred from the City's Manhole No. 143 (identified via Victorville City GIS Sewer Manhole System, and this is also known as Manhole No. 120 in the Victorville Sewer Atlas Book), located approximately 240 feet northwest from the intersection of Happy Valley Lane and Royston Street. 11,688,149 gallons of raw sewage were discharged into Turner Wash during the event. The City constructed two dirt berms in the wash to contain the raw sewage discharge. 2,000 gallons were collected behind the berms and returned back to the sewer system. The remaining 11,686,149 gallons infiltrated into the ground surface of the wash. Based upon a GIS Map of the effluent flow provided by the City, the raw sewage flowed across more than 3,000 feet of the wash bed. Turner Wash is a direct tributary to the Mojave River, but it did not carry surface water flows at the time of the SSO discharge event.

City Public Works Supervisor, Sam Arvizu, directly observed flowing water in a portion of Turner Wash on Monday morning at approximately 9:45 a.m., September 14, 2015. Mr. Arvizu followed the water stream in the otherwise dry wash bed, and he observed raw sewage discharging from a sewer manhole. He immediately contacted other City staff at 9:58 a.m. City crews arrived on site at 10:10 a.m., and they were able to stop the discharge by 11:55 a.m.

City crews observed that the sewer manhole was vandalized. The frame and cover had been removed, and debris was deposited in the manhole. Upon arrival, City crew members found an auto tire on top of the riser cone, along with a length of four-inch diameter PVC or SDR 35 pipe protruding from the overflowing manhole. While removing the debris, City crews found a second length of four-inch diameter pipe standing upright in the overflowing manhole, along with a small tire and wheel that was lodged in the channel.

A temporary earthen berm was constructed in the immediate vicinity of the overflowing sewer manhole to stop the flow of raw sewage from continuing to flow down Turner Wash. A second earthen berm was constructed at the far northerly edge of the raw sewage flow (approximately 3,000 feet downgradient from the overflowing manhole) to curtail further downstream impacts.

Heavy equipment used to flush the sewer pipe could not maneuver the sandy soil of Turner Wash until a temporary access road could be constructed. Once access was provided, the equipment began removing debris from the sewer pipe by 11:00 a.m.

The City immediately initiated cleanup activity, and initially reported that cleanup was completed by September 17, 2015. Additionally, the City scarified the site and applied a fourth round of disinfectant on September 29, 2015, as a precautionary measure. Additional debris entrained in the berms was removed as it became exposed.

The City determined that the discharge began at approximately 11:00 a.m. on September 6, 2015. This is based upon a review of the diurnal graphs plotted from the metering station that had previously been installed at the City's sewer line connection to VVWRA's trunk line,

downstream from the point of discharge. Using this same chart, the City calculated the total spill volume to be 11,688,149 gallons.

In its SSO Technical Report for this discharge, the City states on page 4, "...not knowing an overflow was occurring was the biggest deficiency." The report goes on to state that City staff had met with VVWRA staff and their flow meter vendor to implement an alarm system to alert the City of unusually low-flow or high-level readings from the continuous-read flow meters. However, this section of the SSO Technical Report for this SSO event repeats, verbatim, the language stated in the SSO Technical Report for the March 26, 2015 SSO event. (CIWQS Spill Event ID No. 814130.)

# Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **7** (seven) is assigned to Step 1 of the calculation methodology.

# A. Factor 1: Harm or Potential Harm to Beneficial Uses

The raw sewage discharge flowed across a 3,000-foot segment of Turner Wash, which is tributary to the Mojave River. Turner Wash was dry at the time of the raw sewage discharge, and all but 2,000 gallons of the discharge infiltrated into the sandy soils of the wash.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the discharge of over eleven (11) million gallons of raw sewage over a nine-day period more likely adversely impacted local groundwater resources, especially given the very large discharge volume, sandy soils, and close proximity to groundwater. Further, impacts to wildlife resources from the discharge of the raw sewage along the 3,000-foot length of its flow path within the earthen wash may be reasonably expected. The site of the discharge also occurred in an area where any member of the public may be present (walking, bicycling, etc.), creating a potentially significant health hazard.

At a minimum, the discharge of 11,686,149 gallons of raw sewage that occurred September 6 through 14, 2015 resulted in **moderate harm** to the beneficial uses of the Mojave River and its tributary areas. The Enforcement Policy defines below moderate as:

Moderate –moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected and impacts to beneficial uses are moderate and likely to attenuate without appreciable acute or chronic effects).

Based on the circumstances described, above, a score of **3** (three) is assigned to Factor 1 of the calculation methodology.

# B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation No. 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged

raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

## C. Factor 3: Susceptibility to Cleanup or Abatement

The City was able to recover 2,000 gallons (approximately 0.02 percent) of the 11,688,149 gallons discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

# Step 2: Assessments for Discharge Violations

Water Code section 13385, subdivision (c), allows civil liability to be assessed on a daily basis and on a per gallon basis for any amount discharged but not cleaned up in excess of 1,000 gallons. Civil liability may be assessed in an amount up to \$10,000 per day of violation, and up to \$10 per gallon discharged but not cleaned up in excess of 1,000 gallons.

Lahontan Water Board staff considers this discharge event to be a high-volume discharge. Pursuant to the Enforcement Policy, a maximum amount of \$2.00 per gallon is recommended for determining the per gallon amount of the initial liability.

# A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 7 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.31**.

## B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons)] x [(maximum per gallon liability) + (per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $\label{eq:constraint} \begin{array}{l} [(0.31) \ x \ (11,685,149 \ gallons) \ x \ (\$2/gallon)] \ + \ [(0.31) \ x \ (9 \ day) \ x \ (\$10,000/day)] \ = \ \$7,272,692.38 \end{array}$ 

# Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

#### A. Adjustment for Culpability

In this case, a culpability multiplier of **1.3** has been selected.

Similar to this factor analysis for Violation 2, the City's failure to implement an acceptable and current SSMP, in addition to the City's failure to adequately coordinate with the VVWRA prior to the SSO to develop an alarm notification system from the installed continuous-read flow meters, likely caused or contributed to more frequent, high volume SSOs, such as the September 2015 SSO event.

Additionally, the Gap Analysis identifies the need for the City to include easement right-of-way surface inspections to monitor for, among other items, vandalism (page 30). Repeated SSO events from 2007 to present indicate the City had knowledge of ongoing issues related to vandalism and inadequate maintenance. At the time of this SSO event, the City had no formal plan to resolve the ongoing issues in place, and its reaction to vandalism incidences was limited in scope and effectiveness.

The City is ultimately responsible for operational aspects of its sewer collection system. The circumstances described above justifies, at a minimum, a culpability factor that is above neutral for the City's failure to properly operate and maintain its sewer collection system and for the City's failure to effectively respond to chronic vandalism of its more vulnerable collection system locations.

#### B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.0** has been selected.

The City appropriately and promptly implemented containment, cleanup, and corrective measures following the September 2015 SSO event.

#### C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

## Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$9,454,500.09** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (\$7,272,692.38) x (1.3) x (1.0) x (1.0) = \$9,454,500.09.

#### Violation No. 4 SSO Discharge of 73,445 Gallons

## <u>Synopsis</u>

On November 20-25, 2015, an SSO occurred from the City's Manhole No. 131, located west of an apartment complex at 16711 Chalon Road. 73,500 gallons of raw sewage were discharged into an earthen wash during the event. The City was able to recover 55 gallons of the amount that was discharged and returned that volume back to the sewer system. The remaining 73,445 gallons infiltrated into the ground surface of the wash. Based upon a GIS Map of the effluent flow provided by the City, the raw sewage flowed across a 1,500-foot section of the wash. The wash is tributary to the Mojave River and is a water of the United States, but it did not carry surface water flows at the time of the SSO discharge event. (Report of Unauthorized Waste Discharge Information Form, December 9, 2015.)

The City initially received a call of standing water and sewer odors in the area of the SSO event at 10:20 a.m. on Wednesday, November 25, 2015. The reporting party stated that he had noticed the odors for five or six days prior to reporting the incident, indicating the SSO likely began on or around November 20, 2015. A City staff person arrived on site at approximately 11:10 a.m. and discovered the overflowing manhole at approximately 11:25 a.m. City crews arrived at the site at approximately 11:40 a.m. The discharge was temporarily stopped between 12:30 p.m. and 12:55 p.m. when the blockage was partially cleared, and it was completely stopped by 1:45 p.m. (CIWQS Spill ID Form 819880 Version 2.3, December 16, 2015; Report of Unauthorized Waste Discharge Information Form, December 9, 2015; and Updated Mainline Stoppage Report, December 16, 2015.)

The cause of the SSO discharge was determined to be from vandalism and from accumulated fats, oils, and grease (FOG). Several plastic bags of garbage, a bread toaster, a rubber ball, and other debris were manually removed from the manhole. A total of 100 pounds of debris were removed manually, and 75 pounds of FOG and debris was vacuumed out of the affected manhole. (Report of Unauthorized Waste Discharge Information Form, December 9, 2015.)

City crews returned on Thursday, November 26, 2015 prior to 7:00 a.m. Additional FOG material was removed from the channel of Manhole No. 131 using hand tools to ensure sewage would continue flowing appropriately in the sewer collection system. Additional City crews returned on Friday, November 27, 2015 prior to 7:00 a.m. The crews flushed the sewer mains in the area of the discharge and vacuumed an additional 150 pounds of FOG, debris, and grit. Additionally, 55 gallons of standing raw sewage was vacuumed from the area where the initial spill deposited and pooled within the earthen wash area. The area was disinfected at that time, two days after the spill occurred. (Report of Unauthorized Waste Discharge Information Form, December 9, 2015.)

The City did not contact Cal-OES until December 16, 2015, 21 days after the SSO event occurred. (Updated Mainline Stoppage Report, December 16, 2015.) The City calculated the spill volume based upon the number of residential units contributing flow to Manhole No. 131 over a 6-day period, using an average of 240 gallons per unit per day. (Updated Mainline Stoppage Report, December 16, 2015.)

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **6** (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The raw sewage discharge affected a 1,500-foot stretch of an earthen wash, which is tributary to the Mojave River. The wash was dry at the time of the raw sewage discharge, and all but 55 gallons of the discharge infiltrated into the earthen wash.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts.

The discharge of 73,445 gallons of raw sewage for the period of November 20 through 25, 2015 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

#### B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation No. 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

#### C. Factor 3: Susceptibility to Cleanup or Abatement

The City was able to recover 55 gallons (approximately 0.07 percent) of the 73,500 gallons discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

## Step 2: Assessments for Discharge Violations

#### A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

## B. Initial Amount of ACL

The initial base liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $[(0.22) \times (72,445 \text{ gallons}) \times (\$10/\text{gallon})] + [(0.22) \times (6 \text{ day}) \times (\$10,000/\text{day})] = \$172,579.00$ 

## Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

## A. Adjustment for Culpability

In this case, a culpability multiplier of **1.2** has been selected. Common elements between Violation No. 3 and this incident include (1) failing to implement an acceptable and current SSMP to better manage the conditions that led to approximately 225 pounds of FOG material and other debris accumulating in the affected manhole and sewer main, and (2) failing to implement an effective vandalism prevention program. In this case, however, coordination with VVWRA to develop an alarm notification system for the continuous flow meters was not a consideration, which resulted in an adjustment factor that is slightly lower than that for Violation No. 3.

## B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.3** has been selected.

The City quickly implemented appropriate containment and corrective measures once it determined an SSO was occurring. However, the City did not collect the raw sewage that had pooled within the wash area and disinfect the area until two days after it was notified of the discharge and initially mobilized crews to address the SSO event. Had the City collected and disposed of the pooled raw sewage on the day it initially mobilized crews, then the discharge volume recovered would likely have been much greater than 55 gallons, thereby reducing the amount that infiltrated through the ground surface. Further, failing to immediately clean up the raw sewage increased the risk of exposure to receptors for an additional two days.

The City also did not report the SSO event to CAL-OES until December 21, 2015, 21 days after the SSO event.

The City's failure to immediately clean up the pooled raw sewage for two days increased the amount of sewage that likely infiltrated into the ground and potentially adversely impacted local groundwater resources. The City's failure to immediately clean up the pooled raw sewage and properly notify Cal-OES also increased the risk of receptor exposure and violated Permit notification requirements.

## C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

#### Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$269,223.24** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability 172,579.00x (1.2) x (1.3) x (1.0) = 269,223.24

#### Violation No. 5 SSO Discharge of 5 Gallons

## <u>Synopsis</u>

On December 9, 2015, at 2:45 p.m., an SSO was observed by State Water Board staff member, Bryan Elder, while conducting a routine Permit inspection. The leak was observed from an air relief valve on a section of force main located under a private railroad trestle crossing over the Mojave River. The valve was located on the eastern side of the crossing and was corroded. The State Water Board inspection report notes that the valve appeared to be weathered, had exceeded its useful life, and discharged raw sewage directly into the Mojave River. The inspection report states approximately one to two gallons of raw sewage discharge were observed during the inspection, but that it was unknown how long the discharge had actually been occurring. (December 2015 Compliance Inspection Report, February 19, 2016.)

City staff initially arrived at the site and temporarily ceased further discharges by closing the ball valve, isolating the air relief valve from the force main. This occurred at 3:20 p.m. on December 9, 2015. The City replaced the air relief valve with a new valve the following day on December 10, 2015 at 10:45 a.m. The City also increased its number of regular inspections for this area and adjusted its schedule of preventative maintenance. The City estimated a total of five (5) gallons likely discharged on December 9, 2015. (Report of Unauthorized Waste Discharge Information Form, December 10, 2015.)

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **6** (six) is assigned to Step 1 of the calculation methodology.

#### A. Factor 1: Harm or Potential Harm to Beneficial Uses

The discharge of raw sewage occurred directly above and into the Mojave River. The river had flowing water at the time of the raw sewage discharge.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses given the low discharge rate. Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill.

However, the site of the discharge occurred in an area where the public has access. Although the discharge is relatively small, the discharge of raw sewage directly above the Mojave River in an area where any member of the public may be walking creates a potential health hazard.

The discharge of five (5) gallons of raw sewage on December 9, 2015 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas.

Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

## B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation No. 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

#### C. Factor 3: Susceptibility to Cleanup or Abatement

For this violation, all of the raw sewage flowed directly into the Mojave River (and infiltrated into the riverbed). The discharge was unrecoverable, and therefore a factor of **1** (one) is assigned.

## Step 2: Assessments for Discharge Violations

#### A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

## B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $\label{eq:constraint} \begin{array}{l} [(0.22) \ x \ (0 \ gallons) \ x \ (\$10/gallon)] + [(0.22) \ x \ (1 \ day) \ x \ (\$10,000/day)] = \\ \$2,200.00 \end{array}$ 

## Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

#### A. Adjustment for Culpability

In this case, a culpability multiplier of **1.4** has been selected. As discussed in this factor analysis for Violation 2, the City commissioned a Gap Analysis for its sewer collection system and associated infrastructure facilities, which was completed on September 30, 2014. The Gap Analysis identified that the City had not been implementing the O&M Plan that had been identified in its 2009 Sanitary Sewer Management Plan. The Gap Analysis also recommended

that the City develop a proactive maintenance program which would include inspecting its sewer collection system for areas of deterioration, such as that due to corrosion (page 29).

The City is directly culpable for failing to properly inspect a force main located directly over the Mojave River. The City was unaware the discharge was occurring until State Water Board staff identified the discharge during its December 9, 2015 inspection. The State Water Board inspection report notes that other areas of this force main also appear to be corroded. Additionally, the City was not able to provide evidence of when this section was last inspected, other than indicating that the air relief valve was installed in 1994 when this section of force main was replaced. (State Water Board Compliance Inspection Report, February 19, 2016.)

As stated, above, additional nearby corroding pipe sections for which the City was previously unaware were discovered during the inspection. The City has sewer collection facilities within its service area that like this force main, are vulnerable due to being located above ground, being isolated, and/or in close proximity to surface waters. Such facilities require routine inspection to ensure their integrity and proper operation in order to prevent raw sewage discharges. Failure to do so results in discharges, such as this one discovered during a State Water Board staff inspection. While this discharge was small, it could have just as easily been a significantly large discharge due to the failure to implement an acceptable inspection and maintenance program.

The City's failure to properly inspect and maintain its sewer collection system in accordance with its own plans and procedures, especially a section of exposed force main located directly above the Mojave River, justifies a high culpability factor in this matter.

## B. Adjustment for Cleanup and Cooperation

In this case, a neutral Cleanup and Cooperation multiplier of **1.0** has been selected. The City quickly responded once it was realized that a discharge was occurring.

# C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

# Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$3,080.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability

(\$2,200.00) x (1.4) x (1.0) x (1.0) = \$3,080.00

#### Violation No. 6 SSO Discharge of 28,925 Gallons

# <u>Synopsis</u>

On May 11, 2016, an SSO occurred from the City's Manhole No. 127, located on Yates Road, 100 feet east of Cypress Avenue. 30,125 gallons of raw sewage were discharged along a 200-foot section of Yates Road before discharging into and through a 2,850-foot section of concrete-lined drainage channel that flows through the Green Tree Golf Course, followed by an 1,100-foot section of concrete-lined channel through Doris Davies Park, and then across a 650-foot section of an earthen wash during the event. The total flow length was 4,800 feet. The City recovered 1,200 gallons of the discharged sewage within the concrete-lined channel portion of the drainage system and returned that volume back to the sewer system. The remaining 28,925 gallons infiltrated into the ground surface of the wash. The wash is tributary to the Mojave River, but it did not carry surface water flows at the time of the SSO discharge event. A temporary earthen berm was constructed approximately 60 feet south of Hughes Road to contain the raw sewage flow within the earthen wash and to prevent the discharge from flowing further towards the Mojave River. (City of Victorville SSO Event Technical Report, May 25, 2016, and CIWQS Spill ID Form 824530 Version 1.1, May 27, 2016.)

The spill was initially reported to the City at approximately 6:00 a.m. on Wednesday, May 11, 2015, by the local Sheriff Dispatch. City crews arrived on the site at approximately 6:30 a.m., and additional crew arrived on the site at approximately 6:45 a.m. At 7:20 a.m., City crews constructed the temporary earthen berm to curtail further migration of the raw sewage. The overflow of raw sewage was stopped at approximately 8:53 a.m. Crew members began removing debris and sanitizing the affected flow path at 9:00 a.m. Additional cleanup and disinfection occurred on May 12, 2015 and again on May 16, 2015.

The City determined the cause of the SSO to be due to vandalism. The City removed approximately 75 pounds of debris consisting of garbage, plastic, and a railroad tie.

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of 6 (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The discharge of raw sewage affected a 4,800-foot drainage system, 650 feet of which was an earthen wash. The drainage system is tributary to the Mojave River. The drainage system was dry at the time of the raw sewage discharge, and the entire amount of the discharge reaching the earthen wash infiltrated.

In spite of the raw sewage discharge flowing through a public golf course and park before infiltrating into a dry earthen wash, it is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses given the nature of the affected drainage features (i.e., typically dry concrete channels). Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the

infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts.

The discharge of 28,925 gallons of raw sewage on May 11, 2016 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

# B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

## C. Factor 3: Susceptibility to Cleanup or Abatement

The City was able to recover 1,200 gallons (approximately four percent) of the 30,125 gallons discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

# Step 2: Assessments for Discharge Violations

## A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

## B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1,000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $[(0.22) \times (27,925 \text{ gallons}) \times (\$10/\text{gallon})] + [(0.22) \times (1 \text{ day}) \times (\$10,000/\text{day})] = \$63,635.00$ 

# Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

## A. Adjustment for Culpability

Identical to this factor analysis for Violation No. 4, a culpability multiplier of **1.2** has been selected. The common element between the two incidents is failing to implement an effective vandalism prevention program.

#### B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.0** has been selected. The City quickly implemented appropriate containment and corrective measures once they were notified that an SSO was occurring, preventing further migration of the discharge. The City also took all appropriate follow up measures to clean up and disinfect the affected area.

#### C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

#### Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$76,362.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (\$63,635.00) x (1.2) x (1.0) x (1.0) = \$76,362.00

#### Violation No. 7 Failure to Clean Up September 2015 SSO Discharge of 11,686,149 Gallons

Violation No. 7 from the Complaint has been dismissed in the Stipulated Settlement Agreement and Stipulation for Entry of Order; Order No. R6V-2020-0001 (Proposed). The violation cited non-compliance with permit conditions that do not include discharges. This violation is therefore not subject to liability under Water Code section 13385.

#### Violation No. 8 Failure to Properly Manage, Operate, and Maintain All Parts of the Sanitary Sewer System

Violation No. 8 from the Complaint has been dismissed in the Stipulated Settlement Agreement and Stipulation for Entry of Order; Order No. R6V-2020-0001 (Proposed). The violation cited non-compliance with permit conditions that do not include discharges. This violation is therefore not subject to liability under Water Code section 13385.

#### Violation No. 9 SSO Discharge of 68,750 Gallons

## <u>Synopsis</u>

Based on the City's February 9, 2017 City of Victorville SSO Technical Report, an SSO occurred on January 26, 2017 from three different manholes:

- Manhole No. 001123 (also known as Manhole No. 110, the subject of Violation No. 2), located in the undeveloped easement area east of the intersection of Grant Street and Lambert Lane.
- Manhole No. 004426, located on Coad Road approximately 760 feet east of Hesperia Road.
- Manhole No. 005241, located on Coad Road approximately 1,470 feet east of Hesperia Road.

68,750 gallons of raw sewage were discharged into an earthen wash during the event. The City constructed three dirt berms in the wash to contain the raw sewage discharge. All raw sewage collected by the berms infiltrated into the soil within the wash. The wash did not carry surface water flows at the time of the SSO discharge event.

The City initially received notification at 12:09 p.m. from the Smart Cover system located in the manhole immediately upgradient from Manhole No. 001123. City staff confirmed the SSO at 12:30 p.m., and the City deployed personnel and equipment at 1:00 p.m. The discharge ceased at 1:48 p.m. Two initial berms were constructed within the wash to contain the raw sewage discharging from Manhole No. 001123. A small amount of the discharge flowed downgradient from the first berm but did not reach the second berm.

While inspecting the downgradient manholes, City staff observed two additional manholes (Manhole Nos. 004426 and 005241) beginning to overflow. The blockage at these locations was cleared by 2:50 p.m. City staff constructed a third berm to contain any raw sewage that may discharge into the adjacent wash, vacuumed debris, and sanitized Coad Road as a priority to ensure public safety. This activity was completed by 5:30 p.m.

The City's SSO Technical Report states that crews disbanded following the cleanup of Coad Road and reconvened at 2:30 a.m. on January 27, 2017 to thoroughly clean the affected sewer collection system. City staff removed a metal pipe support from a manhole downgradient from where the three discharges occurred. Additional rounds of disinfection occurred on January 27 and 30, 2017, and debris removal continued through February 2, 2017.

The information the City entered into CIWQS (Spill ID 832163) identifies the cause of the raw sewage discharge to be the metal pipe support found in the sewer main. The CIWQS information cites the bracket as potentially restricting flow, thereby causing grease and solids to form and clog the sewer main.

In an electronic mail to Water Board staff on February 9, 2017, the City clarified that it did not recover any of the raw sewage contained by the constructed berms. The City stated that its first priorities were to clear the blockage and to remove debris and sanitize public access areas. The City stated that by the time these initial tasks were completed, the raw sewage contained by the berms had essentially dissipated in all but the most remote location (berm No. 1). Berm No. 1 was located in an area with soft sandy soils, and the soil conditions created a challenge for equipment to maneuver and access the berm. In the email to Water Board staff, the Director of Public Works and Water stated, "With darkness setting in, it was determined that the most prudent course of action was to reconvene in the early hours before daylight to reassess the situation and perform further mitigation measures. Crews returned at 2:30 AM, at which time there was no contained spillage remaining to recover." All of the raw sewage contained behind berm No. 1 had percolated into the soil.

Water Board had staff inspected the site between 4:45 p.m. and 5:15 p.m. on January 26, 2017. During that time, staff photographed a significant quantity of water stored behind berm No. 1. Water Board staff did not observe any City crew staff in the area, but the Director of Public Works and Water was present on site. He told Water Board staff that the cause of the blockage was a grease ball and that the piece of metal had also been found in the sewer system. He stated that as the grease ball moved downstream, it caused additional SSOs at the two downgradient manholes. (Internal Memos from John Morales and from Ghasem Pour-Ghasemi to Eric Taxer, both dated August 4, 2017.)

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **6** (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The raw sewage discharge flowed into and across a 4,500-foot stretch of an earthen wash, which is tributary to the Mojave River. The wash was dry at the time of the raw sewage discharge, and the entire amount of the discharge infiltrated into the earthen wash.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. Water Board staff is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts. Further, impacts to wildlife resources from the discharge of the raw sewage along the 4,500-foot length of its flow path within the earthen wash may be reasonably expected.

The discharge of 68,750 gallons of raw sewage on January 26, 2017 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

## B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

#### C. Factor 3: Susceptibility to Cleanup or Abatement

The City did not recover any of the raw sewage that was discharged before it percolated into the ground. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

## Step 2: Assessments for Discharge Violations

#### A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

#### B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $[(0.22) \times (68,750 \text{ gallons}) \times (\$10/\text{gallon})] + [(0.22) \times (1 \text{ day}) \times (\$10,000/\text{day})] = \$153,450.00$ 

## Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

A. Adjustment for Culpability

In this case, a neutral culpability multiplier of **1.0** has been selected.

It is noted that this SSO event is located within the same sewer collection system section as Violation No. 2, and the City had previously identified a pipe constriction in this area which creates a vulnerability to SSOs due to fats, oils, and grease (FOG). However, there is a significant difference between Violation No. 2 and Violation No. 9. The City, since Violation No.

2 occurred, has taken appropriate proactive measures to reduce the potential for SSOs until structural improvements can be implemented.

On June 1, 2015, the City installed a Smart Cover system at Manhole No. 001123. As noted in the synopsis section, the Smart Cover system provided an immediate alert of the SSO event which prevented a much larger discharge quantity from occurring in this relatively isolated area.

The City also implemented an enhanced preventative maintenance program for this portion of the sewer collection system, which included frequent cleaning of this section. City crews cleaned this section of the collection system on November 24, 2015 and again on July 21, 2016, roughly once every eight months. (City Email, April 28, 2017.) The SSO event occurred approximately seven months following the previous cleaning event.

The City has also developed a communication and education program to help inform the public on the importance of keeping FOG and wipes from being disposed into the collection system. A FOG brochure was mailed to all City residents in October 2016. City staff also provided public outreach during the City-sponsored Fall Festival on October 1, 2016. (City of Victorville Letter, May 4, 2017.)

These actions are appropriate to address a problematic section of the City's collection system and warrant a neutral culpability factor.

#### B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.3** has been selected.

As noted in the previous synopsis discussion, the City quickly implemented appropriate containment, public-area cleanup, and corrective measures once it determined an SSO was occurring. However, the City failed to implement appropriate measures to recover the raw sewage that was retained behind the constructed berms. Raw sewage recovery is required by Permit section D.7.(ii).

The City claims that it suspended initial cleanup operations because it was getting dark. This reason for suspending cleanup operations is in direct conflict with information provided by the City in its February 9, 2017 email response to Water Board staff and in its Technical Report, where the City states that cleanup crews returned to the discharge site later that night at 2:30 a.m., when it is dark. Additionally, the City should have been equipped with appropriate equipment to perform night-time emergency activities.

The City's February 9, 2017 email also noted that, "...the effluent contained by the berms was percolating at a very fast rate due to the soil conditions in the area." Knowing this, crews should have been deployed to attempt to recover as much of the raw sewage as possible. Further, Water Board staff was at the site between 4:45 p.m. and 5:00 p.m. on January 26, 2017, approximately three hours after the first berm containing a vast majority of the SSO discharge was constructed. Water Board staff photographed a significant quantity of raw sewage behind berm No. 1, and although there was still natural daylight during this period, there were no City crews present. Thus, an opportunity to recover a greater amount of the

discharge was lost, increasing the potential for impacts to underlying groundwater. These conditions justify a higher value for the Cleanup and Cooperation factor.

## C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

# Step 5: Determination of Total Base Liability Amount

Total Base Liability Amount of **\$199,485.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (\$153,450.00) x (1.0) x (1.3) x (1.0) = \$199,485.00

#### Violation No. 10 SSO Discharge of 953 Gallons

## <u>Synopsis</u>

On February 9, 2017, an SSO occurred from the City's sewer Cleanout No. 000719, located within the Pearl Arbor Terrace sewer easement above D Street between McKinney Way and Sherman Way. The blockage site was approximately 775 feet upstream from Manhole No. 007021 near D Street. (Mainline Stoppage Report, February 16, 2017.) The Pearl Arbor Terrace easement is an existing ephemeral drainage with connectivity to the Mojave River. 1,153 gallons of raw sewage were discharged within the ephemeral drainage (Sanitary Sewer Overflow Discharge Report, August 11, 2017.) While this drainage has been modified by development, it continues to convey storm water flows from La Paz Drive to a drop inlet at D Street. From D Street, storm water flows are conveyed into a concrete-lined ditch that runs parallel to D Street and into another modified ephemeral stream at Valensa Lane, which discharges into the Mojave River. (Memo to File, Jan Zimmerman, July 27, 2017.) The City recovered 200 gallons of the amount that was discharged and returned that volume back to the sewer system (Mainline Stoppage Report, February 16, 2017). The remaining 953 gallons infiltrated into the ground surface of the tributary drainage.

The spill was initially reported to the City at approximately 2:37 p.m. on Thursday, February 9, 2017. City crews arrived on the site at approximately 3:10 p.m. and began to construct containment berms. Additional staff and equipment arrived at the site at approximately 3:40 p.m. The discharge was stopped at approximately 4:29 p.m. (Mainline Stoppage Report, February 16, 2017.)

The cause of the SSO was a blockage of sand in the sewer line. The cleanout cover was missing when crews arrived at the site. City crews were unable to clear the blockage, and a decision was made to replace the affected pipe section. The pipe replacement and initial site sanitation effort were completed at approximately 6:10 p.m. City crews returned on February 10 and daily February 13 through 16 to apply additional rounds of disinfection, to install a lockable cleanout cover, and to provide additional soil cover over the sewer line and associated cleanouts and manholes. (Mainline Stoppage Report, February 16, 2017.)

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of **6** (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The raw sewage discharge occurred within an ephemeral tributary to the Mojave River. The drainage system was dry at the time of the raw sewage discharge, and 953 gallons of the discharge infiltrated into the earthen drainage.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. Water Board staff is not aware of any complaints or other evidence of impact

to such uses resulting from the spill. Given the small discharge volume, it is also unlikely that local groundwater resources and wildlife resources were impacted.

The discharge of 953 gallons of raw sewage on February 9, 2017 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

# B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

## C. Factor 3: Susceptibility to Cleanup or Abatement

The City was able to recover 200 gallons (approximately 17 percent) of the 1,153 gallons initially discharged. Because less than 50 percent of this SSO discharge was susceptible to cleanup and abatement, a score of 1 (one) is assigned to this factor.

# Step 2: Assessments for Discharge Violations

## A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

# B. Initial Amount of ACL

The initial base liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

[(0.22) x (0 gallons) x (\$10/gallon)] + [(0.22) x (1 day) x (\$10,000/day)] = \$2,200.00

# Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

## A. Adjustment for Culpability

Identical to the factor analysis for Violation No. 4, a culpability multiplier of **1.2** has been selected. The common element between the two incidents is failing to implement measures intended to adequately protect, inspect, and maintain sections of the sewer collection system that are vulnerable to damage caused by either vandalism or the surrounding environment (e.g., sewer main located within an earthen wash).

#### B. Adjustment for Cleanup and Cooperation

In this case, a Cleanup and Cooperation multiplier of **1.0** has been selected.

The City quickly implemented appropriate containment and corrective measures once it was notified that an SSO was occurring, preventing further migration of the discharge. The City took all appropriate follow up measures to clean up and disinfect the affected area.

#### C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

## Step 5: Determination of Total Base Liability Amount

Total Base Liability Amount of **\$2,640.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (\$2,200.00) x (1.2) x (1.0) x (1.0) = \$2,640.00

#### Violation No. 11 SSO Discharge of 393,000 Gallons

## <u>Synopsis</u>

On June 12-13, 2017, an SSO occurred from the City's Manhole No. 005570, located within a sewer easement northeast of Ottawa Street and west of the Santa Fe Channel. 393,000 gallons of raw sewage were discharged into the Santa Fe Channel, an earthen drainage channel, during the event, none of which was recovered. The raw sewage flow dissipated within the channel approximately 200 to 300 feet north of Coad Road, impacting an approximately 2,000-foot section of the channel. The channel is tributary to the Mojave River and is a water of the United States, but was not carrying surface water flows at the time of the SSO discharge event. (Mainline Stoppage Report, June 27, 2017.)

The City received a flow alarm for flow meter VSD No. 2 on Monday, June 12, 2017. City staff reviewed the flow information received from the alarm software triggering the notification at the time of the alarm. The information indicated that the flow characteristics appeared to be within the normal range for the day of the week and for the time of the day that the alarm occurred. The City assumed that this was a false alarm and did not conduct a field investigation. The City later discovered the alarm system software was not providing real-time flow information required to properly assess flow conditions. The City has since corrected the software issue. (January 9, 2018 email from Director of Public Works and Water.)

At approximately 3:15 p.m. on Tuesday, June 13, 2017, the City received a telephone call from VVWRA that meter VSD No. 2 was experiencing a low-level alarm, which was verified by VVWRA's flow level alarm service provider. A City crew member arrived on site at approximately 3:40 p.m. and observed raw sewage flowing onto the sewer easement surface for approximately 30 feet before discharging into the Santa Fe Channel. Two City sewer combination cleaning trucks, a backhoe/loader, and a front-end loader arrived on site between 4:25 p.m. and 4:40 p.m. City crews constructed a series of three earthen berms to contain the raw sewage discharge, and the discharge was stopped at approximately 5:45 p.m. The cause of the blockage was concrete debris. (Mainline Stoppage Report, June 27, 2017; and January 9, 2018 email from Director of Public Works and Water.)

The City re-deployed one of the sewer combination cleaning trucks and associated crew at approximately 6:30 p.m. (after the discharge was stopped and the immediate area was cleaned up and sanitized) to recover the standing raw sewage at one of the berms that had been installed (berm No. 2). However, all standing raw sewage behind the earthen berms had infiltrated into the ground surface when cleanup crews arrived. The City completed initial cleanup and disinfection efforts on June 13, 2017, and the City continued to return to the site through June 26, 2017 to provide follow-up disinfection and cleanup. (Mainline Stoppage Report, June 27, 2017.)

The City reviewed the VSD No. 2 flow chart during the SSO event and determined the initial start time of the discharge was 11:00 a.m. on the prior day, Monday, June 12, 2017. The City reviewed flow chart graphs to calculate a raw sewage discharge volume of approximately 393,000 gallons. (Mainline Stoppage Report, June 27, 2017.)

## Step 1: Potential for Harm for Discharge Violations

Based on the scores for environmental harm, receptor risk, and cleanup susceptibility, and as further detailed below, a score of 6 (six) is assigned to Step 1 of the calculation methodology.

## A. Factor 1: Harm or Potential Harm to Beneficial Uses

The raw sewage discharge flowed into and across a 2,000-foot section of an earthen wash, which is tributary to the Mojave River. The wash was dry at the time of the raw sewage discharge, and the entire amount of the discharge infiltrated into the earthen wash.

It is likely that the discharge resulted in no impacts to contact and non-contact recreation beneficial uses. The Lahontan Water Board is not aware of any complaints or other evidence of impact to such uses resulting from the spill. However, the infiltration of raw sewage could reasonably be expected to have locally impacted groundwater resources due to the significant discharge volume, but staff has no evidence of such impacts. Further, impacts to wildlife resources from the discharge of the raw sewage over the 2,000-foot length of its flow path within the earthen wash may be reasonably expected.

The discharge of 393,000 gallons of raw sewage on June 12 through 13, 2017 resulted in **below moderate harm** to the beneficial uses of the Mojave River and its tributary areas. Based on the circumstances described above, a score of **2** (two) is assigned to Factor 1 of the calculation methodology.

## B. Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

Identical to this factor analysis for Violation No. 1, the high degree of toxicity in raw sewage poses a direct threat to human and ecological receptors. The characteristics of the discharged raw sewage therefore posed an **above-moderate** risk or threat to potential receptors. Accordingly, a score of **3** (three) is assigned to Factor 2.

## C. Factor 3: Susceptibility to Cleanup or Abatement

The City was unable to recover any of the 393,000 gallons discharged. Because less than 50 percent of this SSO discharge is susceptible to cleanup and abatement, a score of **1** (one) is assigned to this factor.

## Step 2: Assessments for Discharge Violations

## A. Extent of Deviation from the Requirement

The raw sewage discharge rendered the prohibitions on discharging untreated wastewater to waters of the United States ineffective in their essential functions. The prohibitions would be effective only if no discharge had occurred, or if 100 percent of the discharge was cleaned up and abated. The violation is a major deviation from the requirements.

Accordingly, based on the Potential for Harm score of 6 and major deviation from the requirements, the per-gallon and per-day factors for the discharge are both **0.22**.

## B. Initial Amount of ACL

The Initial Base Liability amount for the discharge is calculated by multiplying and adding:

[(per gallon factor) x (gallons discharged but not cleaned up over 1000 gallons) x (maximum per gallon liability)] + [(per day factor) x (days of violation) x (maximum per day liability)] = Initial Base Liability

 $[(0.22) \times (392,000 \text{ gallons}) \times (\$10/\text{gallon})] + [(0.22) \times (2 \text{ day}) \times (\$10,000/\text{day})] = \$866,800.00$ 

## Step 3: Per Day Assessments for Non-Discharge Violations

Non-discharge violations are not applicable for this alleged violation.

## Step 4: Adjustment Factors

## A. Adjustment for Culpability

In this case, a neutral culpability multiplier of **1.0** has been selected.

It is noted that the City did coordinate with VVWRA to receive alarm notifications from the flow meter sensors installed at the City's discharge points into the VVWRA trunk line system. The City implemented this procedure in response to Violation Nos. 2 and 3, above. Once the City verified a discharge was occurring upon receiving the June 13, 2017 alarm notification, the City immediately mobilized personnel to contain and stop the discharge. Taking such action in response to previous violations, in part, justifies a lower value than the 1.3 value assigned for Culpability for Violation Nos. 2 and 3. However, the Water Board Prosecution Team has determined that a factor lower than 1.0 is not appropriate based upon other circumstances related to the City's alarm and data systems.

This determination is based upon the City initially receiving an alarm notification on June 12, 2017, one day prior to being notified of the discharge by VVWRA. The flow information received from the alarm software triggering the notification at the time of the alarm indicted that the flow characteristics appeared to be normal. This caused the City to assume that this was a false alarm. It was later discovered that real-time flow information was not being provided to properly assess flow conditions due to a software issue that has since been corrected. The City is ultimately responsible for the actions of its contractors, including its contracted alarm service contractor, and for verifying that such services are functioning properly.

## B. Adjustment for Cleanup and Cooperation

Similar to the factor analysis for Violation No. 10, a neutral Cleanup and Cooperation multiplier of **1.0** has been selected.

## C. Adjustment for History of Violations

There are no adjudicated cases of this nature against the City. Therefore, a neutral multiplier of **1.0** has been selected.

## Step 5: Determination of Total Base Liability Amount

Total Base Liability amount of **\$866,800.00** is determined by multiplying the initial liability amount for the violation from Step 2 by the adjustment factors from Step 4:

(Initial Base Liability) x (Culpability) x (Cleanup) x (History) = Total Base Liability (\$866,800.00) x (1.0) x (1.0) x (1.0) = \$866,800.00

## Methodology Steps 6 through 10

## Step 6: Ability to Pay and Ability to Continue Business

The Enforcement Policy provides that if the Water Board has sufficient financial information to assess the discharger's ability to pay the Total Base Liability, or to assess the effect of the Total Base Liability on the discharger's ability to continue in business, then the Total Base Liability amount may be adjusted downward.

In this case, the Water Board Prosecution Team has sufficient information to recommend the City has the ability to pay the proposed liability. To understand an agency's ability to pay, review of the agency's operating costs and availability of funds is necessary. The fiscal year 2015/2016 Comprehensive Annual Financial Report (CAFR) was available for review on the City's website. Collection system operation and maintenance expenses are managed and budgeted under the City's Sanitary Fund. Based on data available in the CAFR, the City's Sanitary Fund had over \$20 million in current assets at the end of the 2015/2016 fiscal year, of which nearly \$17 million was in cash and investments. Current liabilities totaled approximately \$2.4 million. The City's Sanitary Fund had an unrestricted net position of nearly \$17 million. These figures indicated that the City had liquid funds available that could be used to satisfy unanticipated expenses including penalties or accelerated compliance.

In addition to the analysis above, Water Board staff used the MUNIPAY software provided by the United States Environmental Protection Agency to determine whether the City has the ability to pay. Attachment C to the Complaint contains the affordability conclusions synopsis from MUNIPAY. MUNIPAY uses the information available in the CAFR and demographic data retrieved from United States Census Bureau to determine whether the City can afford the penalty expenditure, as well as one-time and recurring compliance expenses. For the analysis, the one-time compliance expenditures were assumed to be implementation of flow monitoring software, estimated at \$4,000, and completion of CCTV inspection for the entire collection system, estimated at \$2,235,024. Recurring compliance costs include annual labor expenses in addition to the City's current program, totaling \$546,384. Based on the input data, MUNIPAY has confirmed the City's ability to pay the \$1,500,000 civil liability and future compliance expenses.

# Step 7: Other Factors as Justice May Require

## Adjustment for Staff Costs

Under the 2009 Enforcement Policy, the Lahontan Water Board suspended the practice of adding staff cost into all administrative civil liabilities based upon the California State Auditor's findings stated in its 2012-120 Audit Report. Specifically, one of the findings in the Audit Report is that staffing costs in penalty actions for water quality certification violations are, "generally not supported and are inaccurate because of inflated cost rates." (California State Auditor Report 2012-120 State Water Resources Control Board, *It Should Ensure a* More Consistent Administration of Water Quality Certification Program, June 2013.) Based upon this finding, the Lahontan Water Board suspended adding staff cost into administrative civil liabilities for all regulatory programs, not just the Water Quality Certification Program.

## Justification for Reducing the Liability Amount

The Water Board Prosecution Team has used factors in this penalty assessment that are comparable with other SSO cases and community system dischargers. However, due to the specific facts of each discharge incident, the comparable factors have resulted in calculating an extraordinarily high liability amount (\$11,744,277.03), especially when compared to previous Lahontan Water Board administrative civil liability actions involving wastewater (treated and untreated) discharges, such as County Sanitation District Nos. 14 and 20 of Los Angeles County, Administrative Civil Liability Order No. R6V-2007-0034. Raw sewage discharges are taken seriously due to the adverse impacts they can have on human and environmental health, and administrative civil liabilities should be reflective of such impacts and the underlying causes of the associated discharges. Additionally, the Enforcement Policy's goals and objectives for taking effective enforcement actions against significant and/or chronic non-compliance also need to be taken into consideration when determining appropriate administrative civil liability amounts. Those goals and objectives include (1) returning the discharger to compliance; (2) being fair and consistent; (3) creating a deterrent against committing future violations, either by the discharger or by other parties similarly situated in the regulatory community; and (4) fully eliminating any economic advantage obtained from the non-compliance. While a significant administrative civil liability is warranted for the violations discussed above, the Total Base Liability amount is in substantial excess of what is necessary to meet the Enforcement Policy's goals and objectives for imposing administrative civil liabilities. The following paragraphs provide justification for a substantial reduction from the Total Base Liability amount to the recommended liability amount of \$1,500,000.

A. <u>Returning to Compliance:</u> It is well-documented that the series of sanitary sewer overflows subject to this enforcement action were, in part, due to or likely exacerbated by the City's significant noncompliance with the Permit. The extent of the City's non-compliance was identified through the Lahontan and State Water Board's December 2015 compliance inspection of the City's sewer collection system that also included an audit of the City's procedures and documents for complying with the Permit. (December 2015 Compliance Inspection Report, February 19, 2016) The City responded to the December 2015 Compliance Inspection Report by committing to taking the actions necessary to return to compliance. (City Response to December 2015 Compliance Inspection Report, May 23, 2016.)

The City's efforts to return to compliance initially started with the completion of the City's September 30, 2014 GAP Analysis that identified a number of areas the City needed to address in order to comply with Permit requirements. These areas included updating the City's 2009 Sewer System Management Plan (SSMP) that addresses the following critical elements:

- Operation and Maintenance Program
- Rehabilitation and Replacement Plan (Capital Improvement Plan)
- Overflow Emergency Response Plan
- System Evaluation and Capacity Assurance Plan (SECAP)

## • Communication Program

The City updated its SSMP in May 2016, prior to the Prosecution Team issuing the Complaint on July 1, 2016. The SSMP update addressed many of the SSMP deficiencies (e.g., operations and maintenance, equipment needs, alarm and communication systems) identified through the December 2015 compliance inspection and earlier discharge incidents. Additionally, the work completed in preparing the System Evaluation and Capacity Assurance Plan element of the SSMP supported the City's efforts to update its 2008 Sewer Master Plan, which was completed in December 2016. The December 2016 Sewer Master Plan identifies a number of capital improvement projects necessary to address existing capacity deficiencies and those forecasted through 2040. The City also completed implementation of its Rehabilitation and Replacement Plan in March 2018. This effort included cleaning, video inspecting, evaluating and assessing, and coding for observed defects in 385 miles of the City's gravity sewer mains. The effort resulted in recommendations to rehabilitate 28 miles of sewer mains with structural deficiencies at an estimated cost of approximately \$9.8 million. Additionally, the information obtained through this effort provided the City with the information necessary to develop a detailed five-year Capital Improvement Program that subsequently supported the City's 2018 Sewer Rate Study. The 2018 Sewer Rate Study led to the City increasing sewer rates to the maximum rates supported by the Sewer Rate Study for all customer classes, effective August 1, 2018. The Sewer Rate Study incorporated capital improvement projects for correcting existing structural deficiencies and existing capacity deficiencies. (City Email, May 6, 2019.) In 2019, the City updated its 2016 SSMP again, incorporating the new information the City has obtained since 2016.

The City has also been taking action to implement several sewer system projects to begin addressing the system deficiencies that the City identified. These projects include the following (City Email, May 6, 2019):

- Lining 11,390 feet of sewer main in 10 locations. The project contract was awarded on August 17, 2017 and substantially completed on January 7, 2018 at a cost of \$321,168.
- Replacing 7,354 feet of 8-inch diameter and 416 feet of 12-inch diameter sewer main. Estimated completion date for this project is December 31, 2019 at an estimated cost of approximately \$1.69 million.
- Upgrading 3,022 feet of 10-inch pipe to 15-inch pipe. This project is identified in the 2016 Sewer Master Plan and is at 90 percent design level. The project is currently scheduled for construction during Fiscal Year 2019/2020 with an estimated cost of approximately \$1.47 million.
- Upgrading 1,748 feet of 8-inch pipe to 12-inch pipe. This project is identified in the 2016 Sewer Master Plan and is at 90 percent design level. Currently estimated cost is approximately \$700,000.
- Upgrading 6,550 feet of 12-inch pipe to 18-inch pipe. This project is identified in the 2016 Sewer Master Plan and is at 90 percent design level. Currently estimated cost is approximately \$2.89 million.

• Replacing and realigning 5,700 feet of existing trunk pipelines on Coad Road and Hesperia Road with 21-inch trunk pipelines. This project is at 90 percent design level and is currently scheduled for construction during Fiscal Year 2019/2020 with an estimated cost of approximately \$3.48 million.

These actions demonstrate the City's comprehensive efforts to effectively return to compliance with the Permit. The City's initial effort to begin addressing its noncompliance occurred in 2014 (Gap Analysis) and prior to the December 2015 Compliance Inspection. The City also initiated additional actions intended to facilitate a return to compliance prior to the Prosecution Team issuing Administrative Civil Liability Complaint No. R6V-2016-0042. The Prosecution Team has taken the timing and intensity of the City's efforts to return to compliance into consideration and believes that they justify a significant reduction from the Total Base Liability amount of \$11,744,277.03.

B. <u>Fair and Consistent Enforcement:</u> The Enforcement Policy states that the Water Boards need to be fair and consistent in their enforcement actions. Although consistency is generally achieved through application of the penalty methodology and not by comparing enforcement actions, comparing similar enforcement cases is not prohibited and may be relevant. The Prosecution Team evaluated the Lahontan Water Board's \$4.75 million settlement with the County Sanitation District No. 14 and No. 20 of Los Angeles County (Administrative Civil Liability Order No. R6V-2007-0034). The Prosecution Team compared the cause of the violations, the nature of the violations, and nature and extent of the impacts associated with each case.

The violations documented in Administrative Civil Liability Order No. R6V-2007-0034 were created as a result of (1) District No. 14's discharge of secondary-treated wastewater in a manner that created nuisance conditions due to overflow conditions onto Rosamond Lake from an authorized disposal location (Paiute Ponds), and (2) District No. 20's discharge of secondary-treated wastewater to its authorized disposal location (Effluent Management Site) in a manner that caused and continues to cause nitrate as nitrogen concentrations to exceed the maximum contaminant level beneath and beyond the boundaries of the Effluent Management Site. The Administrative Civil Liability Order addresses violations of waste discharge requirements, the Water Quality Control Plan for the Lahontan Region, two Cease and Desist Orders, and one Cleanup and Abatement Order. These violations occurred over the course of more than 10 years. District No. 20's discharge also resulted in nitrate groundwater pollution demonstrated by quarterly groundwater sampling in the upper 50 feet of groundwater over a 2-1/2 square mile area.

In comparison, the City's violations are related to a total of more than 12.5 million gallons of raw sewage discharged to desert washes tributary to the Mojave River and over areas of relatively shallow groundwater during approximately 3-1/4 years. There are no documented impacts to beneficial uses, although localized and temporary impacts to Municipal and Domestic Use and Wildlife Habitat beneficial uses could be expected. The discharge incidents violated waste discharge requirements.

The Lahontan Water Board imposed a \$4.75 million liability in settling a case involving actual documented beneficial use impacts over an extensive area that continue today, and violation

of three different formal enforcement actions. The City's violations and suspected impacts to beneficial uses, while still significant, are comparably less significant than those of the two county sanitation districts. To be fair and consistent, reducing the recommended liability amount to a value significantly less than that imposed for the violations and resulting conditions addressed by Administrative Civil Liability Order No. R6V-2017-0034 is justified.

C. <u>Creating a Deterrent:</u> The Prosecution Team is recommending imposing an administrative civil liability of \$1,500,000 for the violations discussed, above. While this is significantly less than the Total Base Liability amount produced by the ACL Methodology, it is still a significant liability amount that will deter the City from returning to noncompliance and others from considering actions that could lead to similar violations. The recommended liability amount would represent the fourth largest administrative civil liability imposed by the Lahontan Water Board, sending a strong message that such violations are taken seriously by the Water Board and addressed accordingly.

D. <u>Fully Eliminating Any Economic Benefit:</u> Step 8, below, demonstrates that imposing the recommended liability amount will effectively eliminate the economic benefit the City had realized as a result of the violations discussed, above.

Ε. Effective Use of State Resources: The Prosecution Team is recommending that the Water Board impose a \$1,500,000 administrative civil liability, \$750,000 of which will be allocated to a Supplemental Environmental Project (SEP) to be completed with City resources. This amount is still quite significant and will send a strong message to other dischargers that the Lahontan Water Board takes the human and environmental health threat created by discharges of raw sewage seriously, and that operating and maintaining sanitary sewer systems in compliance with Permit requirements is critical to protecting human and environmental health. The recommended liability is substantial and provides an appropriate deterrence from poor maintenance and operation for this discharger and others that are similarly situated and encourages regular maintenance and upkeep of sewer collection systems. The reduction from the calculated amount to \$1,500,000 is also partially associated with avoiding any risks with litigating these alleged violations in an administrative hearing, petition to the State Water Board, or in court. In doing so, the Lahontan Water Board can direct its resources that would otherwise be used in litigating this case to its other high priority work. Additionally, the recommended liability amount and the City's commitment to spending and upgrading its system reflects a reasonable response to the underlying violations and causes.

# Step 8: Economic Benefit

The Enforcement Policy directs the Water Board to determine any Economic Benefit Amount of the violation based on the best available information. Pursuant to Water Code section 13385(e), civil liability, at a minimum, must be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute a violation. The Enforcement Policy suggests that the Water Board compare the Economic Benefit Amount to the adjusted Total Base Liability and ensure that the adjusted Total Base Liability is, at a minimum, 10 percent greater than the Economic Benefit Amount. Doing so should create a deterrent effect and will prevent administrative civil liabilities from simply becoming the cost of doing business. (Enforcement Policy pages 20-21.)

As stated in the Complaint, the City failed to properly manage, operate, and maintain the wastewater collection system that has caused and/or contributed to several sanitary sewer overflows, in addition to causing detriment to the regulatory program. Several actions were significantly delayed or avoided that could have prevented or reduced the extent of the violations presented in this methodology. As a result, the City realized a significant economic benefit as summarized below.

Cost Savings – Labor Costs: During the 2015 State Water Board audit, limited City staff resources were noted as an issue contributing to deficiencies observed in system-wide operation and maintenance. Based on the City's May 23, 2016 response to the audit and in the City's letter submitted on May 4, 2017, the City hired five permanent positions (1-Code Enforcement Officer, 2-Maintenance Workers, 1-Senior Maintenance Lead Worker, and 1-Office Assistant) dedicated to collection system management, operation, and maintenance, in order to address concerns raised in the audit report. An additional Lead Maintenance Worker position was also filled on December 31, 2016. (City email, October 8, 2019.) Based on publicly available salary information, the total annual labor expense for the six positions is approximately \$546,384. Had these resources been available sooner, violations observed at the time of the 2015 audit may not have been as prevalent or concerning as what was observed. Additionally, discharge violations evaluated by this methodology could have been reduced or eliminated due to increased collection system maintenance and oversight.

Therefore, the Lahontan Water Board asserts that an economic benefit was realized from the labor savings associated with insufficient staff resources. Although resource limitations likely existed beyond the non-compliance period addressed by the alleged violations, for conservative cost-saving estimation purposes, the economic benefit was computed using the March 26, 2015 SSO event date as the initial date of non-compliance. Compliance dates for each of the six positions were determined based on the City's May 4, 2017 letter and October 8, 2019 email.

Cost Savings – Sewer System Assessment: In addition to staffing, an appropriate inspection and condition assessment program would have prevented or mitigated the SSO violations presented in the Stipulated Order. The 2009 SSMP described a sewer system inspection and condition assessment strategy in which the entire system would be assessed over a sevenyear period. Based on information provided during the State Water Board December 2015 inspection, the City had inspected approximately 25 miles of the system using CCTV.

The City has since initiated and completed (March 2018) a video inspection and assessment program for nearly all of its gravity main system at a cost of approximately \$4.2 million. (City Email, December 20, 2017.) This inspection and assessment program were in addition to the 6.6 miles of high maintenance sewer system segments video inspected as part of developing the 2016 Sewer Master Plan. The City realized an economic benefit by delaying full implementation of the sewer system inspection and assessment strategy described in the City's 2009 SSMP.

Cost Savings – Sewer System Management Plan (SSMP): The Permit requires the City to update its SSMP once every five years. The 2009 SSMP should have been updated in 2015, but the update was not completed until May 17, 2016. Having and implementing an updated,

effective SSMP is critical to keeping public sewer systems in good operating condition and could have helped to prevent or reduce the extent of the discharge violations evaluated by this methodology. The City realized an economic benefit from delaying the update of the SSMP.

Cost Savings – Sewer System Flow Monitoring: Based on the City's actions following the SSO event described in Violation No. 3, an accessible flow monitoring program was implemented allowing City staff to view VVWRA flow data and receive alarms related to upsets and anomalies (December 2015 Compliance Inspection Report, February 19, 2016 page 5). The technology was available prior to the SSO event, but had not been used by either agency. Had the system been in place, it is likely that the SSO would have been detected sooner, and therefore the volume would have been significantly reduced. The cost for implementing the program and training City staff was approximately \$4,000, based on 40 hours of labor for program setup at \$100 per hour. The City stated that the system was fully operational on February 10, 2016. (City of Victorville Letter, May 4, 2017.) The City realized an economic benefit from delaying the implementation of the communications system providing the City with access to VVWRA flow data and alarms related to City sewer system flow conditions.

The BEN financial model provided by the United States Environmental Protection Agency was used to compute the total economic benefit of noncompliance. For computational purposes, the penalty payment date was established as the projected hearing date, March 11, 2020.

The total economic benefit of noncompliance was determined to be \$1,021,884. To ensure the adjusted Total Base Liability is, at a minimum, 10 percent greater than the economic benefit amount, the adjusted Total Base Liability must be greater than \$1,124,072.

#### Step 9: Maximum and Minimum Liability Amounts

The Enforcement Policy directs the Water Board to consider the maximum or minimum liability amounts set forth in the applicable statutes.

#### Violations No. 1 through 6, and 9 through 11

The maximum liability amount the Lahontan Water Board may assess administratively pursuant to Water Code section 13385, subdivision (c), is \$10,000 per day of violation plus \$10 per gallon discharged but not cleaned up in excess of 1,000 gallons. The violations are not subject to minimum mandatory penalties.

As discussed, above, Violation Nos. 7 and 8 have been removed from this methodology.

Violation No.	Initial Base Liability	Maximum Amount
1	\$206,965.00	\$940,750.00
2	\$665,221.70	\$2,114,500.00
3	\$9,454,500.09	\$116,941,490.00
4	\$269,223.24	\$784,450.00
5	\$3,080.00	\$10,000.00
6	\$76,362.00	\$289,250.00
7	\$0.00	\$0.00
8	\$0.00	\$0.00
9	\$199,485.00	\$697,500.00
10	\$2,640.00	\$10,000.00
11	\$866,800.00	\$3,940,000.00
TOTAL	\$11,744,277.03	\$125,727,940.00

Table 2. Summary of Initial Base and Maximum Potential Liabilities

The maximum potential liability for Violations No. 1 through 6 and Violations No. 9 through 11 is \$125,727,940.00. The minimum required liability for all violations is the economic benefit derived from the violations, plus ten percent (\$1,124,072). The recommended liability falls within these maximum and minimum liability amounts.

## Step 10: Final Liability Amount

The final liability proposed is \$1,500,000 for Violations Nos. 1 through 6, and 9 through 11, based on consideration of the penalty factors discussed, above.

# ATTACHMENT B City of Victorville Supplemental Environmental Project (SEP) Old Town Septic to Sewer Conversion Project August 29, 2019

## **Description of the SEP**

This project will connect properties in the Victorville Old Town area, which are utilizing septic systems, to the City sewer collection system. For the purposes of this SEP, the Old Town area is bounded by the Mojave River, Forrest Avenue, I-15 and Eleventh Street, an area of approximately 245 acres, with 441 developed properties. Please refer to Exhibit 1, a map of the Old Town area. There are currently approximately 82 developed properties in Old Town that are on septic system. The City is proposing to connect an estimated 33 properties to the sewer collection system or as many properties as funds will allow. The project is discussed in more detail below under the "Project Development" and "Project Implementation and Schedule" sections.

## Background

GIS analysis has shown that there are 1,748 developed parcels in the City of Victorville that are within 200 feet of an existing sewer main, but not connected to the sewer collection system. These properties use a septic system on the same parcel to treat the sewer flow and are almost entirely single-family homes. The City Code Section 10.02.140 requires a property owner to connect to the City sewer collection system when a septic system fails, if the property is within 200 feet of an existing sewer. In Section 10.02.150, the City Code allows for a waiver of the requirement to connect to sewer if there is evidence of special circumstances, specifically, "practical difficulties" or "unreasonable hardships" if the granting of such a "variance will not be materially detrimental to public health, safety or welfare." Please refer to Exhibit 2, which is a copy of the referenced City Code sections. Data from requests for a variance from the requirement to connect to sewer after failure of a septic system shows that the average estimated cost to connect to sewer was approximately \$27,000, including fees. From February of 2011 through August of 2016, there were 11 variances granted by City Council based on financial hardship. Please refer to Exhibit 3, which shows the summary of cost data on these variances.

## **Problem Identification**

#### Water Quality Impacts

A conventional septic system, if properly designed and maintained, should remove nearly all suspended solids, bio-degradable organic compounds, and bacteria. However, according to EPA ecological research on environmental effects of septic tank systems<sup>1</sup>, it is estimated that as many as one-half of all septic systems are not operating satisfactorily. The failure of a septic system has the potential of adverse impacts to groundwater. Historically, septic system failure has been linked to soil clogging, loss of infiltrative capacity, or simply exceeding the infiltrative capacity of the soil. When this type of system failure occurs, wastewater may seep to the surface and contaminants may be carried with the overland flow directly to a water body or a nearby well.

On the other hand, septic systems may fail to provide sufficient treatment due to the high permeability of the surrounding soil without showing any signs of seepage or overflow. Highly-permeable soil can be rapidly overloaded with organic and inorganic contaminants that move to the groundwater zone without being treated by the system. Multiple studies show that most of the known contaminants in septic tank effluent including suspended solids, biochemical oxygen demand (BOD), and fecal bacteria can be removed by soil filtration under proper conditions and sufficient filtration depths. However, other chemicals such as chlorides and nitrates are essentially unaffected by movement through most soils. The probability of contamination increases in wet conditions when the groundwater table rises. Higher water tables can rise into the aerobic zone below the soil absorption field and impede wastewater treatment.

Although groundwater contamination caused by septic systems may be due to different factors in different regions (i.e. density of the facilities in the area, geology, depth to water table, and climate), it has been continuously one of the highest ranked contributors of directly discharged wastewater to groundwater and one of the most frequently reported sources of contamination<sup>2</sup>. Contamination from septic tanks has been identified to cause diseases such as infectious hepatitis, typhoid fever, dysentery, and various gastrointestinal illnesses, and may be responsible for numerous subclinical cases of waterborne diseases that go unnoticed. As a main contributor to the nitrate concentration in groundwater, septic systems can be indirectly related to health concerns associated with high concentrations of nitrate in drinking water such as methemoglobinemia in human infants, increased risk of spontaneous abortion, bladder and ovarian cancer, and non-Hodgkin's Lymphoma<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Environmental Protection Agency (EPA), 1997. "Environmental Effects of Septic Tank Systems", *Ecological Research Series*, August, 1997.

<sup>&</sup>lt;sup>2</sup> Environmental Protection Agency (EPA), 1997. "Environmental Effects of Septic Tank Systems", *Ecological Research Series*, August, 1997.

<sup>&</sup>lt;sup>3</sup> John A. Izbicki, Alan L. Flint, David R. O'Leary, Tracy Nishikawa, Peter Martin, Russell D. Johnson, Dennis A. Clark, 2015. "Storage and mobilization of natural and septic nitrate in thick unsaturated zones, California", *Journal of Hydrology*, Volume 524, May 2015, Pages 147-165, ISSN 0022-1694, https://doi.org/10.1016/j.jhydrol.2015.02.005.

#### Cost to Connect to Sewer

As explained above, the cost to connect a property within 200 feet of an existing sewer can be substantial, and has averaged about \$27,000. The connection fee paid to the City is currently \$4,350. There are additional costs for the construction of the lateral connection in the public right of way, the plumbing connection on private property, the abandonment of the septic system and City permit fees. For property owners who are in financial hardship and not financially able to connect to the sewer collection system, the City has not been able to develop a grant program due to fund restrictions. The funds collected from the usage fee, paid by existing users, cannot pay for the cost of new connections to the system. The funds collected from the connection fee are restricted to increasing the capacity of the system.

## **Project Selection**

A septic to sewer conversion project was selected as a solution to the problem of the potential for adverse groundwater impacts from septic systems that can feasibly be connected to the sewer collection system. A project area was selected using the criteria of a small depth to groundwater and an economically disadvantaged area of the City. The Victorville Old Town area clearly meets both of these criteria.

#### Depth to Groundwater

The depth to groundwater in Old Town varies by location and time. Groundwater data was accessed from the State Water Resources Control Board GeoTracker website at <u>https://geotracker.waterboards.ca.gov</u>. Three sites were accessed: (1) the former Nuway Dry Cleaners located at Eighth Street and C Street; (2) the former Chevron Bulk Plant located at D Street and Eighth Street; and (3) Golden West Tire, located at D Street and near First Street. Please refer to Exhibit 4, a table summarizing water table data. This exhibit includes excerpts of groundwater monitoring reports that were prepared for and submitted to the Lahontan Regional Water Quality Control Board.

The depth to groundwater below the ground surface at these locations varied from a minimum of 24.89 feet, 12.53 feet and 4.38 feet, respectively in the vicinity of the three sites. As would be expected the sites closer to the Mojave River had less depth to groundwater. A summary table from Site 3 shows a variance in the depth to ground water varying between 3.38 feet to 8.13 feet for the four monitoring wells over almost a nine-year period from November of 1999 to September of 2008.

Considering the low depths to groundwater in the area, nitrate contamination is likely even with less permeable soil types. Furthermore, in the areas closer to the Mojave River with relatively less depth to groundwater table, the treatment capacity of the septic systems may be limited due to the thin layer of soil absorption. This may lead to additional risks of contamination from salts, bacteria, etc. The contamination risk could become significantly higher during wet seasons.

#### Economically Disadvantaged Community

The residents of the Old Town area, on average, have a lower income level than most of the other residents in Victorville. Property values and rents are also lower than compared to other parts of the City. Therefore, the likelihood that an Old Town resident or property owner would be able to fund a connection to the sewer system is less compared to other parts of the City. The Old Town area is within an SB 535 Disadvantaged Community designated by CalEPA and identified on the "CalEnviroScreen" as of April 2017. This designated area extends to Mojave Drive and Verde Street on the south border. The website reference for this designation can be found at: <u>tt</u>. Please refer to Exhibit 5, a map showing the Disadvantaged Community area overlay on Old Town.

## Supplemental Environmental Project List

On December 15, 2016, this project was presented to the Mojave Water Agency (MWA) Technical Advisory Committee (TAC) to request addition to the list of projects for Supplemental Environmental Project funding with the Lahontan Regional Water Quality Control Board. The Committee approved the request and the project was added to the project list for the Mojave Integrated Regional Water Management Plan. Please refer to Exhibit 6, the MWA TAC agenda item. Project No. 2004 at the end of the list is the "Septic System Connection to Sewer Grant Program", which is this project.

#### **Project Development**

From February 20, 2017 through May 25, 2017 the City's contractor, Hoffman Southwest Corp., also known as Propipe, cleaned and performed CCTV (closed circuit television) inspection of the gravity mains in the collection system in the Old Town area. From this inspection the location (distance from a referenced manhole) and orientation (side of the pipe) of lateral connections to each sewer main were determined. A map was prepared with current aerial imagery to identify which properties with buildings were not connected to sewer. It has been determined that approximately 82 developed parcels in the Old Town area are not connected to sewer (54 residential and 28 nonresidential properties). Please refer to Exhibit 7, a map showing these properties.

The proposed project for environmental documentation purposes will include all 82 properties. However, the properties to be connected are prioritized based on their proximity to the Mojave River. In general, the closer the property is to the River, the lower the ground elevation and the less the depth to groundwater will be from the septic system.

A preliminary cost estimate was developed for a typical single property adjacent to an existing sewer. Sewer mains will not need to be extended for this project. Actual costs will vary depending on the conditions of a particular location including the depth of the sewer main, proximity of existing utilities and utility conflicts, difficulty of connecting to the main, the length and difficulty of installing the onsite piping and plumbing. Please refer to Exhibit 8 for preliminary cost estimates for the construction phase and the total project. It is estimated that 33 properties will be included in the project. Alternate bid

items will be included in the bid schedule so that properties can be added or deleted to scale the project cost to match the available offset to the ACL penalty amount. Please refer to Exhibit 9, a map of the properties to be included in the project and Exhibit 10 for a list of the properties to be included in the project.

### Project Goals and Water Quality Benefits of the SEP

The City's proposal for septic to sewer conversion meets a series of beneficial goals for the water resources in the area:

- Preserve local beneficial uses as it relates to water quality of water supplied by surface water and groundwater.
- Continue pursuing the goals for septic system reduction and sewer service expansion to promote water quality protection.
- Provide support and assistance to Disadvantaged Communities and help facilitate projects and programs that benefit those communities.
- Improve the water use in the region by increasing the available recycled water at the wastewater treatment plant and protecting water supply, groundwater quality, and physical infrastructure.
- Reduce the hauled waste program from septic systems cleanups.

Priority projects will be for a target area in Old Town that has a high water table (close to the Mojave River), is in proximity to known contaminants in the soil or groundwater, and has economically disadvantaged residents. These projects would reduce the infiltration of leachate from the septic systems to groundwater and decrease the probability of nitrate contamination. It would also protect the surface water resources during the wet weather events by eliminating the transportation of septic system leakage to water bodies. Wastewater from the projects would be added to the influent volume of the wastewater treatment plant that undergoes tertiary treatment. This would eventually increase the recycled water availability and water supply flexibility of the City.

### Public Benefit of the SEP

The primary public benefits of the SEP are twofold: protecting water quality by mitigating the risk of groundwater contamination from existing septic systems; and providing reliable sewer service to economically disadvantaged residents of the City. As explained above, the advantages of converting septic systems to sewer connections in areas with a high groundwater table is significant in protecting groundwater quality. The low depths to groundwater in the residential properties close to the Mojave River impose the highest risk of groundwater contamination and water quality degradation. The careful selection of the project area ensures that while the City is serving the economically disadvantaged community, it is addressing the most critical and high-risk systems and delivering the highest public benefit.

### **Key Personnel**

The designated Project Manager is Stephan Longoria, PE, Senior Civil Engineer, in the Engineering Division of the Public Works Department. Stephan will be responsible for

every aspect of the project, from start to completion. In addition to supervising several engineers, Stephan also supervises the City's Public Works Inspectors, who inspect all improvements in the public right of way.

Kevin Collins, the Building Official for the City, will be responsible for permit issuance and inspection of all improvements on private property and the abandonment of the existing septic systems.

### Financing of the SEP

The proposed financing of this SEP is from the City's sewer fund. The cost of this project is proposed to offset fifty percent of the penalty amount resulting from ACL Complaint No. R6V-2016-0042. The project's costs are proposed to be all inclusive, to include the following, and not necessarily be limited to: preparation of environmental documentation; design and preparation of plans, specifications and estimates; all construction in the public right of way such as sewer laterals, connections to sewer mains, and cleanouts; all construction on private property such as the onsite piping and plumbing and connection to the building; abandonment of the existing septic system; all permitting and inspection fees; City and VVWRA connection fees. The ongoing sewer usage charge to the property owner will be paid by the property owner.

### **Project Implementation and Schedule**

The major SEP tasks and schedule for the start and completion of those tasks is shown below. The CCTV investigation has been completed. The environmental documentation and approval process for the project is scheduled to start immediately after the SEP is approved by the Lahontan Regional Water Quality Control Board. It is anticipated that the work will be categorically exempt and the environmental documentation and clearance will use in-house resources. It will be necessary for each property owner to sign an agreement with the City to give the City's agents and contractor the right to enter their property to survey it and install the required improvements to connect to the sewer collection system. The agreement will state that after the improvements have been inspected by the City and have been completed to the satisfaction of the City and the property owner, the improvements will become the property of the property owner and maintained from that time forward by the property owner. It is anticipated that the preparation of the plans, specifications and estimates (PS&E) will be prepared by an engineering consultant. The PS&E will be the construction documents used for advertising for contractor bids. After the construction contract is awarded by the City, the contract will be executed. City permits for the work both in the public right of way and private property will be issued to the contractor, and submittals for the construction schedule, traffic control and materials will be reviewed and approved. After this the construction can start. The project will be closed out after testing, final inspections, resolution of change orders and claims and final payment to the contractor. After this, the City will approve a notice of completion for the project, which is recorded. Then the improvements in the public right of way will be accepted for maintenance by the City and, in accordance with the property owner agreement, the property owner will be required to maintain all improvements on private property. Shown below is an estimated SEP implementation schedule.

Task	Duration (days)	Start	Finish
Environmental Documentation	35	04/01/20	05/06/20
Property Owner Authorization & Agreement	91	04/01/20	07/01/20
Plans, Specifications and Estimates	150	07/02/20	11/29/20
Advertise Construction	35	11/30/20	01/07/21
Award Contract	49	01/07/21	02/16/21
Execute Contract, Permits and Submittals	30	02/16/21	03/24/21
Construction	120	03/29/21	07/27/21
Close Out Construction & Notice of Completion	62	07/27/21	10/05/21
City & Property Owner Maintenance Acceptance	63	10/05/21	11/29/21

### Table: Supplemental Environmental Project Implementation Schedule

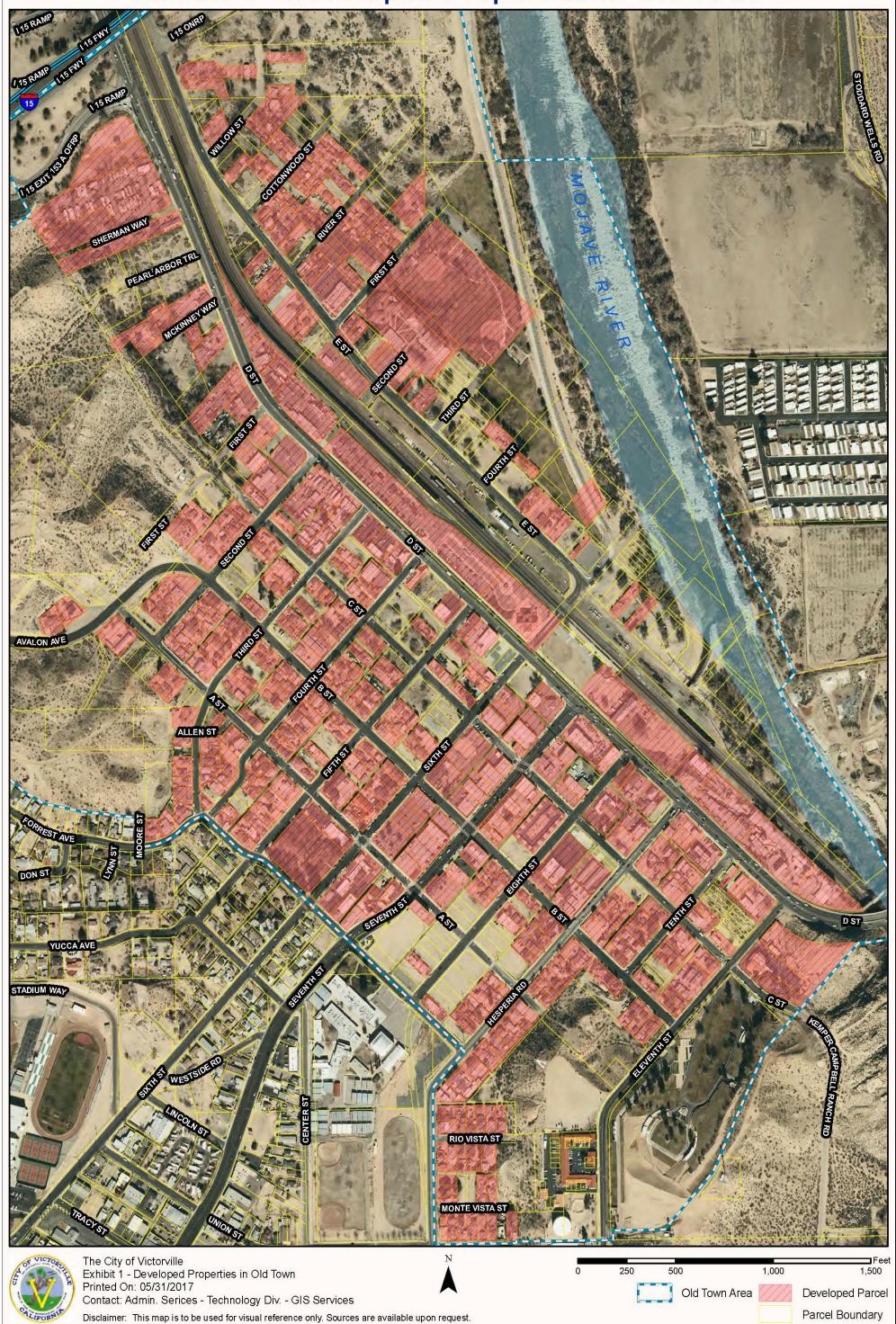
### Maintenance Plan Beyond the SEP-funded Period

The maintenance of all improvements in the public right of way (which are either road or sewer easements) will be the ongoing responsibility of the City of Victorville Public Works Department. These improvements include the sewer mains, manholes, laterals and cleanouts. The maintenance of all improvements within private property will be the ongoing responsibility of the property owner. These improvements include onsite piping and plumbing, and abandoned septic system facilities.

### City of Victorville Supplemental Environmental Project (SEP) Old Town Septic to Sewer Conversion Project Exhibits

- Exhibit 1 Map of Old Town Area
- Exhibit 2 City Code Sections Failure of Private Sewer Disposal System and Variances
- Exhibit 3 Sewer Connection Variance Estimated Costs
- Exhibit 4 Old Town Depth to Groundwater Elevations
- Exhibit 5 Disadvantaged Community Area Map
- Exhibit 6 MWA TAC Agenda Item
- Exhibit 7 Map of Old Town Properties not Connected to Sewer
- Exhibit 8 Preliminary Project Cost Estimate
- Exhibit 9 Map of Properties to be included in Project
- Exhibit 10 List of Properties to be included in Project

# Exhibit 1 - Developed Properties in Old Town



### Exhibit 2 City of Victorville City Code

### 10.02.140 - Failure of private sewage disposal system.

- (a) The owner of any building occupied or used by humans situated within the city and abutting on any street on which there is now located or may in the future be located a public sewer which will serve the building and which building was, as of May 5, 1983, being served by a privy, privy vault, septic tank, cesspool, seepage pit, or other private sewage disposal system intended or used for the disposal of sewage shall, upon the failure of such disposal system, at his own expense, connect said building directly with the proper public sewer within ten days from the date of such failure, and it is unlawful, thereafter, to construct or repair, reactivate or maintain any such private sewage disposal system. Whenever a public sewer was previously available, the property owner shall connect all building sewers to the public sewer upon failure of any private sewage disposal system serving the property.
- (b) Upon connection to the public sewer after such failure, the property owner shall be required at his/her sole expense, to do the following:
  - Pump out all septic tank effluent and/or sludge from the septic tanks, seepage pits, cesspools or other such facilities associated with the private sewage disposal system;
  - (2) Properly dispose of such septic tank effluent and/or sludge by waste hauling;
  - (3) Fill the pumped-out facilities with suitable materials as required by the building official.

(Ord. No. 2363, § 3, 3-21-17)

### 10.02.150 - Variances; applicable procedure.

(a) A variance from this chapter's requirements for connecting a property to the public sewer may be obtained upon a written application therefor, directed to the city engineer, who shall have the power to grant such variance if he/she finds from the evidence presented by the applicant that there are special circumstances applicable to the individual's property, such as a building being too low to permit gravity flow to a public sewer or the topography of the land is such that said gravity flow will not occur, or that the building or proposed building is too far distant from a public sewer to make it practicable or economically feasible to connect thereto, and that strict enforcement of the provisions of this chapter would result in practical difficulty, unnecessary hardship, or results inconsistent with the general purpose and intent of this chapter, and that the granting of such a variance will not be materially detrimental to the public health, safety or welfare.

- (b) The city engineer may grant the requested variance only upon making a written finding that:
  - (1) One or more of the special circumstances specified in subsection (a) of this section exist;
  - (2) There are practical difficulties or unreasonable hardships which would result from the strict enforcement of the requirements to connect a property to the public sewer; and
  - (3) A variance will not be materially detrimental to the public health, safety or welfare.

(Ord. No. 2363, § 3, 3-21-17)

#### Exhibit 3

#### Sewer Connection Variance Estimated Costs

		Sewer System	Type of Sewer System Connection		Cost to Repair Septic	City Council		
No.	Assessor Parcel Number	Connection Cost	Lateral Installation Only	Extend Sewer Main & Install Laterall	Connection Only (Lateral Exist.)	System	Meeting Date	City Council Action
1	3095-321-01	\$46,149.00		X (136-feet)		\$2,200.00	February 1, 2011	Approved
2	3093-461-05	\$5,715.00	х			\$2,556.00	March 15, 2011	Denied
3	3091-071-03	\$24,365.00		X (184-feet)		\$2,500.00	July 3, 2012	Approved
4	3092-201-14	\$36,451.00		X (154-feet)		\$2,707.00	December 16, 2014	Approved
5	3072-131-37	\$37,659.94		X (129-feet )		\$2,761.64	January 20, 2015	Approved
6	0395-051-21	\$12,478.00	х			\$2,757.00	January 20, 2015	Approved
7	0477-251-42	\$36,278.00		X (96-feet		\$2,457.00	May 19, 2015	Approved
8	0480-044-06	\$6,832.00			х	\$2,900.00	June 2, 2015	Denied, but allowed Property Owner to pay City fees through escrow
9	3093-471-23	\$42,007.00				\$4,500.00	June 16, 2015	Approved
10	0395-043-10	\$32,246.00	X (Sewer at rear of property in SBCFCDE)			\$3,412.00	April 5, 2016	Approved
11	0477-132-42	\$18,197.00	X (315-feet)			\$5,607.00	June 7, 2016	Approved
12	3095-261-07	\$12,250.00		X (166-feet)		\$3,007.00	July 5, 2016	Approved
13	3071-581-43	\$39,074.00		X (200-feet)		\$4,393.00	August 9, 2016	Approved

Average Estimated Cost

\$26,900.15

\$3,212.13

### Exhibit 4

### Victorville Old Town Depth to Groundwater Elevations

				er Elevation (feet)	•	Vater (BGS) eet)	
Site	Location	Date Monitored	Min.	Max.	Min.	Max.	Reference
Former Nuway Dry Cleaners	15595 8th Street	11/24/2014	2705.65	2707.99	24.89	27.11	1
Former Chevron Bulk Plant	16928 D Street	9/12/2012	2701.59	2707.14	12.53	17.48	2
Golden West Tire	16568 D Street	2/12/2008	2705.58	2705.86	4.38	5.51	3

Notes

MSL - mean sea level

BGS - below ground surface

References

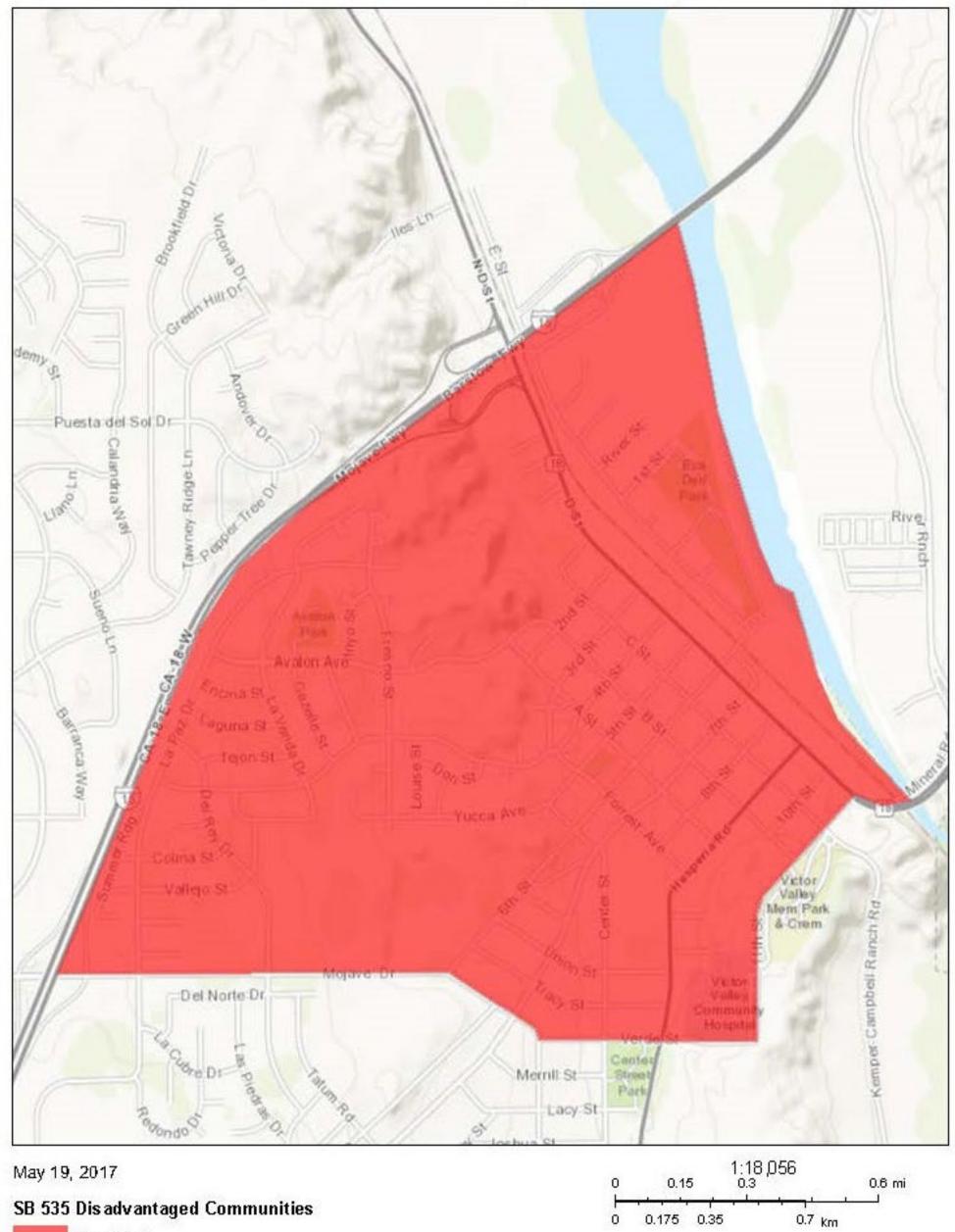
1. Groundwater Investigation Report, January 30, 2015. Prepared by Ninyo & Moore.

2. Third Quarter 2012 Semiannual Groundwater Monitoring Report, October 29, 2012. Prepared by Holguin, Fahan & Associates

3. Quarterly Groundwater Monitoring Report, February 12, 2008. Prepared by EarthSafe.

### EXHIBIT 5

### Old Town Disadvantaged Community Area



Override 1

Sources: Esri, HERE, De Lorme, Intermap, Increment P. Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBlase, IGN, Kadaster NL, Ordnance Suruey, Esri Japan, METI, Esri China. (Hong Kong), switstopo, Mapmyindia, O OpenStreetMap contributors, and the GIS User Community

Exhibit 6

## TECHNICAL ADVISORY COMMITTEE TO THE MOJAVE WATER AGENCY



13846 Conference Center Drive Apple Valley, CA 92307 (760) 946-7000 www.mojavewater.org

> 2016 EXECUTIVE COMMITTEE

Chairman Jeanette Hayhurst

Vice Chairman Chuck Bell

> Secretary Kirby Brill

Morongo Basin Marina West

Upper Mojave River Basin Bob Tinsley

Middle Mojave River Basin Perry Dahlstrom

Lower Mojave River Basin Ellen Johnson

> El Mirage Basin Don Bartz

Lucerne Valley Basin Richard Selby

At Large Patty Kouyoumdjian DATE: December 15, 2016

TO: Technical Advisory Committee

**FROM:** Jeanette Hayhurst, IST Chairperson

SUBJECT: CITY OF VICTORVILLE PROJECT FOR SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP) FUNDING WITH LAHONTAN REGIONAL WATER BOARD

### **RECOMMENDATION**

Consider authorizing the addition of the City of Victorville Septic System Connection to Sewer Grant Program to the list of project for Supplemental Environmental Project (SEP) funding with the Lahontan Regional Water Quality Control Board

### BACKGROUND

The Lahontan Water Board has a program that will allow fines collected from violators to be used directly to fund a project that will benefit the local region where the violation occurred. It is called the Supplemental Environment Project (SEP) Program. (This is similar to how the money paid by Victor Valley Waste Water Authority was used to fund the Salt Nutrient Plan.)

The Lahontan Water Board wishes to create a list of eligible projects that have been vetted by the local community. The project list from the Mojave Integrated Regional Water Management (IRWM) Plan already includes several projects that would meet Lahontan's criteria. On February 4, 2016, the Implementation Support Team (IST) for the IRWM Plan approved a list of projects to be considered for the SEP Program.

It is important to note that this round of SEP funding is only available for the Lahontan Region and does not include projects in the Colorado Region.

### **ATTACHMENT**

• Complete Project List

Project No.	Project Sponsor	Project Name	Project Description
7	Mojave Water Agency	Assistance Program for Small Water Systems	Program would identify water supply, water quality and infrastructure needs of small drinking water systems within the IRWM Region and help connect them to available funding by identifying funding sources, assisting with grant applications and paperwork, etc. Sources of funding could include State and Federal funds from a variety of programs designed to help small systems.
17	City of Victorville	VSD 4 Sewer Lift Station	COV VSD 4 Lift Station will divert the remainder of the Federal Bureau of Prisons wastewater flow to the City's WWTP and blend the TDS from the WWTP's industrial wastewater flow down to a limit that will allow the sale of Title 22 recycled water for cooling purposes to the High Desert Power Project and a future second power plant in the area.
21	Mojave Desert Resource Conservation District	Dairy Nitrate Reduction	<ul> <li>Obtain funding – to be matched with NRCS/USDA funding – a possible 25% contribution – to:</li> <li>1) Help dairies pay to haul manure off-site – likely to fields distant from shallow groundwater and surface waters.</li> <li>2) Help fund infrastructure designed to apply waste pond water directly to adjacent fields via irrigation systems, etc. – alleviating direct percolation to groundwater. Requires manure "manifest" to track movement and use of nutrients. BMP to effectively use nutrients – applied at agronomic rates.</li> <li>3) Feasibility study? to determine alternate uses of manure for fuels – ie: composting/digestion/gasification – what can be done on a regional basis – work in conjunction with VVWRA, etc.</li> </ul>
31	Helendale CSD	Wastewater Treatment Plant Effluent Distribution System	Design and construction of "Purple Pipe" pipeline system to convey effluent water to nearby Golf Course Irrigation system that currently uses pumped groundwater.
32	Helendale CSD	Tertiary Treatment Upgrade	The District has completed a Recycled Water Facilities Plan which has identified a preferred treatment alternative and cost scenario estimated at \$2,670,000 for plant upgrades. The project is designed to produce recycled tertiary water for use within the District service area by improving the WWTP processes to provide unrestricted Title 22 recycled water. The delivery phase is two-stage with minor delivery required to move Title 22 water across the street to Helendale Community Park for landscape irrigation, and the second stage for delivery of Title 22 water to the Silver Lakes Association for golf course irrigation which would require an extensive pump station and force main. The next phase is recycled water storage required to store water during the wet months for use in the dry months and for use by the onsite farming operation. However, this stage of tertiary treatment can be reduced by the implementation of full phase 2 providing recycled water to the SLA golf course.

Project No.	Project Sponsor	Project Name	Project Description
2001	Mojave Water Agency	Annual Cooperative Water Resources Program between the MWA and the United States Geological Survey	<ul> <li>A cooperative water resources program between the Agency and the USGS has been in place since October 1991. The program has served, and continues to serve, as an integral part of the Agency's ability to understand and manage the basin(s). The extension of the program for the 2015-2016 fiscal year will be crucial to MWA's ongoing basin management efforts.</li> <li>The elements of this cooperative agreement consist of: <ol> <li>Basin Wide Groundwater-Level and Water-Quality Monitoring Network - USGS Staff monitor water levels and collect water quality samples at selected wells to supplement MWA's internal monitoring program. These additional data points enable the MWA to maintain a more robust monitoring network across our Service Area.</li> <li>Surface-Water Monitoring and Water Quality - The USGS maintains five streamflow gaging stations along the Mojave River drainage system. Streamflow gaging stations are located at Deep Creek, West Fork, the Lower Narrows, Barstow, and Afton. In addition to streamflow monitoring, the USGS also monitors water quality at three of these locations. The stream gaging data and surface water quality data are maintained on the USGS' National Water Information System (NWIS) website.</li> <li>Review and Storage of MWA Water-Level and Water-Quality Data - The USGS has been maintaining MWA collected water level and water quality data on the NWIS website since FY 2008. This enables our constituents, Board members, MWA staff, and any interested parties to access our data at any time.</li> <li>Monitoring Regional Water-Level Changes and Subsidence - The USGS has monitored regional water levels and produced biennial groundwater contour maps since 1992. This work allows the review of water level changes over time across our Service Area and the greater Mojave Desert region. The USGS will also gather and analyze land subsidence data for the region as part of this year's agreement. The data from this work will be integrated with previous subsidence studies completed by the USGS for th</li></ol></li></ul>

Project No.	Project Sponsor	Project Name	Project Description
2002	Mojave Water Agency	Chromium-VI Treatment Assistance Program	The California State Water Resources Control Board recent adoption of a Maximum Contaminant Level (MCL) for hexavalent chromium of 0.010 mg/L (10 µg/L) on July 1, 2014, has caused an issue with many systems in the Mojave IRWM Plan to be able to provide safe drinking water that meets the new standard. This program would provide assistance to systems to collaborate with state and federal funding agencies to help meet the challenges and cost of hexavalent chromium treatment. Mojave Water Agency using Department of Public Health data show that there are systems within the Mojave IRWM Plan that are affected by the new MCL for hexavalent chromium. This assistance may include planning, engineering, treatment, feasibility testing, and/or treatment systems. Some of the systems that are within the Lahontan Region and are included in this program are: — Phelan Pinon Hill Community Service District — County of San Bernardino (Lahontan Region ONLY) — Thunderbird County Water District — Apple Valley View Mutual Water Company — Daggett Community Services District
2003	Mojave Water Agency	IRWM Plan Regional Water Quality Sampling Project	The Mojave IRWM Plan Regional Water Quality Sampling Project is a project that will take on the task of performing regional water quality collection and analysis across the Mojave IRWM Plan area. The project will focus of selecting key wells from the Mojave IRWM Plan area and sampling these key wells at strategic times and locations. The project will have the goal of a sub-area of the Mojave Water Agency (MWA) sampled every five years in a rotating fashion. Other high priority areas of the MWA watershed (such as the Upper Mojave Watershed) will be sampled at a higher frequency due to the groundwater pumping influence in this area. Samples will be collected and transported to state certified laboratory contracted with MWA and analyzed for a variety of constituents. The Lab will then generate a report of their analyses and MWA will review and approve the report. The data will then be imported into MWA's database and used from scientific purposes (Reports, graphs, and presentations). Data will be available to the public via public information request to MWA or accessing the data via the National Water Information System (http://waterdata.usgs.gov/nwis) through cooperative partnership with the United State Geological Survey.
2004	City of Victorville	Septic System Connection to Sewer Grant Program	The City is proposing to connect to the City's sewer collection system a specified number of developed and occupied buildings, currently served by septic treatment systems, over a three-year period.
			(Continued)

Project No.	Project Sponsor	Project Name	Project Description
			Priority projects will be for a target area in Old Town (between A St, and D St. and 1 <sup>st</sup> St. and 11 <sup>th</sup> St.) where properties are adjacent to an existing sewer main and usually only a lateral connection will be required. The Old Town area has a high water table, is close to the Mojave River, and is an economically disadvantaged area of the City. 28 single family residences and two small apartment complexes one with 8 and the other with 9 units have been preliminarily identified for septic to sewer connection. In addition, the target areas with the highest priority would be areas with a high water table, in proximity to known contaminants in the soil or ground water or that has economically disadvantaged residents. Another criteria for selection would be for a property where a septic system fails and must connect to sewer in accordance with the city's code or receive a variance from City Council based on hardship.





### Exhibit 8, page 1

### Old Town Septic System to Sewer Conversion Project

### **Construction Preliminary Cost Estimate**

ltem No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Price
1	Mobilization & demobilization	LS	1	\$28,000.00	\$28,000.00
2	Prepare and implement water pollution control	LS	1	\$12,000.00	\$12,000.00
3	Clearing and grubbing	LS	1	\$14,000.00	\$14,000.00
4	Prepare and implement temporary traffic control	LS	1	\$15,000.00	\$15,000.00
5	Install 4-inch sewer lateral on existing sewer main per City Standard Drawing SS-03	EA	33	\$2,800.00	\$92,400.00
6	Trench backfill and paving per City Standard Drawing S-10	EA	33	\$400.00	\$13,200.00
7	Install sewer cleanout per City Standard Drawing SS- 04	EA	33	\$1,200.00	\$39,600.00
9	Install piping and connect to building on private property	LS	33	\$6,000.00	\$198,000.00
10	Abandon existing septic system on private property per City Standards	LS	33	\$2,500.00	\$82,500.00

Subtotal

\$494,700.00

\$49,470.00

10% Contingency

**Total Construction Cost** 

\$544,170.00

### Exhibit 8, page 2

### **Old Town Septic System to Sewer Conversion Project**

### **Project Preliminary Cost Estimate**

Item			Estimated		
No.	Item Description	Unit	Quantity	Unit Price	Item Price
1	Plans, Specifications and Estimates	1	LS	\$54,000	\$54,000
2	Construction	1	LS	\$544,170	\$544,170
3	Public Works Inspection Fees (1)	33	EA	\$400	\$13,200
4	Building Division Inspection Fees (2)	33	EA	\$200	\$6,600
5	City Connection Fee (3)	33	EA	\$350	\$11,550
6	VVWRA Connection Fee (4)	33	EA	\$4,000	\$132,000
	Total Estimated Cost				\$761,520

Average Cost per property

\$23,076

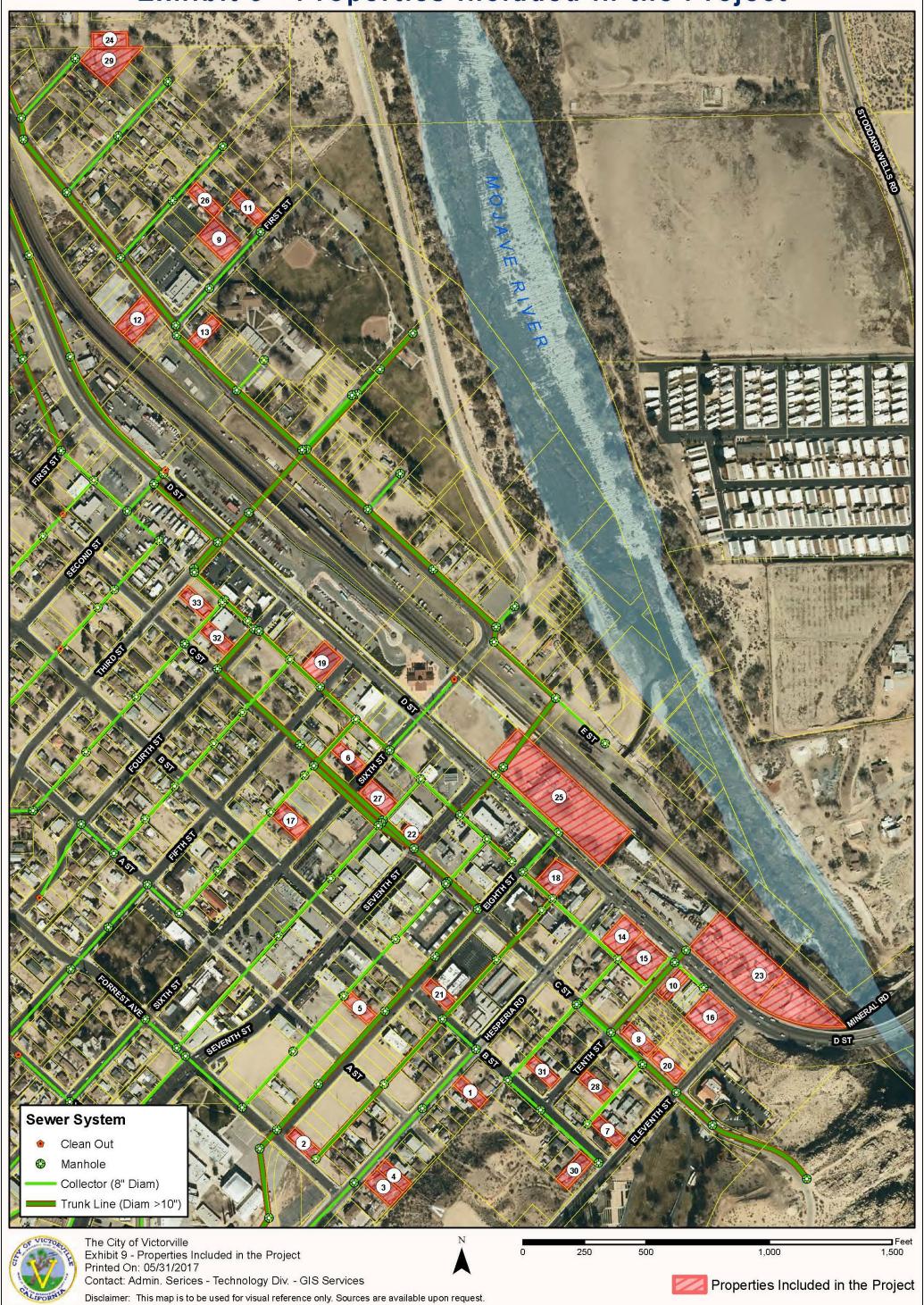
Notes:

1. Permit fee for Engineering inspection of installation of sewer lateral, cleanout and trench backfill and paving

2. Permit fee for Building inspection of onsite piping and plumbing connection and abandonment of septic system

3. & 4. Fee per EDU, one single family residence

# Exhibit 9 - Properties Included in the Project



### EXHIBIT 10 LIST OF PROPERTIES INCLUDED IN THE PROJECT

MAP LABEL (EXHIBIT 9)	APN
1	0478-201-05
2	0478-106-01
3	0478-113-38
4	0478-113-39
5	0478-212-09
6	0478-226-04
7	0478-203-13
8	0478-204-01
9	0478-042-26
10	0478-204-08
10	0478-204-09
11	0478-042-19
12	0478-043-03
12	0478-043-04
13	0478-154-26
14	0478-205-14
15	0478-205-15
15	0478-205-16
16	0478-204-14

MAP LABEL (EXHIBIT 9)	APN
17	0478-223-05
18	0478-215-04
19	0478-235-14
20	0478-204-21
21	0478-214-01
22	0478-225-13
23	0478-192-15
23	0478-192-14
24	0478-041-59
25	0478-181-10
26	0478-042-11
27	0478-225-04
28	0478-203-05
29	0478-041-46
30	0478-201-12
31	0478-202-11
32	0478-236-05
33	0478-236-23