VOLUME 2: PROPOSED FINAL MASTER EIR

CITY OF MODESTO WASTEWATER
MASTER PLAN UPDATE

STATE CLEARINGHOUSE NO. 2006052076

DRAFT EIR PUBLICATION DATE:
DECEMBER 21, 2006

END OF DRAFT EIR PUBLIC COMMENT PERIOD:
FEBRUARY 5, 2007

PROPOSED CERTIFICATION DATE:
MARCH 13, 2007

Prepared for the City of Modesto by:

TURNSTONE CONSULTING
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I. INTRODUCTION

The Draft Master Environmental Impact Report (EIR) for the City of Modesto Wastewater Master Plan Update was circulated for public review from December 21, 2006 through February 5, 2007 to provide the public and responsible agencies with an opportunity to submit written comments on the Draft EIR.

The California Environmental Quality Act (CEQA) requires that a list of agencies and persons commenting on the Draft EIR be included in the Final EIR, and that written responses be prepared for all substantive comments received that raise environmental issues. In compliance with this requirement, Chapter II of this Proposed Final Master EIR presents a list of agencies and persons commenting, and Chapter III presents the letters received, with responses to environmental issues.

Each comment letter is designated alphabetically, and environmental issues in each letter are identified by the letter designation and a sequential number (e.g., Letter A includes Comments A-1 and A-2). Immediately following each comment letter are responses to the comments in that letter. Each response is identified by the letter/number designation that corresponds to the comment it addresses (e.g., Comment A-1 is addressed in Response A-1). Items discussed in comment letters that do not raise environmental issues are not designated and do not require responses.

Responses generally explain information in the Draft Master EIR and refer to EIR pages that discuss the topic of the comment. Some responses include minor modifications to the Draft EIR text. New text is shown in boldface type and deleted text is shown as strikethrough.

Chapter IV lists revisions made to the Draft EIR to correct typographical errors and other minor errors in the text that were identified after the Draft EIR was published. Chapter V of this Proposed Final Master EIR contains the Mitigation Monitoring and Reporting Program required in CEQA Section 21081.6. It identifies all mitigation measures proposed to be adopted in the approval action, the responsible entity, and timing.
II. LIST OF COMMENTORS ON THE DRAFT EIR

The following persons submitted written comments on the Draft EIR for the City of Modesto Wastewater Master Plan Update:

- Christopher Huitt, Staff Environmental Scientist, Floodway Protection Section, California Department of Water Resources, letter dated January 16, 2007
- Celia Aceves, Risk and Property Analyst, Modesto Irrigation District, letter dated February 1, 2007
- Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District, letter dated February 5, 2007
- Raul Mendez, Senior Management Consultant, Stanislaus County Environmental Review Committee, letter dated February 5, 2007
III. COMMENTS AND RESPONSES

This section presents the comment letters received on the Draft EIR for the City of Modesto Wastewater Master Plan Update and responses to the environmental issues raised in the comments.
FEB 02 2007

Mr. William Wong
City of Modesto
1010 Tenth Street, 4th Floor
Modesto, CA 95354

Dear Mr. Wong:

DRAFT MASTER ENVIRONMENTAL IMPACT REPORT (EIR); STANISLAUS COUNTY; CITY OF MODESTO (CITY); MODESTO WASTEWATER MASTER PLAN UPDATE (PROJECT); STATE CLEARINGHOUSE NO. 2006052076

Thank you for the opportunity to review the above document. State Water Resources Control Board (State Water Board) staff have reviewed the draft EIR and have several specific comments.

As a state agency with jurisdiction by law to preserve, enhance and restore the quality of California's water resources, the State Water Board is providing the following comments on the environmental document prepared for the Project.

We understand that the City is not currently pursuing a State Revolving Fund (SRF) loan for this Project. The City may want to consider this loan program to provide funding for future construction. The SRF program offers a low interest loan for building or improving wastewater treatment plants, sewers, water reclamation facilities, and storm water drainage. The State Water Board, Division of Financial Assistance is currently responsible for administering SRF loans. Please refer to the State Water Board's SRF website http://www.waterboards.ca.gov/funding/srf.html for additional information.

Following are specific comments on the Draft EIR:

1) In Table II-1 on pages II.23 and II.24 under Mitigation Measure E.1.2b, the draft EIR states, "Restoration and maintenance activities should be implemented if activities occur within the 100-foot (30.5 m) buffer zone" and "No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used..." and "No mowing should occur within five (5) feet of the elderberry plant stems." Please change "should" to "shall," as "should" is defined in the CEQA guidelines (Article 1, Section 15005) as an advisory element, whereas "shall" is mandatory. Please correct this error throughout the rest of the proposed mitigation measures.

2) Birds of prey are protected under the California State Fish and Game Code (CDFG). Section 3503.5 states it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or take, possess, or destroy the nest or eggs of any such bird expand as otherwise provided by this Code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, lead to nest abandonment, and cause "take" under the CDFG. There is no discussion of potential noise impacts to the bird of prey species within or adjacent to the Project area. Since noise is an element that can alter and,
therefore, impair bird behavior (e.g., cause nest abandonment), please provide a discussion of potential noise impacts and significance criteria.

3) If the City were to pursue an SRF loan, the State Water Board might need additional information to insure compliance with federal crosscutting regulations.

Thank you once again for the opportunity to review the City's draft EIR. If you have any questions, please contact me at (916) 327-9117 or KWittorff@waterboards.ca.gov.

Sincerely,

Kim Wittorff
Environmental Scientist

cc: State Clearinghouse
(Re: SCH# 2006052076)
P. O. Box 3044
Sacramento, CA  95812-3044
Responses to Letter A: State Water Resources Control Board – Kim Wittorff, Environmental Scientist

Response to Comment A-1

In accordance with the direction given in the comment, “should” has been changed to “shall” in appropriate locations in the mitigation measures for Biological Resources in Section IV.E, as shown below. New text is shown in boldface type. These changes are also made to the corresponding mitigation measures in Table II-1, Summary of Impacts and Mitigation Measures, on pp. II.20-II.33. A few other clarifying text changes have also been made.

Mitigation Measure E.1.2b, pp. IV.E.26-IV.E.27:

On p. IV.E.27:

In the first paragraph of the measure, plus an additional revision:

Avoid and protect habitat whenever possible. If suitable habitat for the valley elderberry longhorn beetle occurs in the project area, to the extent practicable these areas shall be designated as avoidance areas that will be protected from disturbance during construction. Any valley elderberry longhorn beetle habitat that cannot be avoided shall be considered impacted and appropriate mitigation shall be implemented as described under Mitigation Measure E.1.2c.

In the second paragraph of the measure, second sentence:

Such core areas shall not be disturbed during construction.

In the third paragraph of the measure, first sentence:

Restoration and maintenance activities shall be implemented if activities occur within the 100-foot (30.5 m) buffer zone.

In the third and fifth bullets at the bottom of the page:

- No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant shall be used in the buffer areas, or within 100 feet of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level.
- The applicant must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed.
- Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing shall occur within five (5) feet of elderberry plant stems.
Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).

Mitigation Measure E.1.2c, pp. IV.E.27-IV.E.28:

On p. IV.E.28:

In the first paragraph of the measure, first sentence:

If elderberry shrubs cannot be avoided, elderberry plants with one or more stems measuring 1.0 inch (2.5 cm) or greater in diameter at ground level shall be transplanted to a mitigation area.

In the fourth bullet:

- A mitigation area set aside for translocated plants shall provide habitat for the beetle in perpetuity. The mitigation area shall provide at least 1,800 square feet for each transplanted elderberry shrub and follow USFWS guidelines for other associated native plants to be planted within the area. This mitigation area shall be weeded by mechanical means (no herbicides) once a year.

Mitigation Measure E.2.2, pp. IV.E.29-IV.E.30:

In the first paragraph of the measure on p. IV.E.29:

If a pre-construction survey finds that Burrowing Owls occupy the project site and avoiding construction in occupied areas is not feasible, then habitat compensation on off-site mitigation lands shall be implemented. Habitat Management lands comprising existing Burrowing Owl foraging and breeding habitat shall be acquired and preserved. An area of 6.5 acres (2.6 ha) (the amount of land found to be necessary to sustain a pair or an individual owl) shall be secured for each pair of owls, or individual in the case of an odd number of birds. As part of an agreement with the CDFG, the project applicant shall secure the performance of its mitigation duties by providing the CDFG with security in the form of funds that would:

Mitigation Measure E.4.2, pp. IV.E.31-IV.E.32:

In the first paragraph of the measure:

If construction activities would result in impacts to any of the special-status species identified as possibly occurring in the project area, mitigation measures for that species shall be implemented. If surveys indicate that impacts would result to a special-status species not identified as possibly occurring in the project area, or for which mitigation measures are not described in this report, avoidance and minimization measures to reduce
III. Comments and Responses
Letter A. State Water Resources Control Board

project impacts to less-than-significant levels shall be determined through coordination with the City of Modesto, CDFG, and USFWS.

Mitigation Measure E.5, pp. IV.E.32-IV.E.33:

On p. IV.E.32 in the second paragraph of the measure, plus an additional revision:

The final acreage of offsite management lands to be provided would depend on the distance between the project area and the nearest active nest site. Prior to grading of any site with potential foraging habitat, protocol-level surveys shall be conducted to determine the nearest active nest, if an active nest is not known within one mile of the site. The 1994 CDFG staff report states (HM = Habitat Management in the following paragraphs):

Mitigation Measure E.6b, p. IV.E.34:

In the first paragraph of the measure:

Nest trees on the project site(s) shall not be removed unless avoidance measures are determined to be infeasible. If a nest tree must be removed, a Management Authorization (including conditions to off-set the loss of the nest tree) must be obtained. The Management Authorization will specify the tree removal period, generally between October 1 – February 1. If construction or other project related activities which may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site by a qualified biologist shall be required to determine if the nest is abandoned. If it is abandoned, and if the nestlings are still alive, the City shall fund the recovery and hacking (controlled release of captive reared young) of nestling(s).

Mitigation Measure E.8, p. IV.E.35:

In the first sentence of the measure:

Prior to initiating microtunneling in a riparian area, a survey shall be conducted to determine whether special status species or habitats are present on or immediately adjacent to the construction area.

Response to Comment A-2

The comment specifically addresses the protection of raptors (birds of prey) with respect to noise disturbance and requests a discussion of potential noise impacts and significance criteria. The comment notes that construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, lead to nest abandonment, and cause “take.” This issue is addressed in Section IV.E, Biological Resources (see Impact E.3 and Mitigation Measures
E.3.1 and E.3.2, pp. IV.E.30-IV.E.31), and in the Biotic Study prepared for the EIR (see Appendix C, p. 39). Although noise is not specifically called out as an element of construction disturbance, it is implicitly one of the elements of construction disturbance that could lead to loss of eggs or young. Thus, the mitigation measures currently described for construction disturbance include noise. It would be redundant to address noise-related impacts to raptors from construction activities separately from construction disturbance. However, a text change is made to add a cross-reference to the nesting raptor discussion in Section IV.E to the Noise impacts discussion in Section IV.I for greater clarity. The following new text is added to Impact H.1 as a new next-to-last paragraph on p. IV.H.10 (new text is shown in **boldface** type)

   **In addition, noise generated by construction activities could disturb nesting raptors in the vicinity of the project area. Construction impacts to nesting raptors are discussed in Section IV.E, Biological Resources (see Impact E.3 and Mitigation Measures E.3.1 and E.3.2 on pp. IV.E.30-IV.E.31).**

**Response to Comment A-3**

The City is not planning to apply for an SRF loan at this time. If a decision is made at a later date to apply for a loan under this program, the City would comply with all SWRCB requirements.
January 16, 2007

William Wong, Associate Civil Engineer
City of Modesto Public Works Department
1010 Tenth Street, 4th Floor
Modesto, California 95354

Modesto Wastewater Master Plan Update
State Clearinghouse (SCH) Number: 2006052076

The project corresponding to the subject SCH identification number has come to our attention. The limited project description suggests your project may be an encroachment on the State Adopted Plan of Flood Control. You may refer to the California Code of Regulations, Title 23 and Designated Floodway maps at http://recbd.ca.gov. Please be advised that your county office also has copies of the Board’s designated floodways for your review. If indeed your project encroaches on an adopted food control plan, you will need to obtain an encroachment permit from the Reclamation Board prior to initiating any activities. The attached Fact Sheet explains the permitting process. Please note that the permitting process may take as much as 45 to 60 days to process. Also note that a condition of the permit requires the securing of all the appropriate additional permits before initiating work. This information is provided so that you may plan accordingly.

If after careful evaluation, it is your assessment that your project is not within the authority of the Reclamation Board, you may disregard this notice. For further information, please contact me at (916) 574-1249.

Sincerely,

Christopher Hutt
Staff Environmental Scientist
Floodway Protection Section

cc: Governor’s Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814
Encroachment Permits Fact Sheet

Basis for Authority
State law (Water Code Sections 8534, 8608, 8609, and 8710 – 8723) tasks the Reclamation Board with enforcing appropriate standards for the construction, maintenance, and protection of adopted flood control plans. Regulations implementing these directives are found in California Code of Regulations (CCR) Title 23, Division 1.

Area of Reclamation Board Jurisdiction
The adopted plan of flood control under the jurisdiction and authority of the Reclamation Board includes the Sacramento and San Joaquin Rivers and their tributaries and distributaries and the designated floodways.

Streams regulated by the Reclamation Board can be found in Title 23 Section 112. Information on designated floodways can be found on the Reclamation Board’s website at http://recbd.ca.gov/designated_floodway/ and CCR Title 23 Sections 101 - 107.

Regulatory Process
The Reclamation Board ensures the integrity of the flood control system through a permit process (Water Code Section 8710). A permit must be obtained prior to initiating any activity, including excavation and construction, removal or planting of landscaping within floodways, levees, and 10 feet landward of the landside levee toes. Additionally, activities located outside of the adopted plan of flood control but which may foreseeable interfere with the functioning or operation of the plan of flood control is also subject to a permit of the Reclamation Board.

Details regarding the permitting process and the regulations can be found on the Reclamation Board’s website at http://recbd.ca.gov/ under “Frequently Asked Questions” and “Regulations,” respectively. The application form and the accompanying environmental questionnaire can be found on the Reclamation Board’s website at http://recbd.ca.gov/forms.cfm.

Application Review Process
Applications when deemed complete will undergo technical and environmental review by Reclamation Board and/or Department of Water Resources staff.

Technical Review
A technical review is conducted of the application to ensure consistency with the regulatory standards designed to ensure the function and structural integrity of the adopted plan of flood control for the protection of public welfare and safety. Standards and permitted uses of designated floodways are found in CCR Title 23 Sections 107 and Article 8 (Sections 111 to 137). The permit contains 12 standard conditions and additional special conditions may be placed on the permit as the situation warrants. Special conditions, for example, may include mitigation for the hydraulic impacts of the project by reducing or eliminating the additional flood risk to third parties that may caused by the project.

Additional information may be requested in support of the technical review of
your application pursuant to CCR Title 23 Section 8(b)(4). This information may include but not limited to geotechnical exploration, soil testing, hydraulic or sediment transport studies, and other analyses may be required at any time prior to a determination on the application.

Environmental Review
A determination on an encroachment application is a discretionary action by the Reclamation Board and its staff and subject to the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.). Additional environmental considerations are placed on the issuance of the encroachment permit by Water Code Section 8608 and the corresponding implementing regulations (California Code of Regulations — CCR Title 23 Sections 10 and 16).

In most cases, the Reclamation Board will be assuming the role of a “responsible agency” within the meaning of CEQA. In these situations, the application must include a certified CEQA document by the “lead agency” [CCR Title 23 Section 8(b)(2)]. We emphasize that such a document must include within its project description and environmental assessment of the activities for which are being considered under the permit.

Encroachment applications will also undergo a review by an interagency Environmental Review Committee (ERC) pursuant to CCR Title 23 Section 10. Review of your application will be facilitated by providing as much additional environmental information as pertinent and available to the applicant at the time of submission of the encroachment application.

These additional documentations may include the following documentation:

- California Department of Fish and Game Streambed Alteration Notification (http://www.dfg.ca.gov/1600/),
- Clean Water Act Section 404 applications, and Rivers and Harbors Section 10 application (US Army Corp of Engineers),
- Clean Water Act Section 401 Water Quality Certification, and
- corresponding determinations by the respective regulatory agencies to the aforementioned applications, including Biological Opinions, if available at the time of submission of your application.

The submission of this information, if pertinent to your application, will expedite review and prevent overlapping requirements. This information should be made available as a supplement to your application as it becomes available. Transmittal information should reference the application number provided by the Reclamation Board.

In some limited situations, such as for minor projects, there may be no other agency with approval authority over the project, other than the encroachment permit by Reclamation Board. In these limited instances, the Reclamation Board
may choose to serve as the “lead agency” within the meaning of CEQA and in most cases the projects are of such a nature that a categorical or statutory exemption will apply. The Reclamation Board cannot invest staff resources to prepare complex environmental documentation.

Additional information may be requested in support of the environmental review of your application pursuant to CCR Title 23 Section 8(b)(4). This information may include biological surveys or other environmental surveys and may be required at anytime prior to a determination on the application.
Response to Comment B-1

The comment points out that proposed construction at the Primary Plant may encroach on the State Adopted Plan of Flood Control. The comment recommends that the City review the State's adopted flood control plan, and, if necessary, obtain an encroachment permit from the Reclamation Board prior to initiating any activities (i.e., building in the floodway).

Section IV.D, Water Quality and Hydrology, of the Draft EIR acknowledges the 100-year flood hazard zone and the Tuolumne River floodway, and discusses potential construction in the floodway and potential flooding impacts (including pp. IV.D.9 to IV.D.11, IV.D.23 to IV.D.25, and IV.D.35 to IV.D.37). Mitigation Measure D.5(a) provides that “. . . the City will work with FEMA and the Reclamation Board to ensure that the design is appropriate and all necessary permits are acquired prior to construction” (p. IV.D.37). Therefore, the Draft EIR has addressed the substance of the comment.

The City appreciates DWR's comment and its attached "Encroachment Permits Fact Sheet."
City of Modesto  
Economic Development Department – William Wong, Associate Civil Engineer  
1010 10th Street, Suite 3300  
Modesto, CA 95354

RE: Draft Master Environmental Impact Report  
City of Modesto Wastewater Master Plan Update SCH #2006052076

Dear Mr. Wong:

Thank you for allowing the District to comment on this referral. Following are the recommendations from our General Services, Electrical, Irrigation and Domestic Water Divisions:

Irrigation
- The first paragraph of page IV.D.27 the Wastewater Master Plan Update states “Where sewer construction would cross under MID laterals, the work would either be done by cut-and-cover when the canals are not in use, or by damming, diversion, and possible dewatering while canals are in use. In locations where standard cut-and-cover excavation is infeasible, pipes may be replaced by reaming or “bursting”.

- MID laterals are not to be dammed, diverted or dewatered during the irrigation season (typically the first part of March to the middle or end of October). Because the MID canal system is utilized during the winter months for storm drain runoff, reaming and boring should be considered the primary method of construction. The bursting method is of concern to the MID in areas where existing City facilities may lie too close to irrigation facilities. Bursting and cut-and-cover construction may be considered on a case-by-case basis.

- There is a network of irrigation and domestic water transmission pipes throughout the City that must be protected during construction. Proper clearance must be maintained between sewer and storm drainpipes and the domestic water transmission pipeline.

- All irrigation and domestic water transmission line crossings must be reviewed and approved by the MID Irrigation Engineering Department.

- The first full paragraph of page IV.D.31 states “One option is to eliminate the cross-connections by constructing new storm drain laterals to new or existing storm sewer trunk lines or detention basins.”

- Existing detention basins that currently discharge into MID laterals operate under agreement between the MID and the City. Each detention basin has a defined area of collection that was approved by the MID Board of Directors. Additional drainage area may not be added to existing drainage areas covered by such agreements.

- The third full paragraph of the same page states “The designers of the new storm water conveyance and treatment structures should consider a wide range of solutions when designing the temporary and permanent solutions including: 1) positive connections to existing trunk lines or MID laterals…”

- No further consideration should be given to the use of MID laterals without consulting MID. The use of MID laterals in option 1 implies that that option is the preferred option for designers. Use of MID laterals should
only be considered after the options of connecting to existing trunk lines, construction of new trunk lines and laterals, detention and retention basins and onsite improvements to reduce discharge flows.

**Domestic Water**
- No comments at this time.

**General Services**
- No comments at this time.

**Electric**
- Please refer to M.I.D.'s previous response provided on June 7, 2006 for M.I.D.'s comments, which include:

- In conjunction with related site improvements, existing overhead and underground electric facilities within or adjacent to the proposed development shall be protected, relocated or removed as required by the District's Electric Engineering Department. Appropriate easements for electric facilities shall be granted as required.

- Relocation or installation of electric facilities shall conform to the District's Electric Service Rules.

- Costs for relocation and/or undergrounding the District's facilities at the request of others will be borne by the requesting party. Estimates for relocating or undergrounding existing facilities will be supplied upon request.

- Extension, reconstruction or removal of existing facilities will be specifically addressed when improvement plans are submitted for individual development proposals within this Wastewater Master Plan.

- Existing electric service for this project may not be adequate to serve any proposed load (changes) additions. Electric service to individual areas for this project may not be available at this time. If additional electric service is desired, the City of Modesto should contact the District’s Electric Engineering Department to determine the availability of electric service and coordinate service requirements to the proposed individual projects. Additional easements may be required with the development of the Wastewater Master Plan. The Electric Division has no specific requirements for this project at this time.

The Modesto Irrigation District reserves its future rights to utilize its property, including its canal and electrical easements and rights-of-way, in a manner it deems necessary for the installation and maintenance of electric, irrigation, agricultural and urban drainage, domestic water and telecommunication facilities. These needs, which have not yet been determined, may consist of poles, crossarms, wires, cables, braces, insulators, transformers, service lines, open channels, pipelines, control structures and any necessary appurtenances, as may, in District's opinion, be necessary or desirable.

If you have any questions, please contact me at 526-7433.

Sincerely,

Celia Aceves
Risk & Property Analyst

Copy: File
Responses to Letter C: Modesto Irrigation District – Celia Aceves, Risk and Property Analyst

Response to Comment C-1

The comment states that Modesto Irrigation District (MID) laterals are not to be dammed, diverted, or dewatered during the irrigation season. Also, because the MID canal system is used in the winter for storm runoff, MID prefers that the primary construction method be reaming and boring, rather than cut-and-cover or pipe bursting. In addition, proper clearance must be kept from domestic water transmission pipelines, and proposed crossings of irrigation and domestic water pipes must be reviewed by MID.

The City appreciates MID's comment, and the following clarifications are made to the first paragraph under “Collection System Improvements” on p. IV.D.27 of the Draft EIR (new text is shown in boldface type, deleted text is shown as strikethrough):

Proposed improvements to the collection system include new, replacement, and rehabilitated sewers, sewer extensions to new areas, and new and modified lift stations.

Proper clearance would be maintained between sewer and storm drain pipes and domestic water pipes. Where sewer construction would cross under MID laterals, the work would either be done by cut-and-cover when the canals are not in use, or by damming, diversion, and possible dewatering while canals are in use. MID laterals would not be dammed, diverted, or dewatered during the irrigation season (typically the first part of March to the middle or end of October). In locations where standard cut-and-cover excavation is infeasible, pipes may be replaced by reaming or “bursting.” (However, where sewer construction would cross MID laterals, reaming and boring would be the primary method of construction, and if the City desired instead to use cut-and-cover or pipe bursting methods, the City would first obtain consent from MID's Irrigation Engineering Department.)

Response to Comment C-2

The comment correctly states that existing detention basins that currently discharge to MID laterals operate under agreements between MID and the City. The City acknowledges this fact. The City also acknowledges that any increase in the drainage area being discharged to the MID laterals would require a revision to the existing agreement and would be subject to MID Board of Directors approval. In the event the City is considering this option to eliminate any of the cross connections, MID would be consulted at the earliest possible stage in the process.
Response to Comment C-3

Regarding elimination of cross-connections, MID expresses concern that making positive connections to MID laterals is a preferred option for the City, and urges that use of MID laterals should only be considered after exhaustion of the other options. The City appreciates MID's comment.

As noted in the text of the Draft EIR, the City is considering several options for eliminating cross-connections. These options are simply a menu of possible solutions, as the removal of each cross-connection has not yet been designed. Nonetheless, Mitigation Measure D.2 on p. IV.D.31 of the Draft EIR is revised as follows (new text is shown in **boldface** type, deleted text is shown as **strikethrough**):

**Mitigation Measure D.2.** Each proposed cross-connection elimination project shall be carefully designed to ensure that existing flooding problems are not exacerbated. If the proposed solution (either temporary or permanent) is not fully compliant with the City standards for stormwater conveyance, then it shall be demonstrated through detailed hydraulic analysis that the proposed solution does not make existing flooding problems worse. The designers of the new stormwater conveyance and treatment structures should consider a wide range of solutions when designing the temporary and permanent solutions, including: 1) positive connections to existing trunk lines or MID laterals, 2) construction of new trunk lines and laterals, 3) detention and retention basins, 4) rock wells, and 5) onsite improvements to reduce discharge flows, and 6) **positive connections to MID laterals.** Each proposed cross-connection elimination design shall be reviewed for compliance with this performance standard by the City Public Works Department prior to approval of the project. **In the event the City considers elimination of a cross-connection by connecting to an MID lateral, the City will consult with MID at the earliest possible stage in the process.** Implementation of this mitigation would reduce the level of significance of this impact to a less-than-significant level.

These revisions are also made to Mitigation Measure D.2 in Table II-1, Summary of Impacts and Mitigation Measures, on pp. II.16-II.17.

Response to Comment C-4

MID reiterates comments it made in response to the Notice of Preparation. MID's states that existing overhead and underground electric facilities within or adjacent to proposed development should be protected, relocated, or removed, as required by MID's Electric Engineering
Department. Such work should be in conformance with MID's Electric Service Rules. Costs of relocating or undergrounding these facilities are to be borne by the requesting party. The City of Modesto acknowledges MID's comment and will work with MID's Electric Engineering Department regarding any proposed construction of wastewater facilities within or adjacent to MID's electric facilities.

The last two bullets of MID's comment pertain to whether sufficient electric service connections and/or sufficient electricity would be available for the proposed project. The City acknowledges MID's comment. Increased electricity demand for the proposed project would be primarily at the Secondary Plant (e.g., for new tertiary treatment processes) which is served by the Turlock Irrigation District. For projects where electricity is obtained from MID, the City would consult with MID in advance regarding the expected demand.

In addition, new lift stations would require electricity for pumping, and upgraded lift stations would require additional electricity for enlarged pumps. The City will consult with MID in advance regarding the expected demand.
February 5, 2007

William Wong  
City of Modesto  
Public Works Department  
P.O. Box 642  
Modesto, CA 95353

Project: City of Modesto Wastewater Master Plan Update (SCH# 2006052076)

Subject: CEQA comments regarding the Draft Environmental Impact Report (DEIR) for the proposed improvements to the City's wastewater treatment facilities

District Reference No: C200602840

Dear Mr. Wong:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

The DEIR appropriately addresses the regulatory environment, including local, state and federal agencies and the regulations in place to regulate air quality and control new sources of air pollution. The DEIR also appropriately addresses the existing air quality conditions impacting the City of Modesto.

The District cannot validate the conclusion that some air impacts will be significant and unavoidable. As a quantitative Air Quality Impact Analysis was not performed, the District cannot verify that project emissions would exceed the District's Thresholds of Significance of 10 tons per year of reactive organic gases (ROG) and oxides of nitrogen (NOx). However, the DEIR appropriately addresses the project's potential impact on air quality, as it will facilitate the growth and development projected in the 2003 Urban Area General Plan. This project would contribute to the overall decline in air quality due to construction activities in preparation of the site and other operational emissions. The District concurs that the emission reducing mitigation measures included in the DEIR should be implemented to the extent specified to reduce air quality impacts.

Seyed Sadedin  
Executive Director/Air Pollution Control Officer

Northern Region  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-8400  FAX: (209) 557-8475

Central Region (Main Office)  
1980 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 233-6200  FAX: (559) 233-8081  
www.valleyair.org

Southern Region  
2700 M Street, Suite 275  
Bakersfield, CA 93301-2379  
Tel: (661) 520-6900  FAX: (661) 520-6985
This project will not be subject to the District’s Indirect Source Review (Rule 9510). Per Section 4.4.3 this project is exempt from the rule because its primary functions are subject to Rules 2201 (New and Modified Stationary Source Review) and 2010 (Permits Required). For more information on the District’s permitting requirements, please contact the Small Business Assistance Office at (559) 230-5888.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Jessica Willis at (559) 230-5818 and provide the reference number at the top of this letter.

Sincerely,

David Warner
Director of Permits Services

Arnaud Marjollet
Permit Services Manager

DW:jrw

cc: File
Response to Letter D: San Joaquin Valley Air Pollution Control District – Arnaud Marjollet, Permit Services Manager

Response to Comment D-1

Comments noted. The City appreciates the SJVAPCD's attention to the Draft EIR. Based on this letter, the last sentence in the first paragraph of Mitigation Measure G.2, on pp. IV.G.24-IV.G.25, related to Rule 9510, is deleted, as shown below (deleted text is shown as strikethrough):

The City shall abide by permit limits imposed by the SJVAPCD to reduce pollutant emissions from diesel-powered engines for emergency power generation and any other sources requiring permits. The City shall abide by permit limits imposed by the SJVAPCD on operation of digester-gas burning equipment at the Primary Plant. If District Rule 9510 would apply, the City shall follow it and make the required emission reductions on-site (or pay for or create off-site emission reductions).

This revision is also made to the first paragraph of Mitigation Measure G.2 in Table II-1, Summary of Impacts and Mitigation Measures, on p. II.36.
STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

February 5, 2007

William Wong, Associate Civil Engineer
City of Modesto
Public Works Department
1010 Tenth Street, 4th Floor
Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED CITY OF MODESTO WASTEWATER MASTER PLAN UPDATE (SCH #2006052076)

Mr. Wong:

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has the following comment(s):

- Applicant shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences or farm buildings, or structures, has been fully investigated (via Phase I study and Phase II study if necessary) prior to the issuance of a grading permit. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

The ERC appreciates the opportunity to comment on this project.

Sincerely,

[Signature]

Raul Mendez, Senior Management Consultant
Environmental Review Committee

cc: ERC Members
Response to Comment E-1

The Stanislaus County Environmental Review Committee is concerned about sites containing (or formerly containing) residences or farm buildings, because they may contain contaminated soil, underground storage tanks, and the like. The Committee states that such sites shall be investigated to the satisfaction of the County Department of Environmental Resources, prior to issuance of a grading permit. Investigation means a Phase I Environmental Site Assessment (ESA), and a Phase II ESA, if necessary.

The City acknowledges the Committee's comment. The Draft EIR discusses the role of the Stanislaus County Department of Environmental Resources regarding contaminated sites on p. IV.K.4. The Draft EIR evaluates the possibility that excavation for installation of wastewater system improvements could encounter contaminated soil and/or groundwater and expose workers and the public to hazardous substances (see Impact K.1 on pp. IV.K.9-IV.K.13). To mitigate any impacts to a less-than-significant level, the Draft EIR contains six mitigation measures (Mitigation Measures K.1a through K.1f on pp. IV.K.11-IV.K.13). Mitigation Measures K.1a and K.1b specifically address the Committee's concern (footnote 9 regarding ASTM is deleted):

Mitigation Measure K.1a.

Prior to activities involving soil disturbance for the improvements to the wastewater collection and treatment systems, the City shall use reasonable means to determine the presence of soil or groundwater contamination. Those reasonable means may consist of soil gas surveys, soil or groundwater sampling, and/or a Phase I Environmental Site Assessment conducted by a qualified professional (e.g., a California-registered environmental assessor, Professional Geologist, or Professional Engineer). Any Phase I environmental site assessment shall be performed in conformance with the most recent standard adopted by ASTM International for Phase I site assessments, and shall present recommendations for further investigation of the site, if necessary (see Mitigation Measure K.1b below for details).

Mitigation Measure K.1b. If warranted, conduct soil and groundwater sampling and analysis.

If the investigation activities in Mitigation Measure K.1a (e.g., soil gas surveys, sampling, and/or preparation of a Phase I environmental site assessment) were to indicate
that a release of hazardous materials could have affected the location(s) where soil disturbance would occur, a Soil and/or Groundwater Investigation shall be conducted prior to soil disturbance by a qualified environmental professional (e.g., Professional Geologist, Professional Engineer) to assess the presence and extent of contamination at the site and the potential risk to human health and public safety from the contamination (if any). The Soil and/or Groundwater Investigation shall be conducted in accordance with state and local guidelines and regulations, and the most recent ASTM International Standard for Phase II Environmental Site Assessments, with oversight from a regulatory agency (e.g., Stanislaus County Environmental Resources Department). The findings of the investigation shall be documented in a written report and submitted to the regulatory agency and the City.

Under the Draft EIR's mitigation plan, the City would not necessarily perform a Phase I study on each construction location, but it would conduct one of the types of investigations noted above. Following the above mitigation measures should be sufficient to identify contamination in most cases. If contamination is discovered during excavation, Mitigation K.1f, on p. IV.K.13, would apply.

Development on property that is now in farm use or farm-related residential use, that may be facilitated as a result of wastewater system improvements, would be reviewed on a site-by-site basis by various City departments during the entitlement process. When appropriate, the City would require the applicant to conduct soil and groundwater studies and carry out necessary remediation if necessary prior to issuing permits for grading or excavation, pursuant to federal, state, and county regulations (see also p. V.8 in the Draft EIR).
IV. STAFF-INITIATED TEXT CHANGES AND ERRATA

The following text changes are identified for the City of Modesto Wastewater Master Plan Update Draft EIR. These text changes are called for to clarify, update, or correct information presented in the Draft EIR. These text changes do not change the analysis or conclusions of the EIR. Changes are presented by chapter, and new text is double underlined and deleted text is shown as strikethrough.

The following sentence is added to the end of the second paragraph of Mitigation Measure B.2 on p. IV.B.9 for clarification:

The loss of Prime Farmland on the Secondary Plant and Ranch site directly resulting from the proposed project could be partially mitigated through the creation of a farmland conservation easement at an alternate location on the City Ranch or other City of Modesto property. The City could also partially mitigate the loss of Prime Farmland on the project site through contribution to the Farmland Conservancy Fund, or to an equivalent program for funding farmland preservation in Stanislaus County. The mitigation would conserve one acre of farmland for each acre developed.

This change is also made to the second paragraph of Mitigation Measure B.2 in Table II-1, Summary of Impacts and Mitigation Measures, on p. II.10.

The following clarification is made to the last paragraph of Mitigation Measure D.1, on p. IV.D.30:

The City of Modesto Department of Public Works shall ensure that the SWPPP is prepared prior to approval of the grading plan for each development Wastewater Master Plan project or each phase of a large-phased development project. Implementation of this mitigation would reduce the significance of this impact to a less-than-significant level.

This change is also made to the last paragraph of Mitigation Measure D.1 in Table II-1, Summary of Impacts and Mitigation Measures, on p. II.16.

A comma is deleted in the level of significance presented in the summary statement for Impact D.4 on p. IV.D.33, as follows:

Impact D.4. Implementation of the proposed project may result in operation-period surface water quality degradation due to pollutant loading associated with treated wastewater discharges. (Significant, and Unavoidable)
The level of significance presented in the summary statement for Impact D.5, p. IV.D.35, is revised as follows:

**Impact D.5. Implementation of the proposed project may result in operation-period surface water quality degradation during daily operations and/or during flooding of the Primary Plant and sludge drying area. (Significant and Unavoidable)**

The level of significance for this impact shown in Table II-1, Summary of Impacts and Mitigation Measures, on p. II.18 is correct and does not require revision.

The first sentence of Mitigation Measure G.5, on p. IV.G.27, is revised as follows to correct a title:

With implementation of the *Urban Area Master General Plan*’s mitigation measures related to traffic and energy use\(^6\) (and related to carbon monoxide and particulate matter, in particular), the significant cumulative impacts would be reduced, but not to less-than-significant levels.

This change is also made to Mitigation Measure G.5 in Table II-1, Summary of Impacts and Mitigation Measures, on p. II.36.
The proposed Mitigation Monitoring and Reporting Program for the City of Modesto Wastewater Master Plan Update is presented on the following pages.
### AGRICULTURAL RESOURCES: Mitigation Measures

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| **B.2. Compensation for loss of farmland** | The loss of Prime Farmland on the Secondary Plant and Ranch site directly resulting from the proposed project could be partially mitigated through the creation of a farmland conservation easement at an alternate location on the City Ranch or other City of Modesto property. The City could also partially mitigate the loss of Prime Farmland on the project site through contribution to the Farmland Conservancy Fund, or to an equivalent program for funding farmland preservation in Stanislaus County. The mitigation would conserve one acre of farmland for each acre developed. Contribution to the California Farmland Conservancy fund, or an equivalent program, to fund farmland preservation projects in Stanislaus County would serve to compensate for the loss of Prime Farmland directly resulting from the proposed project. However, preservation of Prime Farmland through agricultural easements on other Prime Farmland parcels would not mitigate the direct loss of Prime Farmland resulting from the proposed project to a less-than-significant level. | Public Works Department  
Create farmland conservation easement, contribute to Farmland Conservancy Fund, or contribute to an equivalent fund to preserve existing prime farmland in Stanislaus County.  
Prior to grading at the Secondary Plant and Ranch. |
| **B.3. Each development project’s contribution to the cumulative loss of farmland in Stanislaus County could be partially mitigated through contribution to the Farmland Conservancy Fund or an equivalent farmland preservation program, as a condition precedent to the issuance of building permits for projects within the City’s Planned Urbanizing Area. Preservation of Prime Farmland through agricultural easements on other Prime Farmland parcels would not mitigate the cumulative loss of Prime Farmland resulting from the proposed project to a less-than-significant level.** | Community & Economic Development Dept.  
Implement mitigation measures for loss of agricultural land as identified in the 2003 Urban Area General Plan Master EIR by imposing as conditions of approval for development projects | As part of approval of each development project warranting mitigation under the 2003 Urban Area General Plan. |
### WATER QUALITY AND HYDROLOGY: Mitigation Measures

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<td>Public Works Department and Construction Contractor Representative</td>
<td>Prepare SWPPP or require construction contractor to prepare SWPPP; implement SWPPP</td>
<td>SWPPP shall be prepared prior to excavation or grading of any Wastewater Master Plan project and shall be implemented during grading and construction</td>
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<td>Construction Contractor Representative</td>
<td>Maintain copy of SWPPP on construction site and implement SWPPP</td>
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**D.1.** The City shall prepare a SWPPP designed to reduce potential impacts to surface water quality through the construction period of all of the project components (whether or not the particular portion of the project disturbs more than one acre). The SWPPP shall emphasize measures designed to minimize erosion and off-site sedimentation during improvements to the collection system and installation of the new outfall.

It is not required that the SWPPP be submitted to the RWQCB, but must be maintained on-site and made available to RWQCB staff upon request. The SWPPP shall include:

- Specific and detailed BMPs designed to mitigate construction-related pollutants. At a minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP shall specify properly designed, centralized storage areas that keep these materials out of the rain.

- To educate on-site personnel and maintain awareness of the importance of stormwater quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

- A monitoring program that would be implemented by the construction site supervisor which will include both dry and wet weather inspections. In addition, in accordance with State Water Resources Control Board Resolution No. 2001-046, monitoring would be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in runoff.”

- BMPs designed to reduce erosion of exposed soil may include, but are not limited to soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. Efforts should be made to keep the length of open trench and stockpile volumes to a minimum. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If
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<td>Grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Entry and egress from the excavation area shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions.</td>
<td>Public Works Department and Construction Contractor Representative</td>
<td>Prepare site drainage plan or require construction contractor to prepare plan; Implement plan</td>
<td>Plan shall be prepared prior to grading of sludge drying area and shall be implemented during grading and construction</td>
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<td>• A drainage plan shall be prepared for the proposed sludge drying area at the Secondary Plant which specifies that the working surface will be lined with a cement-soil or concrete (to minimize infiltration) and runoff from all portions of the sludge drying area will be contained and treated prior to discharge. Treatment can occur in an appropriately designed detention basin or by filtration. The drainage plan shall consider reuse of stormwater for dust control. The drainage plan shall be reviewed and approved by the Department of Public Works prior to commencement of operations.</td>
<td>Public Works Department and Construction Contractor Representative</td>
<td>Prepare monitoring and contingency plan for micro-tunneling or require construction contractor to prepare plan; Implement plan</td>
<td>Plan shall be prepared prior to commencement of micro-tunneling under a riparian area or other identified wetland, and shall be implemented during micro-tunneling</td>
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<td>• A monitoring and contingency plan for microtunneling that specifies how the likelihood of frac-out [tunnel collapse or the rupture of drilling mud to the surface, EIR p. IV.D.27] would be reduced and response actions should frac-out occur. The risk of frac-outs can be reduced through proper design, careful monitoring, and having appropriate equipment and response plans ready in the event of a frac-out. The monitoring and contingency plan shall specify that:</td>
<td>Public Works Department and Construction Contractor Representative</td>
<td>Prepare frac-out contingency plan for micro-tunneling or require construction</td>
<td>Plan shall be prepared prior to commencement of micro-tunneling in riparian and identified wetland</td>
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<td>• On-site briefings be conducted for the workers to identify and locate sensitive resources at the site.</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>• All field personnel be fully briefed and understand their responsibility for timely reporting of frac-outs.</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>• When excavating around existing rock wells, the inlet to the rock well will be sealed during the excavation activity so that sediment and pollutants cannot be discharged into the rock well in runoff or wash water.</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>• Response equipment be maintained on-site or at a readily accessible location and in good working order.</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>Should a frac-out occur, the plan should specify that:</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>• A qualified biologist would be retained to evaluate the potential for impacts to biotic resources and specify response actions, as appropriate.</td>
<td>Public Works Department and Construction Contractor Representative</td>
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<td>• All work stops, including the recycling of drilling mud/lubricant.</td>
<td>Contractor Representative</td>
<td>contractor to prepare plan; Implement plan</td>
<td>areas and shall be implemented during micro-tunneling.</td>
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<td>• The location and extent of the frac-out is quickly determined.</td>
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<td>• If the frac-out occurs on land that the drilling mud is removed, the area reseeded and/or replanted using species similar to those in the adjacent area.</td>
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<td>• If the frac-out occurs underwater, the frac-out should be monitored for 4 hours to determine if the drilling mud congeals. (the bentonite clay typically used as a drilling mud will usually harden, effectively sealing the frac-out location).</td>
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<td>• If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).</td>
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<td>• If the fracture becomes excessively large, a spill response team be called in to contain and clean up excess drilling mud in the water. Phone numbers of spill response teams in the area should be maintained on site.</td>
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<td>• In any case, if a frac-out occurs, consultation with the appropriate regulatory agencies should occur promptly.</td>
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The drilling and response plan shall be reviewed and approved by the City of Modesto Department of Public Works prior to implementation of the drilling activities.

<p>| D.2. Each proposed cross-connection elimination project shall be carefully designed to ensure that existing flooding problems are not exacerbated. If the proposed solution (either temporary or permanent) is not fully compliant with the City standards for stormwater conveyance, then it shall be demonstrated through detailed hydraulic analysis that the proposed solution does not make existing flooding problems worse. The designers of the new stormwater conveyance and treatment structures should consider a wide range of solutions when designing the temporary and permanent solutions, including: 1) positive connections to existing trunk lines, 2) construction of new trunk lines and laterals, 3) detention and retention basins, 4) rock wells, 5) onsite improvements to reduce discharge flows, and 6) positive connections to MID laterals. Each proposed cross-connection elimination design shall be reviewed for compliance with this performance standard by the City Public Works Department prior to approval of the project. In the event the City considers | Public Works Department | Prepare or review designs of stormwater cross-connection elimination project; determine compliance with City standards for storm water conveyance. | Prior to issuance of each construction contract. |</p>
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<td>elimination of a cross-connection by connecting to an MID lateral, the City will consult with MID at the earliest possible stage in the process.</td>
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<td>D.3 The City should continue to investigate the feasibility of near-term solutions: 1) additional land application of effluent, 2) expansion of storage capacity, and 3) conservation measures. However, under the existing conditions and with the project as proposed, the deficient effluent disposal system could result in significant water quality impacts and no feasible mitigation has currently been identified that could be implemented promptly. This impact is significant and unavoidable.</td>
<td>Public Works Department</td>
<td>If the Wastewater Master Plan is not implemented as proposed, investigate feasibility of other methods of effluent disposal.</td>
<td>Upon a determination that the Wastewater Master Plan will not be implemented as proposed</td>
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<td>D.4 To mitigate the potential impacts to San Joaquin River water quality associated with the expansion of treated wastewater capacity, the City shall conduct an anti-degradation study as set forth above. The study shall be conducted in accordance with all applicable State and Federal anti-degradation policy standards. The City shall implement all feasible and necessary mitigation measures. Based on current RWQCB requirements, it is likely that the implementation of this mitigation measure will reduce operation-period surface water quality degradation due to pollutant loading associated with treated wastewater discharges to a less-than-significant level. The anti-degradation study is a requirement of NPDES permit renewals when additional river discharge capacity is requested and will be defined based on the permit provisions. However, because several permit renewal cycles will occur over the course of the project horizon, the City cannot determine the future requirements at this time and therefore cannot assure that the potential impacts will be fully mitigated. In addition, it is possible that State and Federal anti-degradation policies may change over time to a point where the potential impacts associated with a Project phase can no longer be fully mitigated.</td>
<td>Public Works Department</td>
<td>Conduct anti-degradation study and implement all feasible and necessary mitigation measures as directed by the RWQCB.</td>
<td>The study shall be conducted prior to issuance of an NPDES permit for tertiary treatment and shall be implemented prior to or concurrent with construction</td>
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<td>D.5(a). To mitigate the potential impacts to local flooding conditions associated with placement of fill and construction of the flood walls proposed by the project, the City shall retain a qualified registered civil engineer or licensed architect to conduct the appropriate floodplain studies to determine whether the proposed</td>
<td>Public Works Department</td>
<td>Retain qualified registered civil engineer to conduct floodplain studies.</td>
<td>Prior to completion of final design documents and commencement of construction</td>
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<td>floodplain encroachments could be constructed without increasing base flood elevations upstream or downstream of the Primary Plant. If floodplain modeling indicates that the encroachments could be constructed without impacts to the base flood elevations, the City will work with FEMA and the Reclamation Board to ensure that the design is appropriate and all necessary permits are acquired prior to construction. If the floodplain studies indicate that base flood elevations would increase due to construction of the flood wall and levee system, then other appropriate channel modifications (e.g. expansion of the floodway to the south) shall be considered to offset the increases. If no feasible options are available to offset modeled increases in base flood elevations, then the proposed fill placement and flood walls will not be constructed. If the flood wall and levee system is not constructed, the impact to water quality (described under Impact D.5) would be significant and unavoidable.</td>
<td>If determined feasible, work with FEMA, Reclamation Board, and other agencies as necessary to secure appropriate permits and abide by all permit conditions, or pursue alternative design.</td>
<td>Acquire all necessary permits from the US Army Corps and the California Dept of Fish &amp; Game, and abide by all permit conditions.</td>
<td>Obtain permits prior to commencement of construction; Comply with all permit conditions during construction.</td>
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<td>D.8 To the extent feasible, all instream excavation and construction activities shall be conducted during low flow conditions in the river and work within the wetted channel will be avoided. As specified in the Biology section of this DEIR, the project sponsor will acquire all necessary permits from the US Army Corps of Engineers and California Department of Fish and Game (the provisions of these permits will include measures to protect water quality). In addition, the design of the new outfall and diffuser shall avoid, to the extent feasible, permanent features that extend above the active streambed that could cause flow disruption and scour.</td>
<td>Public Works Department</td>
<td>Acquire all necessary permits from the US Army Corps and the California Dept of Fish &amp; Game, and abide by all permit conditions.</td>
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<td><strong>BIOLOGICAL RESOURCES: Mitigation Measures</strong></td>
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<td>E.1.1. Pre-Construction Surveys: The project area and immediately adjacent area shall be surveyed and mapped by a qualified biologist for the presence of the valley elderberry longhorn beetle and its elderberry host species plant. Mitigation is not required for plants with no stems measuring 1.0 inch (2.5 cm) or greater in diameter at ground level and surveys are valid for a period of two years. If plants larger than these are identified in the survey, Measures E.1.2a through E.1.2c shall be implemented.</td>
<td>Public Works Department and Project Biologist</td>
<td>Retain a qualified biologist and conduct pre-construction surveys for construction projects located along Tuolumne River or other riparian areas. Consult with USACE and USFWS.</td>
<td>Conduct surveys prior to issuance of any construction contract.</td>
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<td>E.1.2a. Agency Coordination and Consultation: Implementation of some features of the Wastewater Master Plan Update may impact USACE jurisdictional habitat. Therefore, construction along the banks of the Tuolumne River or other riparian areas where the appropriately-sized elderberry habitat is found would require USACE approval and necessary permits. Furthermore, these locations may fall within the jurisdiction of the Sacramento Field Office of USFWS. Finally, if any of the construction projects implementing the Wastewater Master Plan Update meet all four of the above criteria, they may be appended to the programmatic document. However, early consultation with the USACE and USFWS is recommended to determine adequate procedure, as implementation of a construction project will require a formal wetland delineation and determination by the USACE, modification and/or mitigation measures, and will require agency approval. The USFWS’s Conservation Guidelines (see Appendix B in the Biotech Study, found in Appendix C in this EIR) establishes avoidance or replacement mitigation that would be appropriate for impacts on the elderberry shrub in the project area. The City shall implement either or both Measures E.1.2b and E.1.2c if appropriate in locations where construction would affect the valley elderberry longhorn beetle habitat.</td>
<td>Public Works Department and Project Biologist</td>
<td>Designate avoidance areas along Tuolumne River near Primary Plant or other riparian areas proposed for construction of wastewater facilities and provide</td>
<td>Establish buffer areas prior to commencement of construction and monitor throughout construction</td>
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<td>E.1.2b. Avoidance: Avoid and protect habitat whenever possible. If suitable habitat for the valley elderberry longhorn beetle occurs in the project area, to the extent practicable these areas shall be designated as avoidance areas that will be protected from disturbance during construction. Any valley elderberry longhorn beetle habitat that cannot be avoided shall be considered impacted and appropriate mitigation shall be implemented as described under Mitigation Measure E.1.2c.</td>
<td>Public Works Department, Project biologist and Construction</td>
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<td>Core avoidance areas include all areas within 20 feet of the dripline of any elderberry plant with a stem measuring 1.0 inch (2.5 cm) or greater in diameter at ground level. Such core areas shall not be disturbed during construction. Buffer avoidance areas include all the area within 100 feet (30.5 m) of any elderberry plant with a stem measuring 1.0 inch (2.5 cm) or greater at ground level. If complete avoidance within a 100-foot (30.5 m) buffer cannot be provided, the USFWS must be consulted before any disturbances within the buffer area are considered. In addition, the USFWS must be provided with a map identifying the avoidance areas and written details describing the avoidance and protective measures. Protective measures include:</td>
<td>Contractor Representative</td>
<td>fencing, education of workers, signs, and implement restoration and maintenance activities.</td>
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### BIOLOGICAL RESOURCES: Mitigation Measures

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<tr>
<td>Public Works Department, Project Biologist and Construction Contractor Representative</td>
<td>Retain qualified biologist; Identify and monitor elderberry plants and implement USFWS procedures for transplanting elderberry plants.</td>
<td>Prior to authorizing construction near affected areas</td>
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- Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing shall occur within five (5) feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).

#### E.1.2c. Transplantation of Elderberry Plants:

If elderberry shrubs cannot be avoided, elderberry plants with one or more stems measuring 1.0 inch (2.5 cm) or greater in diameter at ground level shall be transplanted to a mitigation area. The following guidelines will be followed.

- A qualified biologist shall monitor the project and mitigation sites for the duration of the transplanting to ensure no unauthorized take or loss of individuals occurs.
- Elderberry plants will be transplanted after shrubs have lost their leaves and are dormant, usually from November through the first two weeks in February.
- Transplanting shall be conducted according to standard procedures set forth by the USFWS, which includes planting additional seedlings or cuttings at various ratios for plants removed for translocating.
- A mitigation area set aside for translocated plants shall provide habitat for the beetle in perpetuity. The mitigation area shall provide at least 1,800 square feet for each transplanted elderberry shrub and follow USFWS guidelines for other associated native plants to be planted within the area. This mitigation area shall be weeded by mechanical means (no herbicides) once a year.
- The mitigation area will be monitored for the general condition of the mitigation area, the condition of the elderberry plants, and the associated native plants, for a period of 10 consecutive years with surveys and reports every year, or for 15 years of monitoring with surveys and reports on years 1, 2, 3, 5, 7, 10, and 15. Reports shall be provided to the USFWS.

#### E.2.1. Burrowing Owl Avoidance:

In conformance with Federal and State regulations regarding the protection of raptors, a pre-construction survey for Burrowing Owls shall be completed, in conformance with CDFG guidelines, prior to the start of construction within suitable habitat. If no Burrowing Owls are located during these surveys, no additional action would be warranted. However, if breeding or resident owls are located on, or immediately adjacent to, the site, the

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<tr>
<td>Public Works Department and Project Biologist</td>
<td>Retain qualified biologist to conduct pre-construction survey for breeding or resident burrowing owls in pastures, fallow fields, canal rights of way and</td>
<td>Survey, establish construction schedule and buffer area prior to issuance of any construction</td>
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**BIOLOGICAL RESOURCES: Mitigation Measures**

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<tr>
<td>Public Works Department and Project Biologist</td>
<td>If avoidance is not feasible, work with CDFG to secure a habitation mitigation agreement.</td>
<td>Prior to issuance of any construction contract.</td>
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</table>

following mitigation measures shall be implemented:

- No burrowing owls would be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction.
- A 250-foot buffer, within which no new activity would be permissible, would be maintained between project activities and nesting burrowing owls. This protected area would remain in effect until August 31, or at the CDFG’s discretion and based upon monitoring evidence, until the young owls are foraging independently.
- If accidental take (disturbance, injury, or death of owls) occurs, the CDFG would be notified immediately.

E.2.2. Compensation for loss of Burrowing Owl habitat: If a pre-construction survey finds that Burrowing Owls occupy the project site and avoiding construction in occupied areas is not feasible, then habitat compensation on off-site mitigation lands shall be implemented. Habitat Management lands comprising existing Burrowing Owl foraging and breeding habitat shall be acquired and preserved. An area of 6.5 acres (2.6 ha) (the amount of land found to be necessary to sustain a pair or an individual owl) shall be secured for each pair of owls, or individual in the case of an odd number of birds. As part of an agreement with the CDFG, the project applicant shall secure the performance of its mitigation duties by providing the CDFG with security in the form of funds that would:

- Allow for the acquisition and/or preservation of 6.5 acres (2.6 ha) of Habitat Management lands.
- Provide initial protection and enhancement activities on the Habitat Management lands, potentially including but not limited to such measures as fencing, trash clean-up, artificial burrow creation, grazing or mowing, and any habitat restoration deemed necessary by CDFG.
- Establish an endowment for the long-term management of the Habitat Management lands.
- Reimburse the CDFG for reasonable expenses incurred as a result of the approval and implementation of this agreement. Pending CDFG approval, Habitat Management lands providing foraging habitat...
### BIOLOGICAL RESOURCES: Mitigation Measures

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<tr>
<td>Public Works Department</td>
<td>To the extent practicable, limit construction periods to Sept. through December in or near nesting raptor habitat. Retain qualified ornithologist to conduct pre-construction surveys for nesting raptors and determine extent of construction-free buffer zone to be established.</td>
<td>Prior to issuance of any construction contract</td>
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**E.3.1. Avoidance of Nesting Raptors:** To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from January through August.

**E.3.2. Pre-construction Surveys:** If it is not possible to schedule construction between August and January, then one of the following options shall be implemented:

- With the approval of the CDFG, trees containing known or potential raptor nest sites may be removed to discourage future nesting attempts on the condition that no raptor pair is currently utilizing the site; or,
- Pre-construction surveys for nesting raptors shall be conducted by a qualified ornithologist or wildlife biologist to ensure that no raptor nests would be disturbed during project implementation. A pre-construction survey shall be conducted prior to the initiation of demolition/construction activities during the early part of the breeding season (January through April) and prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the qualified person shall inspect all trees in and immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough to the construction area to be disturbed by these activities, the ornithologist, in consultation with CDFG, shall determine the extent of a construction-free buffer zone to be established around the nest.

**E.4.1. Pre-Construction Surveys of sensitive riparian habitats, and Agency Coordination:** Pre-construction surveys shall be conducted prior to project-related activities that would impact the resources of Dry Creek or the Tuolumne River in order to identify potentially significant impacts. If Dry Creek, the Tuolumne River, or their tributaries are impacted by project activities, USACE permits and a Streambed Alteration Agreement from CDFG may be required. If regulated habitats are impacted by project activities, USACE permits and a Streambed Alteration...
BIOLOGICAL RESOURCES: Mitigation Measures

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<td>Alteration Agreement from CDFG would be required. Early consultation with the USACE and CDFG is recommended to determine adequate protocols, as project modification and/or mitigation measures may be necessary and would require agency approval.</td>
<td>Agreement from CDFG, as necessary.</td>
<td>Conduct pre-construction survey and identify mitigation prior to issuance of any construction contract. Implement mitigation measures throughout construction.</td>
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<tr>
<td>E.4.2. Mitigation for Species of Special Status: If construction activities would result in impacts to any of the special-status species identified as possibly occurring in the project area, mitigation measures for that species shall be implemented. If surveys indicate that impacts would result to a special-status species not identified as possibly occurring in the project area, or for which mitigation measures are not described in this report, avoidance and minimization measures to reduce project impacts to less-than-significant levels shall be determined through coordination with the City of Modesto, CDFG, and USFWS.</td>
<td>Retain qualified biologist to conduct pre-construction surveys for special-status species occurring within a project area; Identify and implement mitigation measures.</td>
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<tr>
<td>E.5. Compensation for loss of Swainson’s Hawk foraging habitat: If project facilities are constructed on lands identified as potential foraging habitat for Swainson’s Hawks then the impacts shall be mitigated by providing offsite Habitat Management lands as described in the CDFG protocol. The final acreage of offsite management lands to be provided would depend on the distance between the project area and the nearest active nest site. Prior to grading of any site with potential foraging habitat, protocol-level surveys shall be conducted to determine the nearest active nest, if an active nest is not known within one mile of the site. The 1994 CDFG staff report states (HM = Habitat Management) in the following paragraphs:</td>
<td>Retain qualified ornithologist to conduct pre-construction surveys of project site in areas such as pasture, alfalfa, fallow fields, low-growing crops or field crops, rice land, and cereal grain crops to identify potential foraging habitat and active nests of Swainson’s Hawks. If suitable foraging habitat is found, implement mitigation in accordance with CDFG requirements.</td>
<td>Prior to issuance of any construction contract.</td>
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<td>• Projects within one mile of an active nest tree shall provide:</td>
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<td>– One acre of HM land (at least 10% of the HM land requirements shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% of the HM lands protected by a conservation easement [acceptable to the Department] on agricultural lands or other suitable habitats that provide foraging habitat for Swainson’s Hawk) for each acre of development authorized (1:1 ratio); or</td>
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<td>- One-half acre of HM land (all of the HM land requirements shall be met by fee title acquisition or a conservation easement [acceptable to the Department] which allows for the active management of the habitat for prey production on the HM lands) for each acre of development authorized (0.5:1 ratio).</td>
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<td>- Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acres of HM land for each acre of urban development authorized (0.75:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the department) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson’s Hawks.</td>
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<tr>
<td>- Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acres of HM land for each acre of urban development authorized (0.5:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the department) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson’s Hawks.</td>
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<td>- Management Authorization holders/project sponsors shall provide for the long-term management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands) at the rate of $400 per HM acre (adjusted annually for inflation and varying interest rates).</td>
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<tr>
<td><strong>E.6a. Pre-construction surveys for nesting Swainson’s Hawks:</strong> In order to assure that nesting Swainson’s Hawks will not be disturbed by construction activities at the Jennings Plant site, in developing areas where collection system extensions are being constructed on or within one mile of undeveloped properties that could have trees with active nests,, a qualified ornithologist shall conduct pre-construction surveys of the project site and adjacent areas within one mile of the project site. Survey Period I occurs from January 1 to March 20, Period II from March 20 to April 5, Period III from April 5 to April 20, Period IV from April 21 to June 10 (surveys not recommended during this period because identification is difficult as the adults tend to remain within the nest for longer periods of time), and Period V from June 10 to July 30. No fewer than three surveys shall be completed, in at least each of the two survey periods immediately prior to project initiation. If a Public Works Department and Qualified ornithologist Retain qualified ornithologist to conduct pre-construction surveys of project site and adjacent areas within one mile of project site during at least two of the survey periods identified. Identify and implement appropriate mitigation measures.</td>
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| | Prior to issuance of any construction contract. | | |

Turnstone Consulting, T185 Proposed Final Master EIR V.14 Modesto Wastewater Master Plan Update March 1, 2007
nest site is found, consultation with CDFG shall be required to ensure project initiation will not result in nest disturbance.

E.6b. Removal of Swainson’s Hawk Nest Trees: Nest trees on the project site(s) shall not be removed unless avoidance measures are determined to be infeasible. If a nest tree must be removed, a Management Authorization (including conditions to off-set the loss of the nest tree) must be obtained. The Management Authorization will specify the tree removal period, generally between October 1 – February 1. If construction or other project related activities which may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site by a qualified biologist shall be required to determine if the nest is abandoned. If it is abandoned, and if the nestlings are still alive, the City shall fund the recovery and hacking (controlled release of captive reared young) of nestling(s).

E.7. Pre-Construction Surveys for jurisdictional wetlands near Secondary Treatment Plant, and Agency Coordination: If project facilities are constructed on or adjacent to wetland areas and those areas potentially under the jurisdiction of the USACE and/or CDFG, pre-construction surveys shall be conducted. If these areas would be impacted by project activities, USACE permits and a Streambed Alteration Agreement from CDFG would be required. These agencies would request adequate measures to offset impacts to riparian and aquatic resources. Early consultation with the USACE and CDFG is recommended to determine adequate protocol, as project modification and/or mitigation measures may be necessary and would require agency approval.

E.8. Preconstruction Surveys near microtunneling areas and Agency Coordination: Prior to initiating microtunneling in a riparian area, a survey shall be conducted to determine whether special status species or habitats are present on or immediately adjacent to the construction area. If it is determined that such species or habitats are present, and if the temporary impacts are determined to be significant, coordination with CDFG and USACE shall occur to determine appropriate avoidance steps or detailed mitigation measures to carry out prior to and during construction. These measures could include establishing a riparian buffer between the construction area and the identified resource or habitat, and monitoring during construction by appropriately qualified scientist(s).
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<tr>
<td>F.1. Implement the Urban Area General Plan 2003 Final Master EIR’s mitigation measures related to traffic. This would reduce the significant cumulative impacts of growth accommodated by the Wastewater Master Plan, but not to less-than-significant levels.</td>
<td>Community and Economic Development Department</td>
<td>Implement mitigation measures for traffic as identified in the 2003 Urban Area General Plan Master EIR by imposing as conditions of approval on development projects</td>
<td>As part of approval of each development project warranting mitigation under the Urban Area General Plan</td>
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<td>AIR QUALITY: Mitigation Measures</td>
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<td><strong>G.1:</strong> The construction plans for each group of building permits for wastewater system improvements shall incorporate the following recommendations from the San Joaquin Valley Air Pollution Control District to minimize emissions during construction phases:</td>
<td>Public Works Department and Construction Contractor Representative</td>
<td>Prepare a dust control compliance plan.</td>
<td>Prepare plans and review new technologies prior to commencement of construction;</td>
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<tr>
<td>• The City or its contractor(s) shall review Regulation VIII of the San Joaquin Valley Air Pollution Control District regulations and prepare a compliance plan prior to commencing any phase of construction. The compliance plan must demonstrate that the current requirements of Regulation VIII will be implemented. Prior to the issuance of construction contracts, the City or its contractor(s) shall perform a review of new technology, as it relates to heavy-duty equipment, to determine what, if any, advances in emissions reduction are available for use. It is anticipated that in the near future both NOX and PM10 control equipment will be available. The San Joaquin Valley Air Pollution Control District should be consulted during this process.</td>
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<td>Review new emission control technologies in consultation with the SJVAPCD</td>
<td>Implement these 4 dust control measures.</td>
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<td>• The City or its contractor(s) shall limit traffic speed on unpaved roads to 15 miles per hour.</td>
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<td>Limit or suspend grading when winds exceed 20 mph. Limit area of disturbance</td>
<td>Implement and monitor compliance with dust and emission control measures throughout construction.</td>
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<td>• The City or its contractor(s) shall install sandbags or other control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.</td>
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<td>Implement street sweeping</td>
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<td>• The City or its contractor(s) shall install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site, to prevent track-out of soil to public roadways.</td>
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<td>• The City or its contractor(s) shall install windbreaks at windward sides of construction areas, if necessary to prevent wind-blown dust.</td>
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<td>• The City or its contractor(s) shall suspend excavation and grading activity when winds exceed 20 miles per hour.</td>
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<td>• The City or its contractor(s) shall limit the area subject to excavation, grading, and other construction activity at any one time.</td>
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<td>• The City or its contractor(s) shall ensure that the accumulation of mud</td>
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<td>AIR QUALITY: Mitigation Measures</td>
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<td>or dirt is expeditiously removed from adjacent public streets at least once every 24 hours when</td>
<td>Public Works Department</td>
<td>Obtain permits from SJVAPCD as required and comply with permit limits.</td>
<td>Prior to operation of facilities requiring SJVAPCD permit and ongoing, during operation of wastewater facilities.</td>
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<td>construction activities are occurring (the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions).</td>
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<td>Use alternative fuel equipment, where feasible.</td>
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<tr>
<td>• The City or its contractor(s) shall use alternative-fuel construction equipment, where feasible.</td>
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<td>Require contractor to minimize idling time.</td>
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<td>• The City or its contractor(s) shall minimize idling time (e.g., to a 10-minute maximum).</td>
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<td>Work with contractor to establish minimum numbers of hours of operation of heavy equipment.</td>
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<td>• The City or its contractor(s) shall limit the hours of operation of heavy-duty equipment and/or</td>
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<td>Implement ozone precursors control measures as specified in construction contract.</td>
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<td>the amount of equipment in use to the minimum practical.</td>
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<td>Establish limitations on construction activities when spare-the-air days are declared by SJVAPCD; include in construction contracts.</td>
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<td>• The City or its contractor(s) shall replace fossil-fueled equipment with electrically driven</td>
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<td>Implement measures included in contract, and report implementation in Daily construction log.</td>
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<td>equivalents (provided they are not run via a portable generator set), where feasible.</td>
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<td>• The City or its contractor(s) shall take steps to curtail construction activity during periods</td>
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<td>of high ambient pollutant concentrations; this may include reducing construction activity during</td>
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<td>the peak hour of vehicular traffic on adjacent roadways or ceasing construction activity during</td>
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<td>days declared as Spare the Air days by the San Joaquin Valley Air Pollution Control District.</td>
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<td>• The City or its contractor(s) shall implement activity management to reduce cumulative short-</td>
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<td>term impacts.</td>
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**G.2:** The City shall abide by permit limits imposed by the SJVAPCD to reduce pollutant emissions from diesel-powered engines for emergency power generation and any other sources requiring permits. The City shall abide by permit limits imposed by the SJVAPCD on operation of digester-gas burning equipment at the Primary Plant.
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<tr>
<td>G.5: With implementation of the <em>Urban Area General Plan</em>'s mitigation measures related to traffic and energy use (and related to carbon monoxide and particulate matter, in particular), the significant cumulative impacts of growth accommodated by the project would be reduced, but not to less-than-significant levels.</td>
<td>Community &amp; Economic Development Department</td>
<td>Implement air quality mitigation measures as identified in the 2003 Urban Area General Plan Master EIR by imposing as conditions of approval on development projects</td>
<td>As part of approval of each development project warranting mitigation under the Urban Area General Plan</td>
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### NOISE: Mitigation Measures

**H.1. Protection of sensitive receptors from excessive construction noise:** In areas where there are sensitive receptors, the City shall ensure that contractors implement the following practices:

- To the extent feasible, construction activities shall be restricted to the hours between 7:00 a.m. and 9:00 p.m., Monday through Friday, and between 9:00 a.m. and 9:00 p.m., Saturday and Sunday and state or federal holidays; minor construction equipment servicing and maintenance shall be excepted from this restriction.
- Construction equipment and vehicles should be equipped with properly operating mufflers according to the manufacturers’ recommendations.
- Air compressors and pneumatic equipment should be equipped with mufflers, and impact tools should be equipped with shrouds or shields.
- Stationary noise sources and construction staging areas shall be located as far as possible from existing residences, hospitals, schools, churches, and parks (preferably at least 200 feet), or contractors shall be required to provide additional noise-reducing engine enclosures (with the goal of achieving approximately 10 dBA of reduction compared to uncontrolled engines).
- Construction vehicle access routes shall be designed to minimize the impact on sensitive land uses such as schools and residential areas.

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<tr>
<td>Public Works Department and Construction Contractor Representative</td>
<td>Determine whether construction would occur near sensitive receptors; if so, require noise-reduction measures in construction contracts. Implement construction noise control measures.</td>
<td>Make determinations prior to issuing construction contracts. Implement and monitor noise-reduction measures during all phases of site preparation and exterior construction activities.</td>
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<tr>
<td><strong>PUBLIC HEALTH AND SAFETY: CONTAMINATED SOILS AND DEMOLITION: Mitigation Measures</strong></td>
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<td><strong>K.1a.</strong> Prior to activities involving soil disturbance for the improvements to the wastewater collection and treatment systems, the City shall use reasonable means to determine the presence of soil or groundwater contamination. Those reasonable means may consist of soil gas surveys, soil or groundwater sampling, and/or a Phase I Environmental Site Assessment conducted by a qualified professional (e.g., a California-registered environmental assessor, Professional Geologist, or Professional Engineer). Any Phase I environmental site assessment shall be performed in conformance with the most recent standard adopted by ASTM International for Phase I site assessments, and shall present recommendations for further investigation of the site, if necessary (see Mitigation Measure K.1b below for details).</td>
<td>Public Works Department and, if appropriate, Environmental professional</td>
<td>Use reasonable means to determine presence of soil or groundwater contamination and retain environmental professional, if appropriate. Report findings and recommendations to the City. Conduct soil and groundwater sampling and analysis if warranted. Report findings to City.</td>
</tr>
<tr>
<td><strong>K.1b.</strong> If warranted, conduct soil and groundwater sampling and analysis. If the investigation activities in Mitigation Measure K.1a (e.g., soil gas surveys, sampling, and/or preparation of a Phase I environmental site assessment) were to indicate that a release of hazardous materials could have affected the location(s) where soil disturbance would occur, a Soil and/or Groundwater Investigation shall be conducted prior to soil disturbance by a qualified environmental professional (e.g., Professional Geologist, Professional Engineer) to assess the presence and extent of contamination at the site and the potential risk to human health and public safety from the contamination (if any). The Soil and/or Groundwater Investigation shall be conducted in accordance with state and local guidelines and regulations, and the most recent ASTM International Standard for Phase II Environmental Site Assessments, with oversight from a regulatory agency (e.g., Stanislaus County Environmental Resources Department). The findings of the investigation shall be documented in a written report and submitted to the regulatory agency and the City.</td>
<td>Public Works Department and Environmental professional</td>
<td>If warranted by results of implementing Measure K.1b, prepare site remediation plan and site health and safety plan and implement site.</td>
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<tr>
<td><strong>K.1c.</strong> If warranted, prepare a site remediation plan and health and safety plan. If the results of the subsurface investigation(s) (described in Mitigation Measure K.1b) indicate the presence of hazardous materials, the Stanislaus County Department of Environmental Resources shall be notified, and site remediation may be required by the applicable state or regulatory agency or the County Department of Environmental Resources Site Mitigation Unit. Specific remedies would depend on the extent and nature of the contamination.</td>
<td>Public Works Department, Environmental professional and Construction Contractor</td>
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<td><strong>PUBLIC HEALTH AND SAFETY: CONTAMINATED SOILS AND DEMOLITION: Mitigation Measures</strong></td>
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<td>magnitude of contamination and the requirements of the regulatory agencies. Under the direction of the regulatory agencies and the City, a Site Remediation Plan shall be prepared, as required, by the contractor(s). The Plan shall: 1) specify measures to be taken to protect workers and the public from exposure to the potential site hazards, and 2) certify that the proposed remediation measures would clean up the waste, dispose the wastes, and protect public health in accordance with federal, state, and local requirements. If the parcel is found to be contaminated to a level that prohibits the proposed use, the potential for reduction of the hazard shall be evaluated in the Site Remediation Plan, in accordance with the General Plan. Groundbreaking activities in the areas of potential hazard shall not proceed until the Site Remediation Plan has been reviewed and approved by the County and is on file with the City. <strong>K.1d.</strong> Where any activity would be performed at a contaminated site or where hazardous materials are suspected, the City’s contractor shall prepare a project-specific Health and Safety Plan prior to any site work. The Health and Safety Plan shall be prepared by the contractor(s) filed with the City and regulatory agencies (as required). The Plan shall include required worker health and safety provisions for all workers potentially exposed to contaminated materials at the site, identification of hazardous materials present, monitoring to be performed during site activities (as appropriate), required training for workers, identification of appropriate personal protective equipment and emergency response procedures, and designation of personnel responsible for Plan implementation. <strong>K.1e.</strong> Prepare a Waste Disposal and Hazardous Materials Transportation Plan. The contractor(s) shall prepare a Waste Disposal and Hazardous Materials Transportation Plan prior to construction activities where hazardous wastes or materials requiring off-site disposal would be generated. The plan shall include a description of analytical methods for characterizing wastes and handling methods required to minimize the potential for exposure, and shall establish procedures for the safe storage of contaminated materials, stockpiling of soils, and storage of dewatered groundwater (as appropriate). The required disposal method for contaminated materials (including any lead-based paint, asbestos, or other hazardous building materials requiring disposal, see Mitigation Measure K.3) and the approved disposal method for hazardous wastes off site.</td>
<td>Representative</td>
<td>remediation plan</td>
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<td>Public Works Department, Construction Contractor’s Representative and Environmental Professional</td>
<td>If soil-disturbing activities would be in known or suspected contaminated areas, prepare site health and safety plan for City review and approval.</td>
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<tr>
<td>Public Works Department, Construction Contractor’s Representative and Environmental Professional</td>
<td>Where hazardous wastes or materials requiring off-site disposal would be generated, prepare Waste Disposal and Hazardous Materials Transportation Plan for City review and approval.</td>
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### PUBLIC HEALTH AND SAFETY: CONTAMINATED SOILS AND DEMOLITION: Mitigation Measures

<table>
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<tr>
<th>Responsibility</th>
<th>Action(s)</th>
<th>Timing</th>
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<tr>
<td>Public Works Department, Construction Contractor’s Representative and Environmental professional</td>
<td>Prepare contingency plan for sampling and analysis of unidentified potentially hazardous substances.</td>
<td>Prior to commencement of grading or construction or any other soil disturbing activities.</td>
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<td></td>
<td>Stop work and notify City immediately if suspected hazardous material is encountered during soil disturbance or structure demolition.</td>
<td>Ongoing, during all excavation and site preparation activities.</td>
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**K.1f.** In the event that previously unidentified contamination is encountered (e.g., identified by odor or visual staining) during soil disturbance activities, or any underground storage tanks, abandoned drums, or other hazardous materials or wastes are encountered during construction, the contractor(s) shall immediately notify the City, and the City shall then notify the County. The contractor(s) shall have prepared a Contingency Plan for Sampling and Analysis of potentially hazardous substances and coordination with appropriate regulatory agencies. The Plan shall be submitted to the City prior to project activities involving soil disturbance. Any site investigations or remedial activities shall be performed in accordance with applicable laws under the direction of a regulatory agency and the City, in accordance with Mitigation Measures K.1c through K.1e above.

**K.2.** The contractor(s) shall prepare a procedure for review by the City for emptying pipes of their contents before pipe bursting begins. Once accepted by the City, with revisions if requested, the contractor shall implement the procedure prior to carrying out any pipe bursting. The purpose of this measure is to avoid the migration of any potentially hazardous materials in the pipes that may be released during pipe bursting into soil and groundwater, and to ensure the health and safety of construction workers and the public by reducing potential exposure. Material removed from the pipes before pipe bursting shall be characterized, handled, stored, and disposed of in accordance with the requirements of Mitigation Measure K.1e, above.
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<td><strong>K.3.</strong> As a condition of approval for any demolition permit for a structure or facility potentially containing lead or asbestos under the proposed project, a lead-based paint and asbestos-containing survey shall be performed at the structure or facility by a qualified environmental professional. Also, any major modification to structures constructed prior to 1980 shall require a similar lead and asbestos survey for those portions of the structure to be modified. Based on the findings of the survey, all loose and peeling lead-based paint and identified asbestos hazards shall be abated by a certified contractor in accordance with local, state, and federal requirements. The findings of the survey shall be submitted to the City. Other hazardous materials and wastes generated during demolition or renovation activities, such as fluorescent light tubes and mercury switches, shall be managed and disposed of in accordance with applicable universal and hazardous waste regulations. Federal and state construction worker health and safety regulations shall apply to demolition activities, and any required worker health and safety procedures shall be incorporated into the contractor’s specifications for the project. The requirements of Mitigation Measures K.1c through K.1f shall also apply.</td>
<td>Public Works Department, Construction Contractor’s Representative and Environmental professional</td>
<td>Retain environmental professional to conduct pre-demolition surveys and report findings to City. Implement abatement as required by environmental professional.</td>
<td>Conduct survey prior to issuance of any construction contract and implement abatement prior to demolition of the structure.</td>
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