2: MMRP

2.1 Overview

This chapter of the MMRP includes a table that facilitates the implementation of all of the mitigation measures presented in the Final EIR. Table 2.2-1 includes all mitigation measures identified in the Final EIR, and is divided into the following columns:

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity

1) Column 1 includes the mitigation measure number from the EIR for reference.
2) Column 2 includes the text of the mitigation measure to be implemented.
3) Column 3 includes the scheduled timing for implementation.
4) Column 4 includes the actions necessary for implementation.
5) Column 5 describes the schedule that implementation of the measure should be verified by the monitoring entity.
6) Column 6 describes how to monitor and report on implementation, such as field verification, review of plans, coordination with an agency, documentation of compliance, etc.
7) Column 7 lists the agencies and parties responsible for monitoring.

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2.2 MMRP Implementation, Verification, and Monitoring

Table 2.2-1: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
Hydrology and Water Quality						
Hydrology-1	The Applicant shall prepare and submit an Erosion and Sediment Control Plan (ESCP) for review and approval by the City of Ione prior to issuance of a grading permit for lining and/or filling ponds 5 and 6. The ESCP shall include the locations and descriptions of control measures (BMPs), such as straw bale barriers, straw mulching, straw wattles, silt fencing, and temporary sediment ponds to be used at the project site to control and manage erosion and sediment, control and treat runoff, and promote infiltration of runoff from new impervious surfaces. The Applicant shall also submit a Notice of Intent (NOI) to the State Water Resources Control Board for coverage under the NPDES Construction General Permit and prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the City of Ione prior to issuance of a grading permit. The SWPPP shall incorporate the ESCP and describe construction-phase housekeeping measures. The SWPPP shall also include descriptions and designs of the post-construction BMPs to be implemented. Where applicable (e.g., for bioswales or biofiltration features), BMPs shall be designed based on specific criteria from recognized BMP design guidance manuals.	The ESCP and SWPPP shall be prepared for the review and approval of the City of Ione prior to issuance of a grading permit. The NOI shall be submitted to the State Water Resources Control Board prior to issuance of a grading permit.	Prepare and submit the ESCP, SWPPP, and NOI.	Prior to issuance of a grading permit.	Review of the ESCP and SWPPP by the City of Ione, and receipt of the NOI by the State Water Resources Control Board.	City of Ione State Water Resources Control Board

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
Hydrology-2	**Mitigation Measure Hydrology-2:** The Applicant shall prepare and submit an operations, maintenance, and monitoring (OMM) plan to the Regional Board as part of the application for expansion of wastewater treatment plant facilities. The OMM plan shall include measures for containment, control, and treatment of runoff or leachate from the activated sludge system treatment and storage areas. Examples of suitable control measures may include lining below-ground facilities, siting facilities over concrete pads, or constructing sumps or installing tanks to retain flows, as determined necessary. Suitable treatment facilities include measures such as draining or pumping the leachate into constructed treatment wetlands, or use of manufactured devices to filter pollutants prior to discharge. The plan shall provide for contingent routing of untreated wastewater in the event of equipment stoppages or upsets of the treatment ponds. Regular training in contingency operations shall be provided to operators. All-weather access shall be maintained for service and emergency repair of all equipment. Other elements of the plan shall be specified by the Regional Board in responding to the City's application for revised Waste Discharge Requirements.	Submit the OMM to the RWQCB prior to construction.	Prepare and submit the OMM.	Prior to construction.	Review of the OMM by the RWQCB.	RWQCB
Hydrology-3	**Mitigation Measure Hydrology-3:** The Applicant shall include a pipeline monitoring program in the application to the Regional Board for revision of the existing Waste Discharge Requirement (WDR) or issuance of a new WDR to accommodate an expanded effluent treatment and re-use program. The monitoring program shall include a schedule for regularly inspecting the pipeline alignment over Sutter Creek to confirm that leakage is absent. Results and observations shall be incorporated into the City's quarterly and annual monitoring	Submit a pipeline monitoring program to the RWQCB prior to obtaining a revised WDR or a new WDR for the project.	Prepare and submit the pipeline monitoring program.	Prior to obtaining a revised WDR or a new WDR.	Review of the pipeline monitoring program by the RWQCB.	RWQCB

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	reports for submittal to the Regional Board. Pipeline leaks along the bridge over Sutter Creek shall be immediately contained and repaired, to the extent feasible. If excavation is necessary to investigate suspected leaks, best management practices (BMPs) similar to those identified in the project SWPPP shall be implemented to prevent erosion and/or release of chemicals used in pipeline repairs.					
Hydrology-4	**Mitigation Measure Hydrology-4:** Where the treated effluent pipeline must cross a ditch or drainage containing flowing water at the time of excavation, the following procedures shall be used to avoid erosion and sediment contributions to surface water and maintain the integrity of the pipeline trench while work proceeds: • The excavation work area shall be isolated using conventional methods, such as by placing coffer dams on either side of the ditch, or by using trench spoils from the excavation or imported soil to temporarily dam the flow of water through the drainage; and • Water flowing in the ditch shall not be permitted to enter the excavation work area. Depending upon the rate and volume of flow in the ditch, suitable control methods might include: allowing the water to pond upstream until the pipeline work is completed; using a pump, siphon, or other means to redirect water to the receiving side of the drainage; or with the coordination of the landowner or landowner's responsible party, temporarily discharging the water to adjacent lands in a non-erosive manner.	Prior to and during pipeline construction activities.	Take erosion and sedimentation control actions whenever a pipeline must cross a ditch or drainage.	Prior to construction.	Verified by an independent monitor in the field.	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
Hydrology-5	**Mitigation Measure Hydrology-5:** The banks of all disposal ponds including Pond 8 shall be designed to withstand the boils and other near-pond surfacing similar to that experienced after the initial construction of Pond 7.	Prior to construction activities on any ponds.	The engineering plans for all ponds shall be prepared by a licensed civil engineer.	Prior to construction.	Review of engineering plans by the City of Ione.	City of Ione
Hydrology-6	Following construction of Pond 8, more frequent monitoring of the wells that have already been installed may be required to demonstrate effective removal of compounds of concern, potentially with an expanded suite of constituents. To address this need, monitoring wells near Pond 8 and east and south of Pond 7 (wells P1, MW-5A, -5B, -4A, -4, and -6) shall be monitored monthly for static water levels, and for (a) bacteria, (b) nitrate and ammonia, (c) dissolved iron and manganese, (d) redox potential, (e) specific conductance, (f) sodium, and (g) chloride. While Pond 8 is in use and for six months thereafter, water levels and specific conductance shall be monitored quarterly in offsite wells 08-1, 08-2b, 08-3, 08-4a and 08-4b to assess effects of Pond 8 on the direction of groundwater flow relative to the baseline developed in this report. If bacteria, ammonia, or nitrate-nitrogen levels in the off-site wells are found to approach or exceed the Maximum Contaminant Levels for domestic potable supply (CCR, Title 22), as a result of operation of the wastewater treatment facilities, then use of Pond 8 shall be discontinued and the treated effluent formerly percolated through Pond 8 shall be conveyed to other off-site locations or end users for disposal. Prior to discontinuing use of Pond 8 in response to excess bacteria levels, a well disinfection plan will be implemented to confirm whether elevated bacteria is attributable to the wastewater treatment facility operations.	Following construction of Pond 8.	Monthly well monitoring for specified constituents, and quarterly monitoring for water levels and specific conductance. If specific MCLs are exceeded, then a well disinfection plan shall be implemented and use of Pond 8 shall cease if elevated bacteria is attributable to wastewater treatment facility operations.	Monthly and quarterly following construction of Pond 8.	Preparation of monthly and quarterly monitoring reports by the City of Ione.	City of Ione
Hydrology-7	**Mitigation Measure Hydrology-7:** Following	Following	Annual aerial	Annually	Annual aerial	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	construction of Pond 8, one or both of the following mitigation measures shall be implemented: Option A: False-color infrared photography at a scale of 1:15,000 or more detailed1 shall be flown of the greater project area to document the extent of ponding and soil saturation in areas to the south and west of the City's WWTP facilities. Infrared photography shall be flown annually in early May or approximately 20 days following a late (or the last) rainfall of the season exceeding 0.5 inches for the week. Results shall be compared by a qualified hydrologist with similar photographs from prior to Pond 8 construction. A memorandum shall be prepared each post-project year outlining areas with more or less moisture than before the additional pond was built, and recommending measures, such as conveyance of the treated effluent formerly percolated through Pond 8 to other off-site locations or end users, to mitigate significant changes. After five years, the photography program should be reassessed and may be discontinued. Option B: The off-site wells installed in January 2009 (MW 08-01, MW 08-2A, MW-08-2B, MW 08-3) shall be monitored quarterly to document changes in water levels south of the City WWTP facility potentially related to effects of effluent disposal. Specific conductance shall be measured in the field on each monitoring visit and water samples shall be collected using conventional sampling protocols and submitted to a state-certified laboratory for analysis of total dissolved solids (TDS), nitrate- and ammonia-nitrogen, sodium and chloride concentrations. A qualified hydrologist shall prepare an annual report or	construction of Pond 8.	infrared photography, to be analyzed by a qualified hydrologist and compared to similar photos from prior to Pond 8 construction. After 5 years, the photography program shall be reassessed and may be discontinued if data has shown that Pond 8 has a less than significant effect on groundwater levels. OR Quarterly well monitoring of water levels and specific conductance. After 5 years, the well monitoring program shall be reassessed and may be discontinued if data has shown that Pond 8 has a less than significant effect on groundwater levels.	following construction of Pond 8, for a minimum of 5 years.	photography, and an annual written memorandum prepared by a qualified hydrologist. OR Quarterly well monitoring, and an annual written memorandum prepared by a qualified hydrologist.	

[1] A 1:6,000 scale is usually ideal for analyzing grassland hydrologic issues.

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	memorandum relating the monitoring results to the source(s) of groundwater, including effluent disposal at the City WWTP, and measures to mitigate significant changes in groundwater levels from conditions before Pond 8 was constructed shall be recommended, if appropriate. After five years, the monitoring program shall be reassessed and may be discontinued if data has shown that Pond 8 has a less than significant effect on groundwater levels.					
Recommended Measure Hydrology-1	The City shall conduct quarterly monitoring of the seepage on the south bank of Sutter Creek within the vicinity of the secondary WWTP. This monitoring data shall be supplied to the RWQCB upon request. If the monitoring data indicate that the wastewater treatment plant operations are impacting Sutter Creek, then the City shall retain a qualified hydrogeologist to evaluate the impacts and identify appropriate measures to address such impacts.	Quarterly monitoring to be performed prior to, during, and following construction activities.	Quarterly monitoring of seepage on the south bank of Sutter Creek.	Quarterly seepage monitoring.	Monitoring data to be recorded and maintained by the City of Ione.	City of Ione, and RWQCB upon Board's request
Biological Resources						
Biology-1	**Biological Resources-1:** Qualified biologists shall locate and stake sensitive resources before construction activities begin, and construction fencing shall be installed to delineate those areas in the field. Monitors shall inspect all fenced areas immediately prior to construction to ensure that barrier fencing, stakes, flagging (i.e., native riparian with a dbh of 3 inches or greater), and required setback buffers are correct and maintained. Specific buffer zone distances shall be determined by the appropriate resource agencies (CDFG and USFWS). Surveys may be required to determine the presence of elderberry shrubs, obligate habitat for the federally threatened valley elderberry longhorn beetle. If any elderberry shrubs are documented outside already delineated	Prior to construction.	A qualified biologist shall locate and stake any sensitive resources, and oversee installation of construction fencing in the field to protect these resources.	Prior to construction.	Field monitoring by a qualified biologist.	City of Ione CDFG USFWS

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	and fenced sensitive areas, they shall be fenced and protected as well.					
Biology-2	**Biological Resources-2:** A qualified biologist shall survey the project site to identify the presence of nesting birds prior to removal of onsite vegetation or site grading. If an active nest is found, CDFG shall be consulted to determine an appropriate avoidance radius. Construction within the avoidance radius shall be prohibited until a qualified biologist has determined that the nestlings have fledged and the nest is no longer active. The biologist shall have the authority to halt or divert construction if necessary to ensure compliance with state or federal regulatory laws, including the Migratory Bird Treaty Act.	Prior to vegetation removal or site grading.	A qualified biologist shall survey the project site for nesting birds, and contact CDFG for an appropriate avoidance radius should any nesting birds be found.	Prior to vegetation removal or site grading.	Field monitoring by a qualified biologist.	City of Ione CDFG
Biology-3	**Biological Resources-3:** If construction, demolition, or tree removal is to take place during the breeding season for raptor species (February 1 to August 31), a preconstruction survey shall be performed. If an active nest is found, CDFG shall be consulted to determine an appropriate avoidance radius. Construction within the avoidance radius shall be prohibited until a qualified biologist has determined that the nestlings have fledged and the nest is no longer active.	Prior to construction, demolition, or tree removal.	Pre-construction survey by a qualified biologist, and consultation with CDFG for an avoidance radius.	Prior to construction, demolition, or tree removal.	Field monitoring by a qualified biologist.	City of Ione CDFG
Biology-4	**Biological Resources-4:** A preconstruction survey for burrowing owls shall be conducted within 30 days prior to ground disturbance to reduce potential impacts to burrowing owls. If no owls are found, no further action is required. If owls are found, appropriate mitigation measures shall be conducted in accordance with the California Department of Fish and Game *Staff Report on Burrowing Owl Mitigation* (CDFG 1995). Avoidance of impacts includes "…no disturbance should occur within 50 meters (approx. 160 feet) of occupied	Pre-construction survey a minimum of 30 days prior to ground disturbance activities.	Pre-construction survey by a qualified biologist, and consultation with CDFG for an avoidance radius.	Prior to ground disturbance activities.	Field monitoring by a qualified biologist.	City of Ione CDFG

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	burrows during the non-breeding season of September 1 through January 31 or within 75 meters (approx. 250 ft) during the breeding season of February 1 through August 31. Avoidance requires that a minimum of 6.5 acres of foraging habitat be permanently preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird. The configuration of the protected habitat shall be approved by the CDFG."					
Biology-5	**Biological Resources-5:** No debris, soil, silt, sand, construction waste, or washings thereof, or other organic or earthen material from any construction activity shall be allowed to enter into federal and state jurisdictional waters. The project proponent shall develop a stormwater pollution prevention plan (SWPPP) to anticipate and manage for stormwater runoff during construction. The plan shall outline the use of sediment barriers and erosion control devices in order to prevent sedimentation (either directly deposited or through runoff) from entering jurisdictional waterways. Drainage and sedimentation control devices shall be routinely cleaned, maintained, and repaired prior to and during the rainy season. All repairs to these systems shall be immediately executed to minimize erosion problems.	Prior to and during construction.	Prepare and implement a SWPPP.	Prior to construction.	Review of the SWPPP by the City of Ione; field verification by an independent monitor.	City of Ione
Biology-6	**Biological Resources-6:** Best-management practices (BMPs) shall be developed for use during construction, and such management practices shall include the provision that revegetation and landscaping adjacent to Sutter Creek shall consist only of native trees, shrubs, and groundcover typical of Sutter Creek and its surrounding habitat.	Prior to and during construction.	Prepare and implement BMPs.	Prior to construction.	Field verification by an independent monitor.	City of Ione
Biology-7	**Biological Resources-7:** Heavy equipment staging areas shall be located in already disturbed	During construction.	The City of Ione shall identify	Identify staging areas prior to	City of Ione to identify staging	City of Ione.

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	and paved access areas greater than 150 feet from Sutter Creek or any other seasonal wetland, if possible. All fueling and maintenance of equipment shall be performed in designated staging areas.		staging areas.	construction.	areas on a map prior to construction.	
Biology-8	**Biological Resources-8:** Heavy equipment brought into the site shall be power-washed prior to entry and inspected by the Environmental Monitor to ensure non-native seeds and other plant parts are not brought into the area.	During construction.	Power wash and inspect heavy equipment prior to entry to the project site.	Prior to entry of heavy equipment to the project site.	Field verification by an independent environmental monitor.	City of Ione
Biology-9	**Biological Resources-9:** To control fugitive dust, soils and work areas shall be pre-watered prior to movement of heavy equipment and construction vehicles (daily or more frequently if needed).	During construction.	Pre-water construction areas.	Prior to movement of heavy equipment and construction vehicles.	Field verification by an independent environmental monitor.	City of Ione
Biology-10	**Biological Resources-10:** Open trenches shall be fenced with orange construction fencing and soil ramps shall be left at regular intervals to facilitate escape of trapped animals.	During construction.	Surround open trenches with construction fencing, and provide ramps to allow trapped animals to escape.	Throughout trenching activities.	Field verification by an independent environmental monitor.	City of Ione
Biology-11	**Biological Resources-11:** Preconstruction biological resource surveys shall be performed to identify the location of sensitive biological resources. Preconstruction surveys shall be consistent with all survey protocols and requirements stipulated by resource agencies as a condition of project approval. Sensitive resources shall be clearly mapped and marked on construction drawings or project maps before construction in these areas. An agency approved Environmental Monitor shall be required to oversee construction in such areas and enforce compliance	Prior to construction.	A qualified biologist shall perform preconstruction biological resource surveys, and shall mark these resources on construction drawings.	Prior to construction.	Preparation of a survey report; field verification by an independent environmental monitor.	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	with exclusionary zones.					
Biology-12	**Biological Resources-12:** If construction or tree removal is to take place during the maternity roosting season for bats (April 1 to September 30), a breeding season survey shall be performed by a qualified biologist to determine the presence/absence of breeding bats in suitable nearby trees prior to activities. If bats are found during surveys, activities shall be rescheduled to take place between October 1 to March 30, or until all juvenile bats are capable of independent flight, as determined by a qualified biologist.	Prior to tree removal activities.	A qualified biologist shall perform bat surveys, and shall establish an appropriate avoidance radius should any breeding bats be found.	Prior to tree removal.	Preparation of a survey report; field verification by an independent environmental monitor.	City of Ione
Biology-13	**Biological Resources-13:** Where construction is to occur near known or potential habitat for western pond turtle (i.e., near Sutter Creek), preconstruction surveys shall be conducted to determine the presence or absence of this species. If pond turtles are observed, a determination shall be made in consultation with CDFG as to whether or not construction would adversely impact this species and what measures shall be implemented.	Prior to construction.	A qualified biologist shall perform turtle surveys, and shall consult with CDFG to establish an appropriate avoidance radius should any western pond turtles be found.	Prior to construction.	Preparation of a survey report; field verification by an independent environmental monitor.	City of Ione CDFG
Biology-14	**Biological Resources-14:** In areas occupied by elderberry shrubs, determinate-level surveys for Valley elderberry longhorn beetles shall be conducted. If the survey determines that the project would have an impact on elderberry shrubs, appropriate mitigation measures shall be determined in consultation with USFWS.	Prior to construction in areas occupied by elderberry shrubs.	A qualified biologist shall perform Valley elderberry longhorn beetle surveys, and shall consult with USFWS to establish appropriate mitigation measures should any Valley elderberry longhorn beetles be found.	Prior to construction.	Preparation of a survey report; field verification by an independent environmental monitor.	City of Ione USFWS

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
Geology and Soils						
Geology-1	**Geology-1:** The City of Ione shall require the selected contractor to stabilize and protect exposed soils. All exposed surfaces and constructed slopes shall be compacted and/or stabilized to prevent subsequent erosion after construction.	During construction.	Contractor shall stabilize and protect exposed soils.	During construction.	Field verification by an independent environmental monitor.	City of Ione
Geology-2	**Geology-2:** An erosion control plan shall be prepared and implemented to mitigate potential erosion impacts. Appropriate erosion control measures in the plan may include construction of water bars, use of silt fences and straw bales, grading surfaces to direct flow away from natural slopes, use of soil stabilizers, and consistent maintenance of roads and culverts to maintain appropriate flow paths. Design of appropriate BMPs shall be conducted by or under the direction of a qualified geologist or engineer. Temporary erosion control measures shall be removed at the end of construction.	Prior to and during construction.	Preparation and implementation of an erosion control plan under the direction of a qualified geologist or engineer.	Prior to construction.	Review of erosion control plan by the City of Ione; field verification by an independent environmental monitor.	City of Ione
Geology-3	**Geology-3:** The City of Ione shall implement a monitoring inspection, maintenance, and repair program for the pipelines and surface facilities. The program shall include various methods to detect and measure potential effects of subsidence and expansive soils, such as deflections of the pipelines due to differential settlement. The plan for implementation of the program shall be submitted to the Amador County Engineering Department, or approved by a City engineer if the property has been annexed before pipelines are installed, for review and approval prior to operation of the project.	Prior to operation.	Preparation and implementation of a facility monitoring inspection, maintenance, and repair program.	Prior to operation.	Review and approval of the facility monitoring inspection, maintenance, and repair program by Amador County or the City of Ione.	Amador County Engineering Department OR City of Ione Engineer
Geology-4	**Geology-4:** A geotechnical study shall be performed for the soils underlying the proposed location of Pond 9 in order to determine their	Prior to construction.	Prepare a geotechnical study.	Prior to construction.	Review and approval of the geotechnical	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	adequacy for supporting the proposed percolation pond. This study shall be performed prior to construction. The geotechnical study shall contain recommendations regarding mitigation to compensate for site inadequacies, such as high permeability of the soil. These recommendations could include, but are not limited to, requiring a certain amount of distance between Sutter Creek and Pond 9 and/or additional lining of Pond 9 in the vicinity of Sutter Creek.				study by the City of Ione.	
Air Quality						
Air Quality-1	**Air Quality-1:** Idling time of construction equipment shall be limited to 5 minutes maximum, to the extent feasible.	During construction.	Contractor to instruct construction workers about minimizing equipment idling time.	Prior to and during construction.	Field verification by an independent environmental monitor.	City of Ione
Air Quality-2	**Air Quality-2:** The contractor(s) shall be required to participate in the CARB Statewide Portable Equipment Registration Program OR meet the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1).	Prior to construction.	Contractor to ensure participation and/or compliance.	Prior to construction.	Contractor to provide verification of participation and/or compliance to the City of Ione.	City of Ione
Air Quality-3	**Air Quality-3:** Construction activities shall be limited to daylight hours, to the extent feasible, so that diesel generators are not required for operation of lights.	During construction.	Contractor to ensure compliance with hours of construction.	During construction.	Field verification by an independent environmental monitor.	City of Ione
Air Quality-4	**Air Quality-4:** Carpooling shall be required for construction workers that travel to the construction site from outside the City of Ione.	During construction.	City of Ione shall establish a carpool program.	During construction.	City of Ione to provide carpool program in	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
					writing.	
Air Quality-5	**Air Quality-5:** The City of Ione shall notify nearby (within 2 miles of construction) sensitive receptors (day-care facilities, schools, hospitals) of construction activities two weeks prior to the commencement of construction activities. The notification shall explain: • The type of construction activities that will occur, • When the construction activities will occur, • Where the construction activities will occur, and • The potential air-quality related health of the activities.	Prior to construction.	City of Ione shall notify all nearby sensitive receptors of construction activities prior to construction.	Prior to construction.	City of Ione shall document methods of notification.	City of Ione
Aesthetics						
Aesthetics-1	**Aesthetics-1:** Post-construction, the applicant shall install and maintain fencing or screening vegetation around the above ground facilities to restrict or prevent public viewing of facilities and operation activities.	Prior to operation.	City of Ione to install appropriate permanent screening.	Prior to operation.	Field verification by an independent environmental monitor.	City of Ione
Recommended Measure Aesthetics-1	**Recommended Measure-1:** During all phases of construction, the applicant shall install and maintain temporary fencing with a colored screen that is consistent with the surrounding environment to restrict or prevent public access and viewing of active on-site construction activities.	Prior to and during construction.	City of Ione to install temporary colored screening.	Prior to construction.	Field verification by an independent environmental monitor.	City of Ione
Transportation and Traffic						
Traffic-1	**Traffic-1:** The City of Ione shall prepare a Traffic Management Plan subject to the review and approval of the City of Ione city staff prior to applying for encroachment permits or initiating construction of the project. The Traffic	Prior to construction.	City of Ione shall prepare and implement a Traffic Management Plan.	Prior to and during construction.	Review and approval of the Traffic Management Plan by the	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	Management Plan shall be written into construction specifications and monitored by the City. The Traffic Management Plan shall have the goals of: • Minimizing construction spoils, • Balancing cut and fill to the extent feasible, • Establishing logical construction staging to minimize truck trips, • Routing truck traffic to avoid the downtown Ione area as much as feasible, and • Providing sufficient emergency service and public information regarding the construction project, detours, and hours and dates of construction. The plan shall include: a. Control measures for traffic control at the ingress and egress of the existing secondary and tertiary WWTPs along West Marlette Street and Five Mile Road during construction activities to allow adequate and safe road access between the facilities and the adjoining roads. b. Control measures to ensure adequate and safe traffic movements along proposed pipeline routes during pipeline construction. c. Control measures to require that contractors vanpool employees to and from the site to the extent feasible and practicable so as to avoid unnecessary congestion and				City of Ione, the Amador Regional Transit System, Amador County, and Caltrans, as appropriate.	

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	parking disruption. d. A construction spoils plan to reduce to the extent feasible the import of material and the export off site of excavated material. e. A construction staging plan indicating where construction equipment, vehicles, and materials will be stored and staged for the duration of project construction, with the intent of minimizing construction staging in a public right-of-way and reducing construction traffic trips. f. Limits on hours of heavy construction traffic to avoid weekday peak hour (7:00am to 9:00am and 4:00pm to 6:00pm) and weekend traffic congestion. g. Control measures to designate access routes to and from the work site, and to limit construction vehicles and worker commute traffic from traveling through downtown Ione. h. A public information flyer shall be prepared and mailed to all resident, property owners, and business owners within a 2-mile radius of construction activities in order to notify the public of construction activities. The mailer shall be distributed two weeks prior to the start of construction activities. The mailer shall contain a phone number for the City representative who will serve as a contact person for project questions and comments.					

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	i. The contractor and city shall coordinate all construction activities with Amador Regional Transit System, school bus systems, and emergency service providers. Coordination shall include providing notices to these agencies 30 days prior to the beginning of any construction that could affect these agencies. j. The City of Ione shall install construction signs along the construction routes leading to the project sites, pursuant to direction in the Caltrans Construction Manual or Manual of Uniform Traffic Control Devices. Signage shall indicate slower construction traffic ahead, and shall be coordinated with Caltrans and Amador County to meet any Caltrans or County requirements.					
Traffic-2	**Traffic-2:** No road shall be closed for a time period exceeding one hour if there are vehicles waiting to pass through the construction area. If activities are not completed within the one-hour timeframe, metal plates or a similar apparatus shall be placed over the trench and waiting motorists shall be allowed to pass. Such metal plates shall be placed over trenches immediately if required to allow emergency vehicles to pass through the construction area.	During construction.	Contractor shall ensure that traffic delay limits are not exceeded.	During construction.	Field verification by an independent environmental monitor.	City of Ione
Traffic-3	**Traffic-3:** Large trucks used to haul solids waste shall be routed around downtown Ione, to the greatest extent feasible.	During construction.	Contractor shall ensure that large trucks avoid downtown Ione to the greatest extent	During construction.	Field verification by an independent environmental	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
			feasible.		monitor.	
Traffic-4	**Traffic-4:** Paved track areas shall be created prior to construction to minimize the amount of construction material deposited on the City's and County's paved surface roads. Paved track areas shall be required at each plant entrance.	Prior to construction.	City of Ione to establish paved track areas prior to construction.	Prior to construction.	City of Ione to document locations of paved track areas on project plans.	City of Ione
Traffic-5	**Traffic-5:** Roads damaged by construction activities shall be repaired in a timeframe acceptable to and in coordination with Amador County Public Works, Caltrans, and/or the City of Ione.	Prior to operation.	City of Ione to repair all damaged roads in an acceptable timeframe.	Prior to operation.	Coordination of roadway repair with Amador County and Caltrans.	City of Ione Amador County Public Works Caltrans
Cultural Resources						
Cultural Resources-1	**Cultural Resources-1:** If historical or archaeological resources are discovered during excavation, grading, or other earthmoving activities, all work in the immediate vicinity shall be suspended. All such activities shall halt within a 50-meter radius of the discovery. Site investigation by SHPO/ACHP and/or a qualified archaeologist shall be conducted immediately to assess the discovered materials and determine whether the resources will yield new information or important verification of previous findings. Project construction in the immediate area shall not resume until the ACHP or SHPO and the Lake County Museum or Historical Society have been consulted and the resources appropriately evaluated and treated. Qualified professionals shall also suggest additional preservation and mitigation measures, as needed, for resources that are deemed significant.	During construction, if cultural resources are discovered.	Contractor shall halt construction activities if cultural resources are discovered, and follow appropriate consultation and mitigation procedures as outlined by SHPO, ACHP, and/or a qualified archaeologist.	During construction.	Field verification by an independent environmental monitor.	City of Ione SHPO/ACHP
Cultural Resources-2	**Cultural Resources-2:** Construction personnel shall be trained regarding the possibility of encountering buried historical and archaeological	Prior to construction.	Contractor to ensure that construction	Prior to construction.	Verification of worker instruction by	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	artifacts on-site. Training shall inform all construction phase personnel of the types of resources that could be encountered, what the resource may look like in the field, and procedures to be followed upon discovery of such resources.		personnel receive training regarding cultural resources.		an independent environmental monitor.	
Cultural Resources-3	**Cultural Resources-3:** Should paleontological materials be discovered, construction shall cease in the immediate vicinity of the find until a qualified archaeologist or paleontologist is consulted to determine the significance of the find, and has recommended appropriate measures to protect the resource. Further disturbance of the resource shall not be allowed until those recommendations deemed appropriate by the appropriate agency have been implemented.	During construction, if paleontological resources are discovered.	Contractor shall halt construction activities if paleontological resources are discovered, and follow appropriate consultation and mitigation procedures as outlined by a qualified archaeologist.	During construction.	Field verification by an independent environmental monitor.	City of Ione SHPO/ACHP
Cultural Resources-4	**Cultural Resources-4:** In the event of discovery of human remains (or a find that consists of bones suspected to be human), the field crew supervisor, archeological monitor, and Native American monitor shall take immediate steps to secure and protect such remains from vandalism during periods when workers are absent**.** The Amador County Coroner shall be notified immediately and provided with any information that identifies the remains as Native American. If the remains are determined to be those of a prehistoric Native American, or determined to be a Native American from the ethnographic period, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours being notified of the remains. The NAHC then designates and notifies within 24 hours a Most Likely Descendent (MLD). The MLD has 24 hours to consult and provide recommendations for the treatment or disposition,	During construction, if human remains are discovered.	Contractor shall halt construction activities if human remains are discovered, and follow appropriate consultation and mitigation procedures as outlined by the Amador County Coroner, the NAHC, a qualified archaeologist, and/or a Native American monitor.	During construction.	Field verification by an independent environmental monitor and a Native American monitor.	City of Ione Amador County Coroner NAHC

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	with proper dignity, of the human remains and grave goods. Human remains shall be preserved in situ if continuation of construction, as determined by the qualified Archaeologist and MLD, will not cause further damage to the remains (this is the preferred alternative). The remains and artifacts shall be documented and the find location carefully backfilled (with protective geo-fabric if desirable). In the event that human remains or burial associated items are exposed and cannot be protected from further damage, they shall be exhumed by the qualified archaeologist at the discretion of the MLD and tribes and reburied with the concurrence of the MLD and tribes in a place mutually agreed upon by all parties					
Hazards						
Hazards-1	**Hazards-1:** Prior to any construction activities at either of the proposed treatment plant sites, the City of Ione shall have soils sampled and analyzed by a licensed laboratory approved by DTSC or the Amador County Health Department (ACHD) to determine the level of residue for pesticides, herbicides, chemicals, associated metals, and biohazards. If residues are found to be within acceptable amounts per ACHD and DTSC standards, then grading and construction may begin. If any residues are found to be greater than the ACHD and DTSC standards, all contaminated soils exceeding the acceptable limits shall be remediated and/or properly disposed of per ACHD and DTSC requirements. Trucks transporting contaminated soils shall be covered to eliminate blowing dust. An appropriate verification closure letter from ACHD and DTSC shall be obtained and submitted to the City of Ione Planning Department prior to the initiation of construction of facilities. Depending on the extent of contaminated soils, a	Prior to construction.	A licensed laboratory shall analyze soil samples from the construction areas to determine the level of residue for hazardous materials; City of Ione shall remediate any contamination as per ACHD and DTSC requirements.	Prior to construction.	City of Ione to document soil sampling, analysis, and remediation activities.	City of Ione ACHD DTSC

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	verification closure letter from the Central Valley RWQCB may also need to be obtained by the City of Ione Planning Department. Site remediation can occur by the use of on-site transportable thermal treatment units or bio-remediation. The soil can also be excavated and transported in covered trucks or train cars off-site to fixed incineration or bio-remediation facilities.					
Hazards-2	**Hazards-2:** Prior to completion of the new and/or expanded wastewater treatment facilities, the City of Ione or its contractor shall prepare and the City shall adopt a Hazardous Materials Business Plan (HMBP) for the wastewater treatment facilities. This HMBP will become part of the standard operating procedures for the wastewater treatment facilities. The HMBP shall identify and characterize the hazardous materials stored or used at the wastewater treatment facilities, and identify the storage, handling, training, and spill contingency procedures for these materials. Additionally, the HMBP shall identify procedures in the event of accidental spills of hazardous materials. These procedures shall include immediate response personnel to limit public access to spill areas, potentially shutting down pump stations, creating berms, use of vacuum trucks, and the use of water booms to contain spills within open water areas. The HMBP shall address response and containment of fuel at pump stations sites, when used.	Prior to completion of construction and operation of the new facilities.	City of Ione shall prepare and implement an HMBP.	Prior to operation.	Review of HMBP by the City of Ione.	City of Ione
Noise						
Noise-1	**Noise-1:** Scheduled construction or maintenance activities that generate intrusive noise (>60 dBA) for extended periods (>8 hours) shall be limited to between the hours of 9am and 5pm Monday through Friday, and will be prohibited on weekends and holidays.	During construction.	Contractor shall limit construction hours to meet these requirements.	During construction	Field verification by an independent environmental monitor.	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
Noise-2	**Noise-2:** All equipment used during construction shall have the appropriate mufflers and noise abatement equipment installed and maintained as necessary.	During construction.	Contractor shall ensure that all appropriate noise abatement equipment is in place.	During construction	Field verification by an independent environmental monitor.	City of Ione
Noise-3	**Noise-3:** The City of Ione shall prepare a Construction Notification Plan. The plan shall identify the procedures that the City of Ione will follow to inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements. The plan shall include, but is not limited to: **Public Notice Mailer:** A public notice mailer shall be distributed 15 days prior to construction. The notice shall identify construction activities that would generate intrusive noise levels (>60 dBA) at the source of the noise. The notice shall state the type of construction activities that would be conducted, the location and duration of construction, and procedures for reaching the public liaison person officer via telephone or in person. The City of Ione shall mail the notice to all residents or property owners within 300 feet of the construction activity and to any organization with facilities that could be impacted by construction. **Public Liaison Person:** The City of Ione shall identify a public liaison person who will be available at least 15 days prior to construction and during construction to respond to concerns of residents, business owners, and organizations regarding noise generation. Procedures for responding to comments and complaints shall be included in the	Prior to and during construction.	City of Ione to prepare and implement a Construction Notification Plan, with distribution of a public notice mailer 15 days prior to construction.	Prior to construction.	Verification of public notice mailer and establishment of a public liaison by an independent environmental monitor 15 days prior to construction.	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table

1) MM#	2) Mitigation Measure	3) Implementation Schedule	4) Implementing Action	5) Verification Schedule	6) Method of Verification	7) Monitoring Entity
	plan.					
Noise-4	**Noise-4:** The contractor shall consult with public and community facilities and services regarding the construction schedule and duration of construction in order to minimize noise impacts.	Prior to and during construction.	Contractor to consult with public and community facilities and services regarding the construction schedule and duration of construction.	Prior to construction.	Documentation of consultation by the contractor.	City of Ione
Greenhouse Gases						
GHG-1	**GHG-1:** Construction workers living outside the City of Ione shall meet at staging areas and be transported (in carpools) to jobsites.	During construction.	City of Ione shall identify staging areas for construction workers, and establish a carpool program.	Prior to construction.	City of Ione to provide staging area locations and carpool program in writing.	City of Ione
GHG-2	**GHG-2: Unnecessary construction vehicle and equipment idling shall be minimized. Construction foremen shall include briefing to crews on vehicle use as part of pre-construction conferences. These briefings shall include discussion of "common sense" vehicle use.**	Prior to and during construction.	Contractor to instruct construction workers on methods to reduce equipment idling times.	Prior to construction.	Field verification of worker instruction by an independent environmental monitor.	City of Ione
GHG-2	**GHG-2:** Unnecessary construction vehicle and equipment idling shall be minimized. Construction foremen shall include briefing to crews on vehicle use as part of pre-construction conferences. These briefings shall include discussion of "common sense" vehicle use.	Prior to and during construction.	Contractor to instruct construction workers on methods to reduce equipment idling times.	Prior to construction.	Field verification of worker instruction by an independent environmental monitor.	City of Ione
GHG-3	**GHG-3:** All off-road construction diesel engines	Prior to and during	Contractor to	Prior to	Field	City of Ione

Table 2.2-1 *(Continued)*: MMRP Table						
1) MM#	**2) Mitigation Measure**	**3) Implementation Schedule**	**4) Implementing Action**	**5) Verification Schedule**	**6) Method of Verification**	**7) Monitoring Entity**
	shall meet Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines.	construction.	ensure that all off-road construction diesel engines meet required standards.	construction.	verification by an independent environmental monitor.	
Agriculture						
Agriculture-1	**Agriculture-1**: The City of Ione shall protect a minimum of 4.1 acres of existing farmland of equal or higher quality than the 4.1 acres of prime farmland that would be permanently converted to non-agricultural uses as a result of this project. This protection may consist of the establishment of farmland conservation easements, farmland deed restrictions, or other appropriate farmland conservation in perpetuity, but may also be utilized for compatible wildlife conservation efforts. The farmland to be preserved shall be located within Amador County and must have adequate water supply to support agricultural use. As part of the consideration of land areas proposed to be protected, the City shall consider the benefits of preserving farmlands in proximity to other protected lands.	Prior to construction on existing farmland.	City of Ione shall identify and protect acreage of prime farmland equivalent in size to that being converted to non-farming uses under the project.	Prior to construction on existing farmland.	City of Ione to establish written protection for the identified farmland.	City of Ione

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