SECTION 5.15
Wastewater

5.15 WASTEWATER

This section addresses the impacts of the proposed project on wastewater conveyance and treatment facilities. The analysis identifies the service area the project site lies within, indicates the nature and location of related infrastructure in the local area, and estimates demands of the proposed project.

5.15.1 REGULATORY SETTING

FEDERAL

CLEAN WATER ACT/NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

The Clean Water Act (CWA) (*33 United States Code* Section 1251 et seq.*)* is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutants discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."[1]

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. The CWA makes it illegal to discharge pollutants from a point source to the waters of the United States. CWA Section 402 creates the National Pollutant Discharge Elimination System (NPDES) regulatory program. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Though not regulated under NPDES, "indirect" discharges are covered by another CWA program, called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering a surface water.

NATIONAL PRETREATMENT PROGRAM[2]

The National Pretreatment Program is an extension of NPDES regulatory program. The National Pretreatment Program is a cooperative effort of federal, state, and local regulatory

[1] Source: United States Environmental Protection Agency website, Introduction to the Clean Water Act, http://www.epa.gov/owow/watershed/wacademy/acad2000/cwa/index.htm, accessed January 29, 2011.

[2] United States Environmental Protection Agency, NPDES, National Pretreatment Program http://cfpub.epa.gov/npdes/home.cfm?program_id=3, accessed January 13, 2010

environmental agencies established to protect water quality. The program is designed to reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewer systems, and thereby, reduce the amount of pollutants released into the environment through wastewater. The objectives of the program are to protect Publicly Owned Treatment Works (POTW) from pollutants that may interfere with plant operation, to prevent pollutants that may pass through untreated from being introduced into the POTW, and to improve opportunities for the POTW to reuse wastewater and sludges that are generated.

The term "pretreatment" refers to the requirement that non-domestic sources discharging wastewater to POTWs control their discharges, and meet limits established by EPA, the state or local authority on the amount of pollutants allowed to be discharged. The control of the pollutants may necessitate treatment prior to discharge to the POTW (therefore the term "pretreatment"). Limits may be met by the non-domestic source through pollution prevention techniques (product substitution recycle and reuse of materials) or treatment of the wastewater.

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In California, the State Water Resources Control Board (SWRCB) is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The SWRCB's current challenge is exacerbated by California's rapid population growth, and the continuing struggle over valuable water flows. The agency faces tough new demands which include fixing ailing sewer systems; building new wastewater treatment plants; and tackling the cleanup of underground water sources impacted by the very technology and industry that has provided California with a robust economy and made it a desirable place to live.

CITY OF SANTA CLARITA

General Plan

Applicable goals, objectives, and policies from the *General Plan Land Use Element* are listed below.

Public Facilities

Goal LU 9: Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.

> **Objective LU 9.1**: Coordinate land use planning with provision of adequate public service and facilities to support development.
>
> > **Policy LU 9.1.1**: Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.

5.15.2 ENVIRONMENTAL SETTING

WASTEWATER SERVICE

Most wastewater generated within the Santa Clarita Valley is treated at two existing water reclamation plants (WRPs), which are operated by the County Sanitation Districts of Los Angeles County (CSDLAC). These two treatment facilities, the Saugus WRP, located at 26200 Springbrook Avenue in Saugus, and the Valencia WRP, located at 28185 The Old Road in Valencia, have been interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The relationship between the two WRPs was established through a joint powers agreement that created the regional treatment system and permits the Valencia WRP to accept flows that exceed the capacity of the Saugus WRP.

These two facilities provide primary, secondary, and tertiary treatment. The SCVJSS has a combined permitted treatment capacity of 28.1 million gallons per day (mgd) and currently processes an average flow of 21.1 mgd.[3]

The mechanism used to fund expansion projects is the CSDLAC's Connection Fee Program. Prior to the connection of the local sewer network to the CSDLAC system, all new users are required to pay their fair share of the CSDLAC sewerage system expansion through a connection fee. The fees fund treatment capacity expansion and trunk lines, while on-site sewer mains are the responsibility of the developer. The rate at which connections are made off-site and revenues accumulate drives the rate at which periodic expansions of the system are designed and built. However, connection permits are not issued unless it is demonstrated that sufficient capacity exists to serve proposed development. Therefore, the expansion of CSDLAC facilities may be immediate if adequate capacity does not exist to serve new users, or the expansion may occur in the future if it is determined that there is adequate capacity to serve new users, but inadequate capacity to serve future development within the tributary area(s) of the affected collection/treatment facilities, thereby necessitating future system expansions. In the latter case, the connection fees paid by new users are deposited into a restricted Capital Improvement Fund (CIF) used solely to capitalize the future expansion of affected system facilities. The cyclical process of building phased expansions and collecting connection fees can continue indefinitely. The only restriction would be when the CSDLAC run out of land. Existing facilities can be expanded to handle a daily capacity of 34.1 mgd, which is sufficient to meet demand until 2015. The CSDLAC does not expect to exceed a daily capacity of 34.1 mgd because connection permits will not be issued that would exceed this amount.

Wastewater Ordinance[4]

Municipal Code Chapter 15.20, Sanitary Sewers and Industrial Waste, indicates that the City of Santa Clarita has adopted, except as otherwise provided, by reference as a sanitary sewer and industrial waste ordinance, Los Angeles County Code, Title 20, Utilities, Division 2. Ordinance No. 90-18 was adopted on July 24, 1990 and Ordinance No. 09-8 Section 1 was adopted on June 9, 2009.

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3 Written communication with Stephen R. Maguin, Engineering Technician, County Sanitation District of Los Angeles County on September 30, 2010.

4 *Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Volume I, One Valley One Vision 2010*, Impact Sciences, Inc., September 2010.

The provisions of this ordinance shall apply to all direct or indirect discharges, including the discharge of all wastewater to any part of the sewerage systems of the Districts, or to other sewerage systems tributary to the District's sewerage system. The provisions of this ordinance shall also apply to wastewater originating outside the territorial boundaries of the Districts or outside the boundaries of Los Angeles County if such wastewater eventually enters the District's sewerage system. This ordinance among other things regulates sewer construction and provides for the approvals of plans for sewer construction and implements federal and state pollution control regulations. The ordinance also provides for the issuance of permits, including permits for industrial wastewater discharge, prohibits the discharge of certain wastes and regulates the quantity of other waste discharges. The ordinance imposes wastewater pretreatement requirements upon waste discharges and provides for the regulation of the degree of such pretreatment. Lastly, this ordinance provides for the distribution of revenue. Violations of the ordinance are subject to criminal fines and penalties, civil liabilities and other penalties in accordance with the law.

Chloride[5]

On November 4, 2008, voters approved the Santa Clara River Chloride Reduction Ordinance of 2008. The ordinance took effect January 1, 2009. The ordinance prohibits residential automatic water softeners in the Santa Clarita Valley and prescribes measures the Sanitation Districts must undertake to reduce chloride. The standard method of disinfection using chlorine gas would be replaced with a Ultra-Violet (UV) system in an effort to further reduce all possible sources of chloride in the wastewater.

SWRP and VMRP Upgrade[6]

The nitrification and denitrification modification was constructed at both the VWRP and SWRP in 2004. The implementation of the Santa Clara River Chloride Reduction Ordinance prohibits residents from owning salt-based water softeners within the Santa Clarita Valley. While removal of all these softeners would reduce the chloride discharge to the Santa Clara River, it does not eliminate the need to install some advanced treatment to meet discharge regulations. The SCVSD is preparing a facilities plan and Environmental Impact Report (EIR) for the facilities necessary to meet chloride requirements. These facilities are expected to include a 3 mgd micro-filtration reverse-osmosis system.

CSDLAC FACILITIES PLAN

The CSDLAC has prepared a Facilities Plan with a horizon year of 2015 for the SCVJSS and a Draft EIR. The Facilities Plan estimates future wastewater generation for the probable future service area of Santa Clarita Valley Sanitation Districts (SCVD) in order to anticipate future treatment capacity and wastewater conveyance needs. According to CSDLAC estimates, total flows projected from the Santa Clarita Valley in 2015, exclusive of Newhall Ranch, would be 34.1 mgd. This projection is based upon SCAG 1996 population projections exclusive of Newhall Ranch. As a result of this finding, CSDLAC proposed to incrementally expand the treatment facilities to meet future needs in two expansions to a total of 34.1 mgd. This two-phase expansion plan, which would increase treatment capacity by approximately 15 mgd, was

5 Ibid.
6 Ibid.

recently approved. The first phase has been completed and has expanded treatment capacity by approximately 9 mgd (approximately a 47 percent increase) from 19.1 mgd. This expansion will meet the expected wastewater treatment demand through 2010. The second phase, scheduled to be complete by 2010, would increase treatment capacity by an additional 6 mgd.

WASTEWATER COLLECTION SYSTEM

The CSDLAC wastewater collection system is composed of service connections that tie into the local collection network. This local network, composed of secondary and primary collectors, flows into the CSDLAC's trunk wastewater mains and the water reclamation plants. The CSDLAC maintains the wastewater trunk mains that lead to the two reclamation plants, and the local collection network is maintained by the Los Angeles County Department of Public Works Sewer Maintenance for the City of Santa Clarita. The SCVD of Los Angeles County operates the Saugus and Valencia WRPs.

The project site is presently undeveloped and there is no wastewater collection and conveyance system on the property. Sewer lines, although not present within the project boundaries, exist in the vicinity of the project site. The project site is outside the jurisdictional boundaries of the CSDLAC and will require annexation into the SCVD before sewerage service can be provided into to the proposed project.

The City Department of Public Works requires that new subdivision wastewater systems connect to the CSDLAC's existing sanitary wastewater system. The Development Services Division is the department responsible for local wastewater in the City of Santa Clarita, and any developer constructing a new wastewater line would have to coordinate the construction and dedication of any such wastewater line with the Development Services. As previously noted, the City contracts with the Los Angeles County Department of Public Works for future operation and maintenance of local wastewater lines. It would then be the responsibility of the CSDLAC to upgrade the wastewater collection and treatment systems by providing relief for existing trunk lines nearing capacity and expanding treatment plants to provide sanitation service to outlying areas.

5.15.3 SIGNIFICANCE THRESHOLD CRITERIA

The *City of Santa Clarita Local CEQA Guidelines* (Resolution 05-38) adopted on April 26, 2005 and the Initial Study Environmental Checklist form in *CEQA Guidelines* Appendix G serve as the thresholds for determining the significance of impacts relating to wastewater services. As such, a project would be considered to have a significant environmental impact if it would result in the following:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.15.4 PROJECT IMPACTS AND MITIGATION MEASURES

- ***DEVELOPMENT OF THE PROPOSED PROJECT COULD GENERATE WASTEWATER THAT COULD EXCEED THE CAPACITY OF CONVEYANCE AND TREATMENT FACILITIES THAT SERVE THE PROJECT AREA.***

Level of Significance Before Analysis and Mitigation: Potentially Significant Impact.

Impact Analysis: Wastewater flow which would originate from the project site would discharge to a local sewer line, which is not maintained by the CSDLAC, for conveyance to the CSDLAC's Soledad Canyon Trunk Sewer, Section 5, located in the Sand Canyon Road at Lost Canyon Road.[7] This pipeline is 18 inches in diameter and has the capacity of 5.7 mgd and conveyed a peak flow of 2.9 mgd when last measured in 2008.[8] As previously discussed, the SCVJSS provide regional wastewater treatment. Thus, the SCVJSS would accept flows from the project site.

The CSDLAC anticipates the proposed project would generate an average wastewater flow of 25,740 gallons per day.[9] The wastewater generated by the proposed project would be approximately 0.07 percent of the SCVJSS' future treatment capacity of 34.1 mgd for average day flows.

As previously discussed, the CSDLAC requires new users to pay a fee to connect to the local sewer network. Therefore, the CSDLAC would require payment of a connection fee to construct an incremental expansion of the SCVJSS to accommodate the proposed project. Furthermore, the City of Santa Clarita would not issue connection permits to the sewer system if it cannot be demonstrated that sufficient capacity exists to serve the proposed development. Thus, the proposed project could not cause an exceedance of capacity of the wastewater conveyance system or SCVJSS treatment plants, since adequate capacity must be demonstrated in order to contribute flows to the system. Implementation of Mitigation Measure (WW-1) would ensure impacts to the wastewater conveyance and treatment facilities would be less than significant.

7 Written communication with Stephen R. Maguin, Engineering Technician, County Sanitation District of Los Angeles County on September 30, 2010
8 Ibid.
9 Ibid.

Mitigation Measures:

WW-1 Payment of connection fees shall be made prior to issuance of a permit to connect (directly or indirectly) to the CSDLAC's Sewerage System.

Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

5.15.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ***DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS WOULD INCREASE DEMAND FOR WASTEWATER CONVEYANCE AND TREATMENT CAPACITY.***

Level of Significance Before Analysis and Mitigation: Potentially Significant Impact.

Impact Analysis: At the time of project design, each project applicant would be required to prove to the CSDLAC that the additional flow would not impact the sewer system or provide adequate funds for necessary improvements to the sewer system. Due to this requirement, the proposed project and related cumulative projects would not result in significant impacts to wastewater service and facilities. The legally permitted levels of sewer service are contingent upon the available capacity of the CSDLAC's treatment facilities, which is in turn limited to levels associated with approved growth identified by SCAG.

The wastewater flow associated with the proposed project and related cumulative projects are not anticipated to exceed levels associated with approved growth, as identified by SCAG's regional growth forecasts. Nonetheless, the City of Santa Clarita would not issue connection permits to the sewer system if it cannot be demonstrated that sufficient capacity exists to serve a proposed development project. As such, wastewater flows from the proposed project and other related cumulative projects could not cause an exceedance of capacity of the wastewater conveyance system or SCVJSS treatment plants, since adequate capacity must be demonstrated in order to contribute flows to the system. With implementation of applicable mitigation, which requires approval of points of connection and quantification of the available capacity in the affected portions of the sewer system serving the City, impacts would be less than significant. The proposed project and related cumulative projects would be required to pay a connection fee to mitigate impacts of the development on the sewerage system.

The City and CSDLAC would review site-specific development plans to determine the impact on existing sewer mains. Individual projects would be required to pay the cost to relocate existing sewer mains impacted by new development. Development of the proposed project would not result in significant cumulative impacts in regards to wastewater services.

Mitigation Measures: Refer to Mitigation Measure WW-1. No additional mitigation measures are required.

Level of Significance After Analysis and Mitigation: Less Than Significant Impact.

5.15.6 SIGNIFICANT UNAVOIDABLE IMPACTS

All potentially significant impacts related to wastewater services can be reduced to a level less than significant with implementation of applicable mitigation measures. As such, implementation of the proposed project would not result in any significant unavoidable wastewater services impacts.

5.15.7 SOURCES CITED

Santa Clarita General Plan, adopted June 14, 2011.

Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Impact Sciences, Inc., September 2010.

Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan, Impact Sciences, Inc., dated May 2011, certified June 14, 2011.

Written communication with Stephen R. Maguin, Engineering Technician, County Sanitation District of Los Angeles County on September 30, 2010.

Vista Canyon Draft Environmental Impact Report, Impact Sciences, Inc., October 2010.