

# LOS ALAMOS COMMUNITY SERVICES DISTRICT

## SEWER SYSTEM MANAGEMENT PLAN (SSMP)



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## A. Overview of Sewer System

The Los Alamos Community Services District (L.A.C.S.D.) was formed on October 29, 1956, under Division 4 of the Street and Highway Code of the purpose of providing water service to the Community of Los Alamos under the 1958 act.

On April 8, 1985, the District was awarded a Federal EPA Grant and a grant from the California State Water Resources for the design and construction of the Los Alamos Wastewater Collection and Treatment Project. On July 12, 1985, Order No. 85-97 was adopted. This project was completed in 1988 and sewer service was provided to the community.

In September of 1993, Phase II was completed of the Wastewater Treatment Plant, increasing the capacity of the treatment facilities and was operating under Order No. 92-93 of the California Regional Water Quality Control Board (Central Coast Region.) Order No. 92-93 allowed the LACSD to discharge a maximum of 176,000 gallons per day, averaged over each month.

On December 2, 2005, the Regional Water Quality Control Board revised Order No. 92-93 by adopting Order No. R3-2005-0133 establishing new W.D.R's for the LACSD Wastewater Treatment Plant Expansion Project Phase III, to discharge a maximum of 225,000 gallons per day, averaged over each month.

On March 15, 2006, the District put the Wastewater Treatment Plant Expansion Project Phase III out to bid and was completed on October 10, 2006.

The purpose of the project was to expand the irrigation disposal capacity to meet build-out of the Urban Boundary, as well as, the Community Service District Boundary and to provide additional wet well capacity to improve lift station operation. Two additional holding tanks with a capacity of 3000 gallons each were added to allow for additional capacity in the event of lift station pump failure.

The Wastewater Treatment System for the town of Los Alamos is comprised of four basic elements, the **Wastewater Collection System, Lift Station, Treatment Facilities** and the **Effluent Disposal System**. The main trunk lines for the Wastewater Collection System are more than adequate to meet build out conditions. The Bell Street lift station is located on Bell Street south of San Antonio Creek crossing. It presently has two 7.5 horsepower pumps operating at 270 gpm each. The treatment facilities are comprised of the head works and treatment ponds. The treatment capacity is rated at 400,000 gpd. The present facilities are more than adequate to handle the build out of Los Alamos Community based on the 1994 Los Alamos Community Plan. The total effluent disposal system is approximately 66.18 acres of land comprised of 47.6 acres of spray irrigation fields.

Presently the wastewater components are: 44,750 linear feet of collection system (8.5 miles), two sewer lift stations (one with two additional wet wells), one half mile of forced sewer main, a 3.1-acre facultative pond system, 47.6 acres of irrigation fields and 5 retention basins.

## **B. LACSD Mission Statement**

The mission of the Los Alamos Community Services District is to provide quality service for customers residing throughout the community of Los Alamos. The LACSD strives to provide service at a fair and equitable rate to the community to allow the District to maintain fiscal soundness today and in the future. The LACSD believes in compensating their employees with remuneration and benefits competitive with other employers in the geographical area and in ensuring that employees are qualified to effectively run the operations of the District. The LACSD's main focus is to employ current technology in order to operate and maintain, water, wastewater and recreational facilities to create a healthy and safe living environment for all.

## **Section I.**

### **Goal**

The standards for the operation and maintenance of the Los Alamos Community Services District (LACSD) wastewater collection system are to properly operate and maintain all portions of the District's collection system, to report overflows, and to respond effectively to any overflows that may occur. The LACSD collection system goals should be at a high level that meets the following requirements.

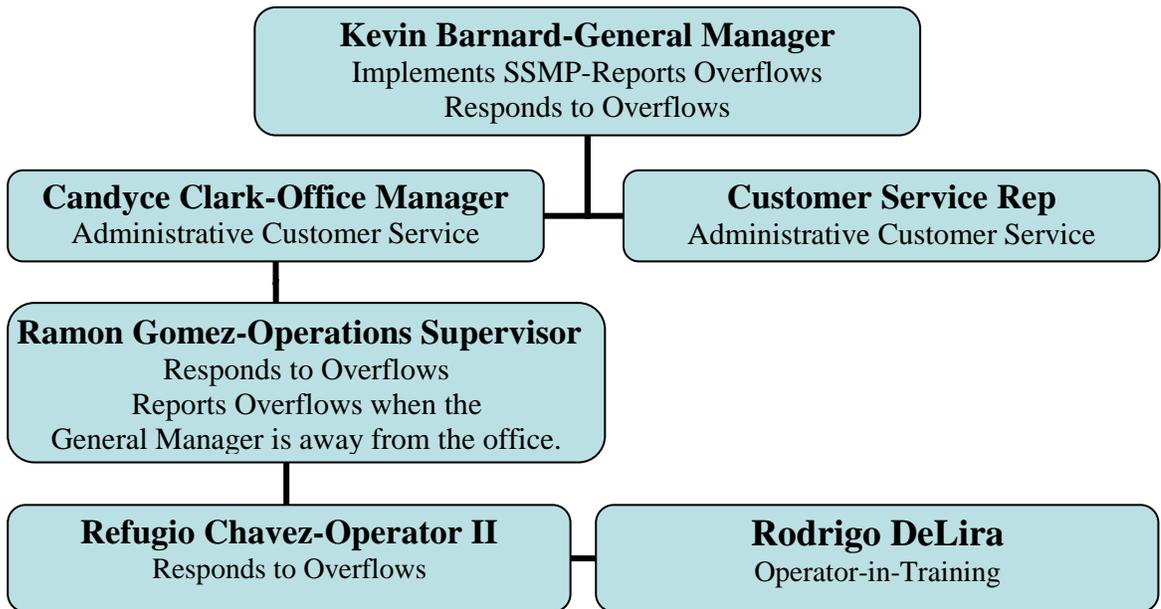
The goals of the LACSD's Sewer System Management Plan (SSMP) are:

1. To properly manage, operate, and maintain all portions of the District's Wastewater Collection System.
2. To provide adequate capacity to convey the peak wastewater flows.
3. To minimize the frequency of Sanitary Sewer Overflows (SSOs)
4. To mitigate the impacts that are associated with any SSO that may occur.
5. To meet all applicable regulatory notification and reporting requirements.

## **Section II.**

### **Organization**

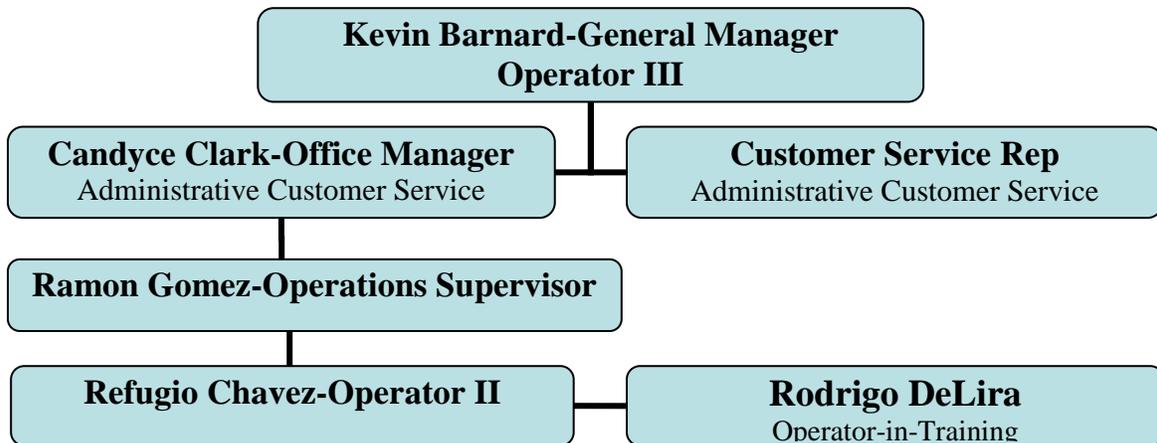
- (a) Responsible or Authorized Representative- **Kevin Barnard, General Manager/Chief Plant Operator/ Collection System Operator III.**
- (b) The names of management, administrative and maintenance positions responsible for implementing specific measures in the SSMP Program include the following;



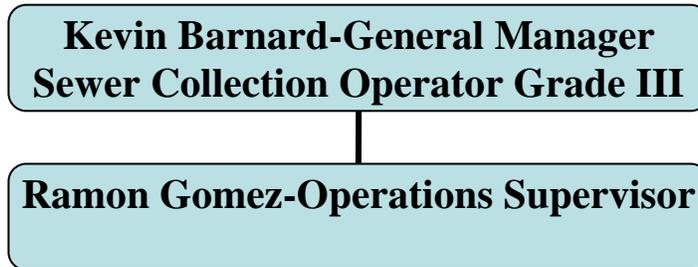
\* **Note:** Emergency contact information can be found in Appendix A

(c) The chain of communication for reporting Sanitary Sewer Overflows (SSO) from receipt of a complaint or other notification of a SSO to the person responsible for reporting the SSO to the State and Regional Water Quality Control Boards (RWQCB), Environmental Health Dept., Department of Public Health (DPH) or the State Office of Emergency Services (OES) is as follows;

### Receives Complaint or Notification of a SSO



## Reports SSO to Appropriate Agencies



\* **Note:** Emergency contact information can be found in Appendix A.

### Section III.

#### Legal Authority

Ordinance No. 83 is known as the Second Amended and Restated Sewer Service Code of the Los Alamos Community Services District and was adopted by the Board of Directors pursuant to the provisions of the Community Services District Law Title 6, (commencing at Section 61000) of the Government Code.

The Los Alamos Community Services District through the use of the District's Sewer Service Code, Ordinance No. 83 possesses the necessary legal authority to:

- (a) Prevent illicit discharges of liquid, solids or debris into our wastewater collection system through Ordinance No. 83 Article 3, 3.02 and 3.03 & Article 11, 11.01 & 11.02.
- (b) Require that sewers and connections are properly designed and constructed through Ordinance No. 83 Article 7, 7.01-7.03 Article 8, 8.01-8.03 Article 9, 9.01-9.12 and Article 10, 10.01-10.19.

In addition, all connections to the District's sewer system shall comply with District Resolution No. 11-327 Standards and Specifications for Developer Extensions to the Sewer and Water System. No statement contained in these Articles shall be construed to interfere with any additional requirement that may be imposed by any law, ordinance, rule or regulation, condition imposed on the permit by the LACSD or by the County.

- (c) Access for maintenance, inspection or repairs for sewer mains and portions of the sewer lateral owned or maintained by the District are covered under Ordinance No. 83 Article 1, 1.05 and Article 10, 10.03-10.05.
- (d) Limit the discharge of fats, oils and grease and other debris that may cause blockages under Ordinance No. 83 Article 11, 11.01-11.04.
- (e) The District's ability to enforce any violation of its Sewer Service Code, Ordinance No. 83 is outlined in Enforcement Provisions under Article 16, 16.01-16.09.

\* **Note:** LACSD Sewer Service Code, Ordinance No. 83 can be found in Appendix B.

## Section IV

### Operation and Maintenance Program

This element of the SSMP includes several major programs and activities. The SSMP approach to each of the program and activities are as follows;

- (a) **Collection System Maps-** The District's mapping and inventory for the sewer collection system are on-going. As new infrastructure is constructed by a developer or applicant to the District's sewer system, the District's inspector ensures that the infrastructure being constructed is per District Engineer approved plans and to the District's Standards and Specifications. If changes are made during construction, the changes made are reflected in the form of "As Builts" and approved by the District Engineer and Inspector. District field operators carry sewer collection maps in their work vehicles and red line them if changes are made or errors are found. These red lined maps are then up-dated by the District's Engineer as needed. Maps for the District's sewer system can be found at the District's Wastewater Treatment Plant, District Office and in District work vehicles.
- (b) **O & M Preventive Activities-** The District's preventive operation and maintenance activities are outlined in the District's Operation and Maintenance Manual under Chapter IV. Maintenance. These activities include;
  - (1) Daily inspections at the Augusta and Bell Street lift stations, cleaning of headworks and recording influent daily flow.
  - (2) Weekly cleaning of grit and grease at the Bell Street Street lift station and the testing of backup generator and lift station alarms.
  - (3) Monthly weed abatement or when necessary.

(4) Quarterly driving inspection for loose manhole covers and clean outs, inspection and cleaning of “Hot Spots” typically around private sewer systems, such as mobile home parks and flat areas within the collection system.

(5) Yearly inspection of electrical components, per the District’s Annual Maintenance Agreement with a local electrician, as well as, in house testing of surge suppressers and annual inspection from District staff on all District facilities per the ACWA Joint Powers Insurance Authority.

(6) The District’s sewer collection system was built in 1989 and is comprised of all plastic pipes and one half mile of a forced sewer main. Wastewater generated within the collection system is mostly residential with some light industrial. In 2014 the District purchased a hydro jetter from the Santa Ynez CSD allowing the District to clean the entire collection system without contracting out. Cleaning of the system will be done quarterly, with the entire system cleaned every year. All 44,750 linear feet (8.50 miles) of the District’s sewer collection system was last hydro jetted in March 2014 and is scheduled for cleaning again before March 2015 or as needed.

(7) Per the District’s Odor Abatement Plan on file with the Santa Barbara County Air Pollution Control District, investigation for odor complaints are received at the District Office and are logged on the District Odor Complaint Form and are investigated promptly.

\* **Note:** LACSD Odor Abatement Plan can be found in Appendix C.

(c) **Rehabilitation and Replacement Plan**-The Los Alamos Community Services District’s Engineer is responsible for preparing a 5-year Wastewater Collection and Treatment Facilities Planning Study. This study provides analysis of the existing facilities for both the short and long term and identifies deficiencies and recommends improvements to the wastewater system where needed and recommends improvements to be made within the 5-year planning period, as well as for build out of the town. Proposed projects and maintenance, as well as, completed projects and maintenance can be found in Chapters 7 of the 5-year Wastewater Collection and Treatment Facilities Planning Study dated April 25, 2012. The next study will be conducted in 2017.

\* **Note:** LACSD 5-year Sewer Facility Planning Study can be found in Appendix D.

(d) **Training Program**-The LACSD ensures that all training provided to our employees is targeted at keeping treatment and collection system operators at the skill level that is required to provide proper treatment, operation and maintenance to the District’s facilities and equipment. Training is also targeted at keeping the District’s operators up to date with current permit requirements, as well as, current and future regulatory issues. Training typically includes but is not limited to; confined space entry, lockout, block out and tag out, injury and illness prevention, hazard communication, respiratory, CPR, first aid, regulatory updates, trench plate, shoring and traffic control. The SSMP approach to ensuring that LACSD employees are qualified to operate and maintain the District’s sewer collection system and treatment plant are follows;

(1) Operator Certification is required per the State Water Resource Control Board and is a requirement as outlined in the LACSD Employee Handbook and Pay Scale and Job Description Handbook as a condition of employment. All employees of the District must have or obtain within 24-months of employment certification as a Grade 1 Wastewater Treatment Plant Operator and certification as a Grade I Sewer Collection System Operator.

If an employee does not already have certification when hired, then they are required to obtain an Operator-In-Training Certificate until they pass the State exam. It is the District's policy to prepare our employees through education, training and hands on experience, as well as, pay the application fee for testing and certification renewal fee.

(2) Continuing Education Units (CEU) are required every 2-years for certification renewal. The LACSD ensures that all Operators receive the necessary continuing education and training in order to receive the necessary CEU's for renewal. Operators are sent to training classes offered by California Water Environment Association (CWEA), American Water Works Association (AWWA), California Rural Water Association (CRWA) and other various training classes with other sewer agencies, as well as, LACSD in-house training.

(3) Recognizing the mutual benefits derived from personal growth and increased work competence, it has been the policy of the LACSD to provide financial assistance to employees interested in furthering their formal education, as well as to provide support and financial assistance. This assistance is provided through the Educational Assistance and Training Program outlined in the Employee Handbook. The LACSD covers the costs for employees to take training classes required for their course of duty, pay tuition and required text for all courses leading to a job related degree or State Certification. Expenses for tuition and required text to obtain professional designations will be pre-paid/reimbursed at actual cost.

The written request must be complete with a description of the entire program, listing of classes required, explanation of job-relatedness to the LACSD, targeted career path with the LACSD, and defined timelines for completion of courses. A copy of the course description and necessary classes from the school catalog should be included. Professional job-related seminar fees, text, transportation, lodging and meals will be pre-paid/reimbursed upon approval.

(4) Financial assistance for training, continued education and certification is provided by the LACSD and is budgeted for as a line item expense within our annual budget. When preparing our Annual Budget, care is given to determine the training needs for our employees for that fiscal year. Additional funding for training is available through the State Small Water System Expense Reimbursement Grant Program.

- (e) **Equipment and Replacement Parts-** Critical equipment components within the District's sewer collection system are as follows;

**The Augusta Street lift station** is the smaller of the Districts two lift stations that currently serves 1-home. The crucial components to the lift station are:

The 2'' sump pump is used to transfer sewage from one side of San Antonio Creek to the other and into the collection system. The District has in inventory a new 2'' pump that is located in the cargo container at the Wastewater Treatment Plant and is specifically for the Augusta Street lift station in the event of a pump failure. The District also has a parts bin located in the cargo container with various sizes of pipe, parts and material used in the collection system.

The lift station is equipped with a visual red alarm light that will signal if there is pump failure way before overflow. The lift station is inspected daily and the alarm light and pump are checked manually weekly. The one resident next to the lift station has been informed about the alarm light and knows to contact the District if they see it on.

Power to the lift station is supplied by PG&E and is crucial for operation. Typical flows generated from a single family residents as identified by the District Engineer within the District's 5-year Facility Planning Study is 200 gallons per person per day. Although the lift station is not set up to accommodate alternative power supply such as a generator at this time, the lift station has a wet well capacity of 1,057 gallons, allowing for 3-5-days storage before overflowing. This is more than sufficient time for the District to respond to the situation and make the appropriate repairs prior to overflow.

**The Bell Street lift station** is the main lift station serving the community of Los Alamos. Everything within the sewer collection system is gravity fed to this lift station. The crucial components to the lift station are:

(1) The two 7.5 horse power pumps that are used to transfer the town's sewage the last half mile to the Wastewater Treatment Plant. The District has in inventory one 7.5 hp motor that is located in the control room at the Wastewater Treatment Plant. The chances of both pumps going out at the same time are unlikely.

(2) The Bell Street lift station is equipped through telemetry with a high and low level alarm that are tied into an automated control dialer that will call the on-call operator in the event of a high or low level situation at the lift station. The auto dialer also notifies the on-call operator in the event of a power outage to the lift station or treatment plant. The alarms are tested weekly at the lift station and the District has a consultant available at all times in the event that repairs/replacement of equipment is necessary to the telemetry system.

As a safeguard, the District as part of Wastewater Treatment Plant Phase III Expansion Project completed in October of 2006, added two additional wet wells that are interconnected with the primary wet well. The two new wet wells have a capacity of 3000 gallons each and have improved the lift station operation by

reducing pump cycles and have increased storage capacity in the event of lift station pump failure. An earthen dyke surrounds the lift station for added protection.

Weekly cleaning of the wet wells for grease, grit and other debris also aids in the prevention for potential buildup and overflow of raw sewage.

**Power** to the lift station is supplied by PG&E for normal operation. Alternative power for emergencies to the Bell Street lift station is supplied by an Onan generator located at the Wastewater Treatment Plant and is more than sufficient to operate the lift station at full capacity, as well as the entire Wastewater Treatment plant operations. The generator is equipped with an automatic transfer switch that will automatically transfer power to the generator if PG&E power is lost and will then automatically transfer back when PG&E power is restored.

There is 250 continuous gallons of diesel fuel capacity for the generator, which is more than sufficient to run the generator (treatment plant & lift station) for several days depending on load. The District has an additional 500 gallon diesel storage tank available at the wastewater treatment plant if needed.

**Testing** of the backup generator and basic mechanical checks are performed weekly. Testing of the generator can be accomplished in two ways (a) by manually dropping the main power breaker to the Wastewater Treatment Plant to signal power loss or (b) through the transfer switch by inserting a key and turning to test mode. This also signals a power loss and causes the generator to run. The District's operators alternate testing methods each week to ensure that the generator will work in both modes. The generator is run for 20-30 minutes a week on full load, including the Bell Street lift station to ensure all system components are working correctly. Basic mechanical checks on the generator include; oil, coolant, voltage setting, fuses, diesel levels and an overall visual inspection for anything out of the ordinary.

**Funding** for equipment and replacement parts is covered in several ways. The District's annual budget has line item expenses for equipment maintenance, sewer supplies and sewer repair and replacement (R&R). Sewer R&R reserves are available for larger aspects of the District's sewer collection system that may be needed. Other line item expenses that are available and may be needed include; building maintenance, outside services, equipment rental, permits and vehicle expense.

**Inventory** of a variety of spare parts, such as sanitary wyes, manhole covers, manhole rings, sewer plugs are also on hand. Major and minor parts are available 24-hours a day from several local supply houses. In addition, the District has a Mutual Assistance Agreement for manpower and resources with the Santa Ynez Community Services District and the Vandenberg Village Community Services District.

# Section V

## Design and Performance

This element of the SSMP consists of the District's Standards and Specifications for the design, construction, inspection, testing, and acceptance of new, rehabilitated or repaired portions of the sewer collection system and are as follows;

- (a) **Standards and Specifications-** The District's Standards and Specifications for Developer Extensions to the Sewer System were prepared by the District's Engineer, Bethel Engineering in October of 1993 and approved by the Los Alamos Board of Directors in Resolution No. 11-327. Resolution No. 11-327 was revised in September of 2002, April 2006 and August 2011.

The District's Standards and Specifications consists of, Tentative Map Submittal and Construction Drawing Submittal, Performance and Guarantee Bonds, Sewer System Design Standards, State Health Standards on sewer separation and Standard Details relating to manholes, cleanouts and sewer laterals.

- (b) **Inspection, Testing and Acceptance-** The District's General Manager and Engineer are responsible for the inspection of new, repaired or re-habilitated sewer projects or equipment and that it is tested and meets the required specifications in accordance with the District's Standards and Specifications.

The function of the inspector is to ensure that the infrastructure being constructed is in accordance with the standards, specifications, plans, profiles, cross-sections and the general and special provisions on file with the District Engineer and is logged accordingly on the District's Sewer Construction form sheet. If changes are made during construction, the changes made are reflected in the form of "As Builts" and approved by the District Engineer and Inspector. Once the project is completed to the satisfaction of the Districts General Manager and Engineer the District accepts conveyance of the facilities and easements and records said conveyance.

**\* Note:** The District's Standards & Specifications for Developer Extensions to the Sewer System can be found in Appendix E.

## **Section VI.**

### **Overflow Emergency Response Plan**

This element of the SSMP consists of the District's procedures for our Overflow Emergency Response Plan (ERP) in the event of a Sanitary Sewer Overflow (SSO) and to identify measures to protect the public health and the environment. The SSO Response chain of command will be followed to quickly notify the LACSD General Manager of any SSO. The General Manager will supervise the Field Crew and coordinate all emergency response actions. If the General Manager is away the designated Lead Operator will assume these duties. The Los Alamos Community Services District staff strives for a proactive approach to maintenance in an effort to reduce or minimize SSOs having impacts to the public health and the environment.

District personnel shall utilize the full resources of the District, including all District staff, contractors, pump trucks, vacuum trucks, tools, equipment and Mutual Aid Agreements with other agencies to contain and fix the SSO.

#### **Notification Procedures**

The District Office is staffed Monday-Thursday from 8:00 am until 4:30 pm, with District field staff available Monday-Friday from 8:00 am until 4:30 pm. On-call Operators are available after hours, weekends and Holidays. On-call personnel can be reached after hours or on Fridays through the District's phone messaging system or through the automated emergency alarm system.

Upon receiving a report of a Sanitary Sewer Overflow (SSO) the person receiving the report shall write down the following information immediately and accurately.

- Date
- Time
- Person reporting SSO
- Phone or cell phone number of person reporting the SSO
- Address or location of SSO
- Cause of SSO (if known)
- Estimated volume of spill in gallons
- Is the SSO near or in a water body
- And any other pertinent information that may help the responding operators

#### **Response Procedures**

Upon receiving the information about the SSO the employee shall immediately follow the Organizational Chain of Command for Receiving Notifications or Complaints as outlined in Chapter II of this Sewer System Management Plan (SSMP) and notify the appropriate District personnel. District personnel shall respond to a SSO within one half hour of notification.

## **Guidelines**

The following guidelines will be followed by the Field Crew when responding to an SSO:

1. Do not enter any manhole, blocked or unblocked, until assistance arrives.
2. Maintain a written log of all events.
3. Protect the public. Use safety tape, delineators, and other traffic control equipment to keep people and traffic away from sewage.
4. Contain the area of the spill. Use suitable materials to block flow and prevent sewage from reaching surface waters, storm drains, and residences.
5. Control the spill. Remove blockage from the manhole or sewer main, provide standby electrical power to a lift station, or otherwise remedy the problem that caused the spill.
6. Remove spillage. Arrange for the assistance of a vacuum truck by contacting one of the following:
  - Pacific Petroleum (24 hours) 925-1947
  - Speeds Oil Tool Service (24 hours) 925-1369
  - Barks Plumbing (24 hours) 928-5823
  - Mainline Utility (24 hours) 434-5015
7. Disinfect spill area. Apply HTH (calcium hypochlorite) to contaminated areas.

## **Critical Components of the Sewer System**

(1) The Augusta Street Lift Station is equipped with a visual red alarm light that will signal if there is pump failure. The lift station is inspected daily and has a wet well capacity of 1,057 gallons, allowing for 3-5-days storage before overflowing. This is more than sufficient time for the District to respond to the situation and make the appropriate repairs prior to a SSO.

**Action-** In the event of pump failure District staff is directed to call for a pump/vacuum truck and if necessary construct an earthen dyke around the lift station to contain the SSO. Do not allow the SSO to enter into any waterways. After resolution of the SSO remove all material effected by the SSO and dispose of at the Wastewater Treatment Plant and disinfect the area with HTH (calcium hypochlorite) to contaminated areas and flush as needed. Replace effected area with new material not contaminated by the SSO. Take laboratory samples if needed.

(2) The Bell Street lift station is the main lift station serving the community of Los Alamos. Everything within the sewer collection system is gravity fed to this lift station. The Bell Street lift station is equipped through telemetry with a high and low level alarm that are tied into an automated control dialer that will call the on-call operator in the event of a high or low level situation at the lift station.

As a safeguard, the Bell Street Lift Station has two additional wet wells that are inter connected with the primary wet well. The two wet wells have a capacity of 3000 gallons each and have improved the lift station operation by reducing pump cycles and have increased storage capacity in the event of lift station pump failure. An earthen dyke surrounds the lift station for add protection.

**Action-** In the event of pump failure District staff is directed to call for a pump/vacuum truck and to not allow the SSO to enter into any waterways. After resolution of the SSO, remove all material effected by the SSO and dispose of at the Wastewater Treatment Plant and disinfect the area with HTH (calcium hypochlorite) to contaminated areas and flush as needed. Replace effected area with new material not contaminated by the SSO. Take laboratory samples if needed.

## **Training**

All District personnel are trained on the appropriate notification and response procedures to SSOs and to this SSMP. District personnel will carry a copy of this plan in their work vehicles at all times. District administrative personnel will review this SSMP and its contents annually to ensure proper policies and procedures are adhered to and that District personnel is competent in carrying out said polices. These procedures are in place to provide immediate response and to protect the exposure to the public. District Personnel is also trained in Confined Space, Lock Out Tag Out, CPR, First Aid, Respiratory Protection and Hazard Communication.

**Contractors** working on District projects are required to have an approved sewage bypass system and emergency response plan in place prior to start of construction. Contractors are instructed to notify the District immediately and to take immediate action to stop any overflow. These procedures are outlined and discussed at the pre-construction meetings and enforced by the District.

**Traffic** in the town of Los Alamos is very light and therefore is manageable by use of appropriate delineators, signs and barricades. District personnel have been trained in the use of this equipment and traffic control. If additional help in the form of man power and resources are needed the District can utilize the Mutual Aid Agreements it has with other agencies within the area.

**Regulatory Reporting-** The priority is to take all feasible steps and necessary remedial actions to control or limit the release of untreated wastewater, minimize or prevent the discharge and recover as much of the wastewater discharged as possible.

## **SSO Categories**

1. Category 1 – All discharges of sewage resulting from system stoppage in the District’s sanitary sewer system that:
  - Equal or exceed 1,000 gallons; or
  - Result in a discharge to a drainage channel and/or surface water; or
  - Discharge to a storm drain pipe that was not fully captured and returned to the sanitary system.
2. Category 2 – All other discharges of sewage resulting from system stoppage in the District’s sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

## **SSO Reporting**

The General Manager is designated and authorized by the District to submit and certify SSO reports and to initiate proper regulatory and governmental agency notifications as required by the nature of the spill.

If there are no SSO during a calendar month, the District will provide, within 30 days after the end of each calendar month, a statement through the California Integrated Water Quality System (CIWQS) database certifying that there were no SSO for the designated month.

Category 1 SSO – Must be reported as soon as: (1) the District has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency actions. Initial reporting of Category 1 SSO must be reported to the Online SSO System as soon as possible but no later than 3 business days after the District is made aware of the SSO. A final certified report must be completed through the CIWQS electronic database within 3 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time within the 3-day period.

The following agencies will also be notified by telephone, as soon as possible:

- Office of Emergency Services (OES)  
Phone (805) 681-5526 or (916) 845-8911.
- Central Coast Regional Water Quality Control Board (RWQCB)  
Phone David Lacaro (805) 549-3892 or Ryan Lodge (805) 549-3506
- Santa Barbara County Environmental Health Department (EHD)  
Phone (805) 681-4922
- Department of Public Health Drinking Water Branch (DPH)  
Phone (805) 566-1326

Category 2 SSO – Must be reported to the CIWIQS electronic database within 30 calendar days after the end of the calendar month in which the SSO occurs (i.e., all SSO occurring in the month of January must be entered into the database by March 1).

Private Lateral Sewage Discharges – May be reported to the CIWIQS database at the District’s discretion. A responsible party (other than the District) should be identified, if known.

## **Section VII.**

### **FOG Control Program**

This element of the SSMP consists of the District’s policies to identify Fat, Oils and Grease (FOG) within our system. The Los Alamos Community Services District mainly serves residential customers, with some light commercial. The District has no industrial and because of our existing Ordinances related to FOG, has limited amounts of fats, oils and greases and has never had Fog related stoppages or overflows within the sewer system. The sewer collection system is hydro jetted on a scheduled basis.

The Los Alamos Community Services District believes in preventative maintenance and strives for a proactive approach to maintenance in an effort to reduce or minimize SSOs having impacts to public health and to our sewer system and therefore has implemented policies to reduce FOG into our system.

Included are requirements to install grease removal devices, design standards for the removal devices, maintenance requirements, record keeping and reporting requirements. The District has the Authority to inspect grease producing facilities, enforcement authorities, and sufficient staff to inspect and enforce the FOG requirements established by the District.

- (a) Los Alamos Community Services District through the use of the District’s Sewer Service Code, Ordinance No. 83 possesses the necessary legal authority to:  
Prevent illicit discharges of liquid, solids or debris into our wastewater collection system through Ordinance No. 83 Article 3, 3.02 and 3.03 & Article 11, 11.01 & 11.02.
- (b) Require that sewers and connections are properly designed and constructed through Ordinance No. 83 Article 7, 7.01-7.03 Article 8, 8.01-8.03 Article 9, 9.01-9.12 and Article 10, 10.01-10.19.
- (c) Access for maintenance, inspection or repairs for sewer mains and portions of the sewer lateral owned or maintained by the District are covered under Ordinance No. 83 Article 1, 1.05 and Article 10, 10.03-10.05.

- (d) Limit the discharge of fats, oils and grease and other debris that may cause blockages and has authority and enforcement provisions under Ordinance No. 83 Article 11, 11.01, 11.02, 11.03 & 11.04.
- (e) The District's ability to enforce any violation of its Sewer Service Code, Ordinance No. 83 is outlined in Enforcement Provisions under Article 16, 16.01-16.09.
- (f) Uses bug buffets in the sewer lift stations to maintain grease levels. The Bug Buffet is a self-contained, self-dispensing block; chock full of bacterial spores and enzymes that eat their way through grease and waste. As the Bug Buffet slowly dissolves, it helps keep lift stations clean and odor-free.
- (g) The District's preventive operation and maintenance activities are outlined in the District's Operation and Maintenance Manual under Chapter IV. Maintenance. These activities include; daily inspections at the Augusta and Bell Street lift stations, cleaning of headworks, quarterly driving inspection for loose manhole covers and clean outs, inspection and cleaning of "Hot Spots" typically around private sewer systems, such as mobile home parks and flat areas within the collection system.

## **Section VIII.**

### **System Evaluation & Capacity Assurance**

This element of the SSMP includes several major elements and activities, including Capacity Evaluation, Design Criteria and Project Scheduling/Funding.

**Capacity Evaluation** – The District's wastewater collection system was completed in 1988 and delivers sewage from the residential and commercial properties in the District to the treatment plant. The collection system is composed of laterals, feeder lines, trunk lines, two lift stations and a force main that delivers sewage to the wastewater treatment plant. The collection system, including trunk lines were evaluated, designed and constructed to handle full build-out of the Community Services District Boundary line, as well as, to handle expansion of the Urban Boundary Line which would require annexation into the District (Approximately 22 parcel's).

As additional development projects come on line to the system, the wastewater collection system is expandable by way of main line extensions, including laterals. The Capacity is limited only to the pipe sizing and the related ability of the connected lift stations.

As a side note, the wastewater treatment plant was also constructed to far exceed full build-out of the town but as the demand on the collection system increases evaluation also needs to be given to the District's current permitted capacity of the effluent spray irrigation and related infrastructure improvements that will be needed. As part of the District's Wastewater Discharge Permit, No. R3-2005-0133, when the District reaches 75% of its permitted capacity, the District will start the process of evaluating the need to expand the spray irrigation fields and related infrastructure to increase our permitted capacity with the RWQCB.

**Design** – The purpose of the District's wastewater collection system is to provide safe and reliable removal of effluent for all applicable developments and uses. This requires that pressure and volume requirements be met during peak wet weather flows. To meet these requirements, collection lines must be sized to provide maximum build-out flows. The wastewater collection system presently has a 12-inch diameter trunk line that is rated at 940gpm peak hourly flow. This amount would equate to an average daily flow of 387,000 gpd using a peaking factor of 3.5. The main trunk lines for the wastewater collection system are more the adequate to meet build out conditions of 199,205 gpd.

**Project Scheduling/Funding**– The wastewater collection system needs certain improvements and funding to provide a safe, efficient system. Improvements and funding fall under two categories, Maintenance Projects and Capital Improvement Projects.

**Maintenance Projects** such as hydro-jetting of the entire collection system, cleaning and disposing of accumulated sludge from the treatment ponds are paid from the maintenance funding within the operating expense portion of the District's budget while repairs and the replacement of the collection system piping as needed are paid for with depreciation funds within the District's operating expense portion of the budget. Adequate depreciation funding that represent actual costs need to be set aside for the repair and replacement of piping and infrastructure so that funds will be available when the time comes.

Maintenance Projects are evaluated and scheduled yearly while preparing the Fiscal Year Budget with funds allocated in the maintenance line item portion of the operating expense budget to cover maintenance projects. Other long term maintenance projects, along with the scheduling are addressed within the District's 5-year Wastewater Collection and Treatment Facilities Planning Study.

**Capital Improvement Projects** (new improvements) are paid for by the District's Capital Improvement Fees that are collected when new development occurs. The purpose of the Capital Improvement connection charge is to help defray costs for connection to the sewer system, any necessary physical improvements to the system's capacity or design.

Scheduling and funding of Capital Improvement Projects are addressed within the Districts 5-year Wastewater Collection and Treatment Facilities Planning Study. The Capital Improvements recommend within the study will allow the District to provide a high level of wastewater service to its present and future customers.

\* **Note:** LACSD 5-year Sewer Facility Planning Study can be found in Appendix D.

## **Section IX.**

### **Monitoring, Measurement & Plan Modification**

This element of the SSMP is based on preventative maintenance and continuous improvement approach. This section includes the identification and tracking of a few key performance indicators that will be used to measure the progress of the SSMP implementation and the performance of the Districts collection system. The District shall keep accurate information on the following;

- Maintain relevant information that can be used to establish and prioritize SSMP activities.
- Monitor the implementation and where appropriate, measure the effectiveness of each element of the SSMP.
- Assess the success of the preventative maintenance program.
- Keep accurate records on service calls, blockages, SSO's over the past 12 months.
- Keep accurate records to the cause, as to why SSO events occurred, e.g. roots, grease, debris or other.
- Keep accurate records to the volume of SSOs and volume contained, annual maintenance production by activity compared to plan, e.g. quantity of sewers cleaned vs. planned.
- Update program elements, as appropriate, based on monitoring or performance evaluations.

## **Section X.**

### **SSMP Program Audits**

The District shall conduct periodic internal audits, appropriate to the size of the District's collection and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file with the District. The General Manager is the responsible for conducting the internal audit. This audit shall focus on evaluating the effectiveness of the SSMP and the Districts compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

**Final April 27, 2011**  
**Audit April 16, 2013**  
**Revisions March 12, 2014**  
**Audit April 2015**  
**Audit April 2017**  
**Revisions August 2017**

## APPENDIX A.

Emergency Contact & Local Agency Information

**Information Not Available**

## APPENDIX B.

LACSD Second Amended Sewer Service Code, Ordinance No. 83

**Please see Link to Sewer Service Code on  
our Sewer Service Web Page**

## APPENDIX C.

LACSD Odor Abatement Plan & Odor Complaint Form

**Please see [Link](#) to our Odor Abatement  
Plan and Odor Complaint Form on our  
Sewer Service Web Page**

## APPENDIX D.

LACSD 5-Year Sewer Facility Planning Study

**Please see [Link to the LACSD 5-Year Sewer Facility Planning Study](#) on our Sewer Service Web Page**

## APPENDIX E.

Standards & Specifications for Developer Extensions to the Sewer System

**Please see [Link to our Standards & Specifications for Developer Extensions to the Sewer System on our Sewer Service Web Page](#)**