

**West Valley Sanitation District
Maintenance Worker Specialty Designation**

September 11, 2013

Purpose of Specialty Designations

The purpose of designating a specialty position is to recognize the specific responsibilities, knowledge, certification, and skills/abilities required for the management of specialized programs or duties within the Operations Department. These programs and duties are considered to be critical elements for the maintenance of the wastewater collection system and or other significant District maintenance functions. Specialty designations are only assigned and held by journey level maintenance staff at the Maintenance Worker II or Maintenance Lead Worker positions.

Criteria for Specialty

A description of each specialty designation is provided to define the specialty and describe the responsibilities and qualifications required of the position. It should be noted that the responsibilities of the specialty position are in addition to those identified in the maintenance classification of the Maintenance Worker II or Maintenance Lead Worker. The general guidelines used to establish the specialty position responsibilities and qualifications are shown below.

1. Responsibility – The individual possessing a specialty designation has the responsibility for managing the specialty program and performing the tasks associated with it. This responsibility may include the supervision of staff, planning and scheduling of work, operation and maintenance of specialized equipment, ordering materials, purchase of new equipment, participation in the budgeting process, data input to maintenance management software (Lucity), producing management reports (Lucity, MS Word or Excel), coordination with public or government entities, and other responsibilities as described.

2. Knowledge – A minimum amount of experience and technical training are typical requirements to qualify as a specialist. Qualifying experience is gained through work under the supervision and direction of a specialist. In some cases, substantial on-the-job experience performing this work could also qualify. Technical training may be obtained through coursework at high school, college, university, technical trade school, or technical training courses and seminars. Periodic training to refresh

knowledge and to keep up with new technology and methodologies is always encouraged and is sometimes required to optimize the individual's effectiveness in the specialty position.

3. Certification – All specialties require some level of certification(s) to show that the specialist is technically knowledgeable and qualified to perform the work required. Certifications can be obtained from trade organizations, or learning institutions noted above, or through the State of California or state sanctioned organizations such as the CWEA. As with training, recertification is an important factor in demonstrating that the individual's level of competency is current.
4. Skills/Abilities – In addition to having the knowledge and certification for the specialty, the specialist must also have the skills and abilities to perform the tasks involved. In addition to the overall physical strength and flexibility requirements of the Maintenance Worker, there are a number of unique physical or mental aptitudes that may be required. These include the ability to use specialized hand tools and equipment, effective use of verbal and written communication, use of computers and software, and the ability to read and interpret technical drawings, etc.

Compensation for Specialty Position

The compensation for all specialties shall be as stated in the most current Classification and Salary Range schedule for the Maintenance Employees Unit. In addition, the District will pay for all applicable training, certification tests, and certification renewal costs related to the specialty. A reasonable amount of time during work hours will be granted for studying, preparing, and taking certification tests.

Current Specialty Positions

The specialty positions currently in effect are:

- Pump Station Maintenance (PSM) Specialty
- Closed Circuit Television (CCTV) Specialty
- Mechanical Maintenance (Fleet MM and General MM) Specialty
- Storm Drain Maintenance (SDM) Specialty

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Pump Station Mechanic Specialty

Specialty Description

The Pump Station Mechanic (PSM) Specialty is established to provide qualified staff for the maintenance and operation of the District's pump stations and portable pumps. It is of critical importance to ensure that the District pump stations reliably and efficiently convey wastewater from the areas they serve to prevent sewage backups and sanitary sewer overflows. Similarly, the portable pumping systems and portable emergency generator must also be well maintained and ready for use in case of emergency bypass situations or electrical outages.

The PSM has the primary responsibility for maintaining all aspects of the District's Pump Stations, portable pumps, and portable emergency generator and ensures that they are well maintained, properly functioning, and kept in a safe and clean operating condition. In addition to performing mechanical maintenance on pumps, piping, and valves, the PSM also is required to perform basic electrical/instrumentation maintenance, maintenance of the pump station grounds, and monitors pump station operation through SCADA.

Specialty Responsibilities

1. Repairs, maintains, installs, inspects, troubleshoots, and adjusts pump station equipment including pumps, piping, valves, electrical supply, control panels, transfer switches, and SCADA.
2. Develops a preventive maintenance schedule using LUCITY for all pump station components and portable pumps. Inputs work details, time, and cost data into LUCITY to close out work orders.
3. Ensures that the pump station and portable pump Operation and Maintenance manuals are kept current and are accessible. Creates and maintains pump station maintenance check lists to ensure that pump station work is completed thoroughly, consistently, and in a safe manner.
4. Generates Work Orders as needed for all unplanned or corrective maintenance needs of the pump station and portable pumps.
5. Establishes and maintains a pump station and portable pump maintenance supply area in the existing shop area. Stocks supply area with required tools, spare parts and supplies for pump maintenance.

Pump Station Mechanic Specialty Description

6. Closely works with Operations Department supervisors to plan pump station maintenance activities and coordinate staff and equipment support.
7. Provides training and mentoring for Maintenance Worker(s) assisting in pump station and portable pumping maintenance.

Specialty Qualifications

Knowledge

The PSM must have demonstrated journey level competency regarding pumps and pumping systems. This knowledge can be obtained through past work experience and specialized training/certification. The specialist must also have basic working knowledge of LUCITY in order to fulfill the responsibilities cited above.

A minimum of one year of demonstrated and substantial pump station maintenance work experience is required. This experience must be gained under the supervision and guidance of a PSM specialist, or equivalent.

Maintenance training at a Flygt Pump repair facility is required within six months of obtaining the specialty designation. In addition, a minimum of one specialized training course every 18 months in pump maintenance and troubleshooting, pump theory, basic electrical theory, electrical system maintenance, mechanical piping, pump station safety, etc. is also required.

The District encourages the specialist to obtain additional knowledge through attendance at CWEA conference sessions or local CWEA training sessions. It is expected that there will be an ongoing effort by the PSM specialist to supplement or update areas of knowledge that need enhancement.

Certification

The minimum certification for this specialty is the CWEA Plant Maintenance Technologist Grade I which is to be acquired within 24 months of obtaining the specialty designation. CWEA offers two certification tracks beginning at the Plant Maintenance Technologist Grade I level. From this point there is the Mechanical Technologist Grades II – IV and the Electrical/Instrumentation Technologist Grades II-IV. Since this certification is primarily focused on plant maintenance and because the District's pump stations are very small and simple, acquiring grade levels beyond Grade I, is encouraged, but not mandatory.

Pump Station Mechanic Specialty Description

Skills and Abilities

The PSM must possess the following skills and abilities:

1. Accurately reads and interprets civil, mechanical, and electrical drawings, plans, and specifications.
2. Properly diagnose and troubleshoot mechanical and electrical pump station equipment performance problems.
3. Properly uses hand tools and electrical meters to make repairs and perform routine preventive and predictive maintenance on pump station equipment.
4. Interprets SCADA information to monitor pump station performance and to anticipate potential problems.
5. Effectively utilizes LUCITY in a) scheduling and creating preventive maintenance work orders, b) generating unplanned maintenance work orders, c) tracking spare parts and supply inventories, d) generate reports summarizing pump station cost, maintenance history, etc.
6. Recognizes conditions requiring repairs or work by contractors, manufacturers, and consultants.
7. Effectively uses computers and software to write reports, request purchase orders, and tabulate data for use by management.

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Closed Circuit Television Specialty

Specialty Description

The Closed Circuit Television (CCTV) Specialty is established to provide qualified staff for the televising activities of the District's collection system. The CCTV effort is critical to the management of the District's collection system by providing specific information regarding pipe condition and assessment, lateral locations, and identifying active or potential blockages. The information obtained is utilized to determine appropriate cleaning methods, prioritize cleaning activities, and helps define and prioritize replacement and rehabilitation projects.

The CCTV specialist has the primary responsibility for managing all aspects of the District's CCTV program including the planning, preparation, and execution of all CCTV related work. The specialist ensures that inspection work is consistent and follows accepted standards established by NASSCO as part of their Pipeline Assessment, Manhole Assessment Certification Programs, and Lateral Assessment Certification Programs (PACP, MACP, and LACP). The CCTV specialist is also responsible for the performance of routine electrical and mechanical maintenance on CCTV equipment.

Specialty Responsibilities

1. Works closely with Operation Department supervisors to plan annual CCTV work and establish annual production goals.
2. Coordinates with Operation Department supervisors to plan CCTV and maintenance work activities.
3. Performs regular quality control checks on all CCTV inspection tasks to ensure that work is being conducted in accordance with PACP/MACP guidelines.
4. Completes both scheduled and unscheduled CCTV work accurately and in a timely basis. Inputs work details, time, and cost data into LUCITY to close out work orders.
5. Ensures that the CCTV equipment Operation and Maintenance manuals are kept current and accessible.
6. Develops a preventive maintenance schedule using LUCITY for all CCTV equipment and performs basic maintenance on CCTV equipment. Generates Work Orders as needed for all unplanned or corrective equipment maintenance.

Closed Circuit Television Specialty Description

7. Establishes and maintains a CCTV maintenance supply area in the existing shop area. Stocks supply area with required tools, spare parts and supplies.
8. Recommends to and or participates in discussions with supervisors and engineering staff regarding improvements to the CCTV equipment and CCTV program.
9. Provides training and mentoring for Maintenance Worker(s) assisting in CCTV work and equipment maintenance.

Specialty Qualifications

Knowledge

The CCTV specialist must have demonstrated journey level competency regarding the operation and maintenance of CCTV equipment. This knowledge can be obtained through past work experience and specialized training/certification. The specialist must also have basic working knowledge of LUCITY in order to fulfill the responsibilities cited above.

A minimum of one year of demonstrated and substantial CCTV work experience is required to qualify as a CCTV specialist. This experience must be gained under the supervision and guidance of a CCTV specialist, or equivalent.

As a minimum, training in pipeline/manhole/lateral inspection and assessment as offered through NASSCO as part of their Pipeline Assessment and Manhole Assessment Certification Programs (PACP / MACP/LACP) is required. The specialist must also obtain current training in the operation and maintenance of CCTV equipment and the use of CCTV software.

The District encourages the specialist to obtain additional knowledge through attendance at CWEA conference sessions or local CWEA training sessions. It is expected that there will be an ongoing effort by the CCTV specialist to supplement or update areas of knowledge that need enhancement.

Closed Circuit Television Specialty Description

Certification

The specialist must possess PACP/MACP/LACP certification through NASSCO prior to assignment of the specialty designation within 6 months of obtaining the specialty designation. Once certification is obtained, the specialist will be required to recertify every three years.

Skills and Abilities

The CCTV specialist must possess the following skills and abilities:

1. Accurately reads and interprets CCTV manufacturer's technical drawings and O&M manuals.
2. Demonstrates expertise in the use of CCTV camera systems, operating software, and equipment.
3. Properly uses hand tools and electrical meters to make repairs and perform routine preventive and predictive maintenance on CCTV equipment.
4. Efficiently utilizes LUCITY in a) scheduling and creating preventive maintenance work orders, b) generating unplanned maintenance work orders, c) tracking spare parts and supply inventories, d) generate reports summarizing CCTV work, maintenance history, etc.
5. Effectively uses computers and software to write reports, request purchase orders, and tabulate data for use by management.

Maintenance Worker Specialty Designation

Mechanical Maintenance Specialty

Specialty Description

The Mechanical Maintenance Specialty involves two distinct specialty areas essential to the District's maintenance function; Fleet Mechanical Maintenance (Fleet MM) and General Mechanical Maintenance (General MM). A majority of work performed at the District is highly dependent upon the use of Administration and Operations fleet vehicles. There are a number of various cleaning equipment, associated implements, and tools that are used for collection system maintenance. It is imperative that fleet vehicles, cleaning equipment, and tools are all kept in prime working order to accomplish the mission of the District.

The primary responsibility of the Fleet MM Specialist is to ensure that all fleet vehicles and cleaning equipment are well maintained, reliable, and kept in a safe and clean operating condition. The General MM specialist covers a wider variety of mechanical maintenance work and besides being the primary field mechanic and welder the specialist serves as a mechanic assistant to the Fleet MM Specialist and Pump Station Mechanic specialist.

Specialty Responsibilities

Fleet MM Specialist

1. Repairs and maintains all District vehicles and engine driven equipment in accordance with the manufacturer's recommendations. Utilizes computerized diagnostic equipment to analyze problems.
2. Develops and maintains a preventive maintenance schedule using LUCITY for all fleet vehicles and engine driven equipment. Inputs work details, time, and cost data into LUCITY to close out work orders.
3. Generates Work Orders as needed for all unplanned or corrective maintenance needs for fleet vehicles and engine driven equipment.
4. Establishes and maintains a fleet vehicles and engine driven equipment maintenance supply area. Stocks supply area with required tools, spare parts and supplies for this maintenance.
5. Provides fleet maintenance training and mentoring as deemed necessary for the General MM specialist.

Mechanical Maintenance Specialty Description

General MM Specialist

1. Performs all field mechanical maintenance repairs on all ancillary cleaning equipment and tools on fleet maintenance vehicles, including welding, torching, or cutting.
2. Designs and fabricates special tools, or alters existing ones, to meet the needs of the Maintenance staff.
3. Provides assistance to the Fleet MM specialist in performing maintenance of fleet vehicles and engine driven equipment.
4. Provides assistance to the Pump Station Mechanic specialist in performing maintenance of pump stations and portable pumps.

Specialty Qualifications

Knowledge

The Fleet MM Specialist must have demonstrated journey level competency regarding the maintenance and repair of fleet vehicles. This knowledge can be obtained through past work experience and specialized training/certification. A minimum of two years of demonstrated and substantial fleet maintenance work experience on both automobiles and trucks is required to qualify as a Fleet MM specialist. This experience must be work performed as a National Institute for American Service Excellence (ASE) certified mechanic, or work performed under the supervision and guidance of an ASE certified mechanic. Specialized training through ASE (A series and T series) and Vactor Training School is required. The Fleet MM Specialist must also have basic working knowledge of LUCITY in order to fulfill the responsibilities cited above.

The General MM Specialist must have demonstrated mechanical competency in fleet maintenance, pump station maintenance, welding, and metal fabrication. Although knowledge in fleet maintenance and pump station maintenance does not have to be to the same degree as that of the Fleet MM and PSM, it is encouraged. A minimum of one year of demonstrated maintenance work experience covering each category is required to qualify as a General MM specialist. Specialized training in Flygt Pump Training, and Vactor Training School is required.

Mechanical Maintenance Specialty Description

The District encourages the MM specialists to obtain additional knowledge through technical or junior college coursework. It is expected that there will be an ongoing effort by the MM specialists to supplement or update areas of knowledge that need enhancement.

Certification

Fleet MM Specialist – Certification as a Master Automobile Technician and a Master Medium/Heavy Truck Technician (A-1, T-1, T-2) is required within 12 months of obtaining the specialty designation. In addition, a certificate of training from the Vector Operator and Maintenance School is also required.

General MM Specialist - Certification as a welder, preferably through the American Welding Society, is required within 12 months of obtaining the specialty designation. In addition, a certificate of training from the Vector Operator and Maintenance School and Flygt Pump is also required. It is also desirable, but not required, to obtain CWEA certification as a Plant Maintenance Technologist Grade I.

Skills and Abilities

The Fleet MM and General MM specialists must possess the following skills and abilities:

1. Read and interpret equipment schematics and O&M manuals.
2. Proper use of shop tools and equipment.
3. Diagnose and troubleshoot fleet vehicle problems (Fleet MM Specialist).
4. Perform repairs, routine preventive and predictive maintenance on equipment.
5. Competently perform welding, torching, and metal fabrication for equipment and tool repair (General MM Specialist).
6. Utilize LUCITY in a) scheduling and creating preventive maintenance work orders, b) generating unplanned maintenance work orders, c) input of maintenance repair data, d) tracking spare parts and supply inventories, e) generate reports summarizing fleet maintenance cost, maintenance history, etc. (Fleet MM Specialist).
8. Effectively uses computers and software to write reports, request purchase orders, and tabulate data for use by management (Fleet MM only).

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Storm Drain Maintenance Specialty

Specialty Description

The Storm Drain Maintenance (SDM) Specialty is established to provide qualified staff for annual maintenance of the storm drain systems within Los Gatos, Saratoga, Monte Sereno, and Campbell as part of the West Valley Clean Water Program (WVCWP). This program was established to assist District member entities in meeting the mandate of the Federal EPA and State Water Resources Control Board to eliminate storm water runoff pollutants. This program is funded by each of the member entities and is managed by WVCWP.

The SDM Specialist has the primary responsibility for managing all aspects of the District's Storm Drain Maintenance Program including the planning, preparation, and execution of all storm drain inspection and cleaning work. The SDM Specialist serves as the District's primary resource for storm drain related issues and has the responsibility to provide reports for and attendance at periodic and annual WVCWP meetings.

Specialty Responsibilities

1. Works closely with Operations supervisors to plan annual storm drain inspection and cleaning work.
2. Develops and maintains a Standing Operating Procedure for Storm Drain maintenance to ensure that storm drain work is completed thoroughly, consistently, efficiently, and in a safe manner.
3. Ensures that storm drain Work Order information is properly entered into LUCITY.
4. Compiles storm drain inspection and maintenance data reports from LUCITY and assists in the development of the annual Storm Drain Program Report.
5. Represents the District at selected West Valley Clean Water Program meetings.
6. Provides storm drain knowledge and expertise to maintenance crews responding to sanitary sewer overflow incidents.

Storm Drain Maintenance Specialty Description

7. Recommends to and or participates in discussions with supervisors and engineering staff regarding improvements to storm drain maintenance methodology and to the overall storm drain program.
8. Provides training and mentoring for Maintenance Worker(s) assisting in Storm Drain maintenance work.

Specialty Qualifications

Knowledge

The SDM Specialist must have demonstrated journey level competency regarding storm drain maintenance, and an intimate knowledge of the storm drain system of the participating cities. This knowledge can be obtained through past work experience and specialized training. The specialist must also have basic working knowledge of LUCITY in order to fulfill the responsibilities cited above.

A minimum of two annual cycles of demonstrated and substantial storm drain maintenance work experience in this District is required to qualify as a SDM specialist. This experience must be gained under the supervision and guidance of an SDM Specialist, or equivalent. In addition to storm drain maintenance work experience, it is desirable for the specialist to possess training in storm water best management practices and related subjects regarding storm water system maintenance.

The District encourages the specialist to obtain additional knowledge through attendance at CWEA conference sessions or local CWEA training sessions. It is expected that there will be an ongoing effort by the SDM Specialist to supplement or update areas of knowledge that need enhancement.

Certification

Currently there are no certification requirements for the SDM specialty. It is possible that in the near future a certification program may be developed, at which time, certification may be required.

Storm Drain Maintenance Specialty Description

Skills and Abilities

The SDM specialist possesses the following skills and abilities:

1. Accurately reads and interprets civil drawings depicting storm drain collection systems.
2. Demonstrates a high level of proficiency in the use of tools and equipment necessary for performing storm drain maintenance tasks.
3. Effectively utilizes LUCITY to a) schedule and create storm drain inspection and cleaning work orders, b) enter accurate time and cost information, and c) generate reports summarizing storm drain maintenance history, etc.
4. Effectively uses computers and software to write reports, request purchase orders, and tabulate data for use by management.