

Test Content Specifications for the Mechanical Technologist Grade IV
Revisions in Effect Beginning January 2007 Certification Exam Cycle

Brief description of the Grade Level in relation to the job family.	Program manager level.
Level of knowledge, skill and ability within the job family, in relation to job tasks, including the taxonomic level of knowledge applied on the job.	Knowledge, skill and ability to administer, coordinate and manage complex programs across vocations. This includes: analysis, synthesis, and evaluation.
Level of supervision received.	May receive broad direction.
Level of supervision exercised.	Will coordinate program activities within or across vocations.
Level of training provided to other personnel.	Designs and administers training programs within the job family.
Use of tools.	Manages and evaluates systems and facilities.
Problem solving and trouble shooting responsibilities.	Evaluates program effectiveness and takes corrective actions as needed.
Actions in relation to safety problems.	Designs and administers safety programs.
Actions in relation to standard operating procedures (S.O.P.s), laws and regulations.	Assures program compliance with laws and regulations.
Actions in relation to documentation of work activities.	Responsible for quality assurance of program documentation.

ESSENTIAL DUTIES

400. Essential duties identified on the Test Content Specifications for Plant Maintenance Grade I and Mechanical Technologist Grades II and III.. Deleted: Electrical Instrumentation Technology
401. Initiates, plans, directs and oversees the sequence of operations for large and complex repair maintenance and construction work at treatment plants, pump stations, storm drainage stations, potable and other associated water systems Deleted: wastewater Deleted: wastewater
402. Coordinates staffing with operational and mechanical activities, directs the coordination of assigned work with appropriate personnel, reviews preliminary design and specification, and in association with appropriate staff, makes recommendations involving modifications to facilities.
403. Directs, coordinates and reviews the work plan for assigned electrical/instrumentation plant facility services and activities; assigns work activities and projects, monitors work flow; reviews and evaluates work products, methods and procedures; and meets with staff to identify and resolve problems.
404. Establishes policies and procedures for operation and maintenance of complex electrical/instrumentation treatment equipment, chemical handling systems and oxygen injection. Deleted: water and wastewater
405. Designs and implements training of crews in appropriate plant maintenance, construction, repair and safety principles to meet and comply with national, federal, state, and local regulations.
406. Schedules and directs computer based maintenance programs.
407. Formulates, initiates and directs the operational parameters for facilities and equipment under manager's jurisdiction, including storm periods or emergencies.
408. Approves time sheets, equipment, labor changes and assigns priority of work orders.
409. Participates in the development and implementation of goals, objectives, policies and priorities.
410. Selects, train, motivates and evaluates personnel performance; and implements discipline and termination procedures, when required.
411. Prepares and presents staff reports and other correspondence as appropriate and necessary.
412. Designs and administers safety programs.

KNOWLEDGE, SKILLS AND ABILITIES

400. Knowledge, skills and abilities identified on the Test Content Specifications for Plant Maintenance Grade I, and Mechanical Technologist, Grades II, and III.

Knowledge of: (all knowledge statements are weighted equal)

401 The methods, materials, equipment, and chemicals used in the maintenance, repair and construction of various types of mechanical, hydraulic, pneumatic, chemical, and electrical/instrumentation components in treatment plants, complex pumping stations, potable water facilities, and chemical handling.

402 Safety principles and CAL-OSHA requirements involved in all aspects of plant maintenance work, equipment usage, and confined space work performed.

403 Supervisory principles and practices which include training, planning and scheduling effective use of personnel, equipment, materials, and budgeting.

404 Computer systems relevant to water and/or wastewater treatment facilities.

405 Pertinent federal, state and local laws, codes and regulations.

407 Permit and regulatory requirements for the operation of the facility.

408 Principles of budget preparation and control.

Skill to:

409 Establish and maintain effective working relationships with those contacted in the course of work including a variety of government officials and the general public. (20%)

410. Direct operations of all mechanical, hydraulic, pneumatic, and electrical and instrumentation equipment used in water and/or wastewater treatment plant operations. (40%) (Changed from 50% to 40%)

411 Communicate clearly and concisely, both orally and in writing. (30%)

Ability to: (ALL ABILITY STATEMENTS ARE WEIGHTED EQUAL)

412 Supervise, direct and coordinate the work of lower level staff.

413 Hire, supervise, train and evaluate staff.

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Deleted: performance evaluations

Deleted: 406 . Water quality control plant compliance regulations.

Deleted: Methods and techniques of water quality compliance reporting.

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414 Interpret and explain applicable policies and procedures.

415. Prepare clear and concise reports.

| 416. Plan and oversee complex jobs, including the utilization of personnel, materials, and equipment.

| 417. Interpret and explain blueprints, specifications, and maps.

Deleted: Read, i

| 418. Prepare and communicate budget information.

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| 419. Maintain facility to meet permit and regulatory requirements.

Deleted: in compliance with applicable water quality control and environmental regulations