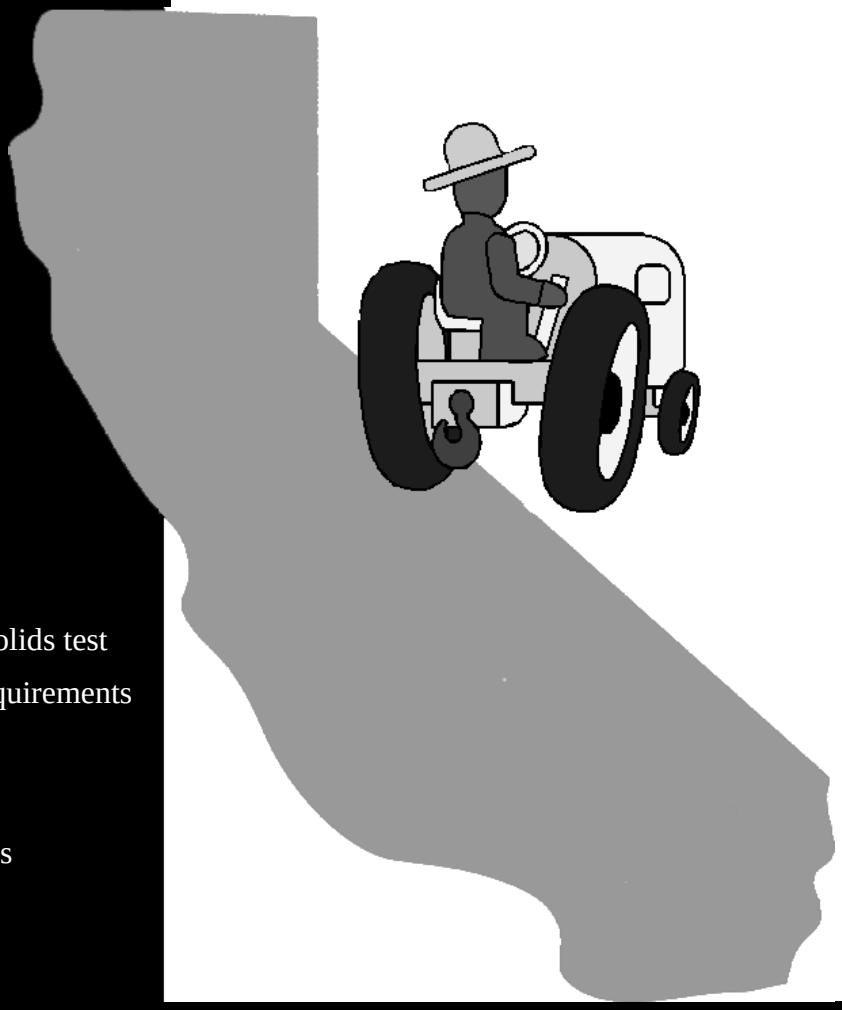
Biosolids Land Application Management Certification

2009

Candidate Handbook



This booklet contains...

- ✓ Subject matter for the Biosolids test
- ✓ Education & experience requirements
- ✓ Selected study references
- ✓ Certification policies
- ✓ Frequently Asked Questions

Biosolids Land Application Management
2009

Candidate Handbook

This handbook contains information about the Biosolids Land Application Management certification program. Please read this entire handbook to become familiar with certification procedures and policies. As a certificate applicant, you are responsible for knowing the contents of this handbook. If you have any questions please contact your Local Section Chair (listed in the TCP Application) or the CWEA office at 510-382-7800.

Statement of Non-Discrimination Policy

CWEA does not discriminate among applicants on the basis of age, gender, race, religion, national origin, disability, sexual orientation or marital status.

California Water Environment Association
Technical Certification Program
7677 Oakport Street, Suite 600
Oakland, CA 94621

phone: 510-382-7800
fax: 510-382-7810
web: www.cwea.org

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Introduction

The California Water Environment Association

CWEA's mission is to enhance the education and effectiveness of California wastewater professionals through training, certification, dissemination of technical information, and promotion of sound policies to benefit society through protection and enhancement of the water environment.

CWEA is a California Nonprofit Corporation and is a Member Association of the Water Environment Federation and a member of the National Organization for Competency Assurance.

The Technical Certification Program

The Technical Certification Program (TCP) was created to offer multilevel technical certification for individuals employed in the water quality field. Tests are written by vocational specialists and administered throughout the year in five different disciplines: Collection System Maintenance, Environmental Compliance Inspection, Laboratory Analyst, Plant Maintenance (Electrical/ Instrumentation and Mechanical Technologist), and Industrial Waste Treatment Plant Operator.

CWEA first offered a certification program for operators of wastewater treatment plants in 1937. The program was administered by CWEA until 1973 when the State of California assumed responsibility for the program. During those 36 years, CWEA awarded 3915 operator certificates.

In 1975 the first committees were formed to establish a new voluntary certification program for water quality professionals specializing in disciplines other than plant operation. Eventually, the Voluntary Certification Program (VCP) emerged with specialized certificate programs for Collection System Maintenance, Plant Maintenance, Environmental Compliance Inspector, and Laboratory Analyst. The first of the new certifications were given in April of 1976. In the 1980s two more disciplines were added: Electrical/Instrumentation, and Industrial Waste Treatment Plant Operator.

Today CWEA offers certification in five different vocational programs with four progressive grade levels. About 2,000 certification applications are processed every year and over 5,500 certificates are currently held by individuals in California, Michigan, Hawaii, Missouri and Alaska.

Biosolids Land Application Management

Biosolids are primarily organic solids that are generated by the wastewater treatment process and that can be beneficially recycled. Biosolids recycling can be accomplished in many ways. One way is application to agricultural land to condition the soil (soil amendment) and/or fertilize crops. This is referred to as *land application*. Biosolids in California have been recycled as soil amendment on home gardens and agricultural lands since the late 1920s. This recycling effort continued on a modest scale until the early 1970s, when new state and federal water quality laws mandated a reduction in pollutants being discharged into sewers and higher levels of wastewater treatment by publicly owned treatment works (POTWs). Industrial source control programs effectively reduced the contaminant levels in sewer discharges and caused a significant decline in biosolids metal concentrations.

POTWs improved wastewater treatment by upgrading and expanding treatment processes, thus greatly increasing the quantities of biosolids generated. Subsequently, POTWs and academia further investigated and refined land application and other recycling practices to manage these increased quantities. This, in turn, resulted in greater scientific understanding of the safety and benefits of biosolids recycling and increased interest of POTWs in beneficially recycling biosolids.

Currently, land application is the most common of the biosolids recycling practices available for managing biosolids generated at municipal wastewater treatment plants. Since publication of the federal biosolids regulation in 1993, the number of acres of farmland receiving biosolids rapidly increased, and land application gained wider acceptance among both the farming community and regulators for the benefits which biosolids provide to soils. However, even the most stringent supporters of biosolids land application recognize the need for standard operating practices in order to fully integrate biosolids recycling into acceptable farming practices.

Certification

The Biosolids Land Application Management certification is designed to measure acceptable competency of practitioners in the field, thus furthering the standardization of good operating practices. Those individuals seeking certification are expected to have a significant knowledge base of the field of biosolids land application management as well as managing physical, financial, and personnel resources of wastewater treatment as it relates to biosolids.

The Biosolids Land Application Management certification program, administered by CWEA, is the first of its kind in California. After approximately two years of research and development, the first certification applications were accepted January 1999 for the July 1999 examination cycle.

Important Information

The Certification Process

To become certified ***all applicants*** must complete the Application For Technical Certification, pay the application fee, have appropriate experience and education, and pass the computer-based test. Application instructions and fee schedules are listed on the application. After applications are received at the CWEA office, applicant information is compiled in the certification database. Acceptance letters are then mailed to all applicants. The experience and education given on the application is then reviewed by CWEA staff. If the application is approved, then the applicant will receive an acceptance letter. If the application is rejected, the applicant will be notified and may be asked to supply more information if warranted. After completing the computer-based test, applicants are sent official test results. Those who pass the exam will then be mailed certificates and wallet cards.

Code of Ethics

The Code of Ethics is intended to reflect the standards and behavior that California Water Environment Association certificate holders and applicants expect of each other as they perform their work protecting public health and the environment and that reaffirm the value of holding a CWEA certificate. The purpose of the Code of Ethics is to ensure public confidence in the integrity and service of professional water quality workers while performing their duties.

All California Water Environment Association certificate holders and applicants are expected to meet the following standards of professional conduct and ethics:

1. To protect public health, themselves, their co-workers, property, and the environment by performing the Essential Duties of the CWEA certified vocation safely and effectively, and complying with all applicable federal, state and local regulations.
2. To represent themselves truthfully and honestly throughout the entire certification process.
3. To adhere to all test site rules and make no attempt to complete the test dishonestly or to assist any other person in doing so.
4. To refrain from activities that may jeopardize the integrity of the Technical Certification Program.

Test Administration And Admission

Testing Dates and Sites: Tests are offered throughout the year. Applicants who are eligible for the test will receive an eligibility letter and instructions on how to schedule their exam. CWEA also provides special accommodations for those with physical or learning disabilities (See following page: "Accommodations For Those With Physical or Learning Disabilities").

Test Site Admission: Certificate candidates are required to show at least one valid government issued photo identification (State driver's license or ID, or passport). Only after positive identification has been made by the testing proctor may a candidate begin the exam. Candidates do not require to show their eligibility letters to enter the test site.

Test Security: Beginning January 2009, all exams will be computer-based format. No reference material, laptop computers, cameras are allowed in the test site. Candidates will have access to an on-screen calculator, however, examinees are welcome to bring pre-approved calculator. Candidates are not allowed to take any notes from the test site. Candidates who violate test site rules may be asked to leave the site and may be disqualified from that test. All violations of test security will be investigated by CWEA and appropriate action will be taken.

Test Design And Format

Test Design: The Biosolids Land Application Management is designed to measure minimal acceptable competency. The *Test Content Areas* for each certification were determined by a study conducted by an independent psychometric consulting firm. The study gathered data from on-site visits of a number of facilities employed in the handling and application of biosolids. A job analysis was developed from data collected at the various facilities and from practitioners in the field of biosolids land application. The Test Content Areas, and experience requirements are based on the research results and subsequent job analysis. All research was conducted under the guidance of the Technical Certification Program Committee, vocational sub-committees, and CWEA staff. All test questions are designed to measure at least one area of knowledge or ability that is required to perform an essential duty.

Test Delivery Mechanism: All tests will be computer-based format. Tests are offered in the English language only.

Test Format: The Biosolids Land Application Management test is given completely in the multiple choice format (see *Sample Test Questions* in this booklet for an example). The multiple choice format is considered the most effective for use in standardized tests. This objective format allows a greater coverage in content for a given amount of testing time and improves competency measurement reliability. Multiple choice questions range in complexity from simple recall of knowledge to the synthesis and evaluation of the subject matter.

Important Info. (Cont.)

Test Scoring

Scoring Method: All tests are mechanically scored by CWEA. The overall test score will determine if you pass or fail the test. Generally, the minimum score required to pass the test is 75% (this passing score may be adjusted downward depending on the difficulty level of each particular test). The minimum passing score is determined by the modified Angoff Method. When taking your test, it is recommended that you try your best to score as high as possible. Do not try to target the minimum passing score.

How Passing Scores Are Set: Each time a certification test is given, the questions are changed resulting in a different test form. Since each form has different questions, the difficulty level of the test may not be the same from form to form. The passing score is developed as an overall estimate of minimal acceptable competence in the Test Content Areas by subject matter and testing experts. Passing scores are determined by an overall passing score, not by performance on individual Test Subject Areas, and are independent of other candidate's scores. Partial credit will not be awarded for any test item answered incorrectly.

Test Rescheduling and Cancellation Instructions:

Reschedule your Testing Window

To reschedule your application you must submit a written request (a letter stating that you wish to reschedule) to the adjacent (next) window once without a fee. A $40 administrative fee is required to reschedule your application again to the third window. There are no exceptions to this policy.

Reschedule your Test Appointment

If you already have a scheduled exam with our testing administrator, Pearson VUE (PV), and wish to reschedule your appointment you must contact (PV) one (1) business day in advance to avoid losing your exam fee.

Cancel your Application

To cancel your application you must submit a written request (a letter stating you wish to cancel your application) to CWEA. The written request must be received at the CWEA office before the testing window begins. Full refunds, less a $40 administrative fee, will be made within 4 weeks after the scheduled date.

Item Appeals

Candidates who wish to appeal a specific test item must do so during the test by completing an the *Candidate Comment Review Screen* during the exam. Candidate comments will be evaluated and appropriate adjustments will be made to the test content. Candidates submitting comments will not be contacted in regards to the appeal.

Test Result Notification

Exam results are routinely mailed to certificate candidates approximately 4 weeks after the exam date. No results are given by phone, fax or email. All results are confidential and are only released to the certificate candidate. There are no exceptions to this policy.

Issue of Certificate/Blue Wallet Card

Certificates and blue wallet cards will be issued to all candidates who pass the exam. Certificates and blue wallet cards are mailed about two to three weeks after result notifications have been mailed.

Renewal of Certification

All certificates must be renewed annually. The first renewal is due one year from the last day of the month in which the certification exam was held. Certificate renewals less than one year past due are subject to the renewal fee plus a penalty fee of 100% of the renewal fee. Certificates more than one year past due will need to retest to regain certification. Renewal notices are mailed to certificate holders two months before the due date. It is the responsibility of the certificate holder to ensure that his or her certificate(s) remains valid.

Re-Certification:

CWEA Certificate Holders are required to renew certificates annually, and are required to provide evidence of completion of 12 contact hours of continuing education requirements every 2 years. For more info, visit CWEA's website: www.cwea.org.

To become certified in Biosolids Land Application Management, candidates must meet all the following basic requirements:

1. ***Complete the Biosolids Land Application Management Application for Technical Certification, and pay the appropriate fee.*** The application can be obtained from the CWEA offices by calling 510-382-7800, or the web site www.cwea.org. A complete application will document the education and experience outlined in section 2, below. You must have your supervisor sign your application as verification of education and experience. See the current application for fees and application deadlines.

2. Have one year of experience related to the science and technology of land application management, or equivalent education including 16 hours of specific training.

The Biosolids Land Application Management certificate is a certification of *competence*, not a certification of *completion* of coursework or of class time.

Thus, there are many ways to qualify for the test. Typically, the successful candidate will have some education and at least one year of practical experience. Qualifying education may include relevant college level course work, training, or attendance at a biosolids educational conference
For more details see the *Qualifying for the Test* section below.

3. Pass the exam for Biosolids Land Application management certification. Passing requires the candidate to score at least 75% of possible points on the test. The 75% pass point may be adjusted downward depending on the difficulty level of the test. For more information see *Test Scoring* on page **3** of this booklet.

Qualifying For the Test

Before you are qualified to take the exam, you must meet certain experience and education requirements. The basic requirement is one year of practical experience in biosolids management, the equivalent education, or a combination of education and experience that is the equivalent of one year of practical experience.

Acceptable Experience

Applicants listing practical experience to qualify for the test must be able to document applied work experience in one, or more, of the following areas:

Biosolids Generator. This would include working with biosolids (not sludge), typically at a Publicly Owned Treatment Works (POTW). Experience should also include preparing contracts for land application, and preparing biosolids for land application.

Biosolids Transporter. This would include supervision of a transportation company or agency, or a driver of a truck trained to haul biosolids.

Biosolids Applier. This would include experience with actual application of biosolids to the land, and supervision and management of land applications.

Grower. This would include experience growing crops on soils amended or fertilized with biosolids (farmers, land owners, or anyone else directly involved in cultivating crops on biosolids amended or fertilized land).

Acceptable Education/Training

Applicants listing education to qualify for the test must be able to document one full-time year of college level credit related to science and technology (24 semester units or 36 quarter units) including 16 hours of classroom and/or laboratory training specifically in the field of biosolids land application management. Each hour in attendance at an approved biosolids training conference, such as the California Biosolids Conference, counts as 2/3 of a classroom hour. Thus, 24 hours in attendance at a biosolids conference would be equivalent to 16 classroom/laboratory hours.

Combination of Experience and Education

Applicants may also qualify with a combination of experience and education and training. Experience and/or education fulfilling only part of the requirement will be pro-rated. For example, an applicant with only 6 months of practical experience will also be required to have 12 semester, or 18 quarter, units completed in science and technology including 8 hours of specific biosolids land application management training. Evaluations and prorations will be made by the TCP Committee.

Summary of Qualifications

Qualified applicants must satisfy either A, B, or C:

A. 1 year of experience in the management of biosolids.

B. 24 semester, or 36 quarter, units of college coursework in science and technology related to biosolids management including 16 hours of specific training.

C. A combination of A and B, above, that is the prorated equivalent of one year of practical experience in the field.

Test Content Areas

How to Use This Section

The Test Content Areas (TCAs) is a listing of the topics that are addressed by the test. You can use the TCAs to determine if biosolids management certification is appropriate for you, how well prepared you are for the test, and as a basic guide to the subjects that you need to study in preparation for the test. The TCAs should be used in conjunction with the publications listed in the Selected References section of this booklet to help you prepare for the written test.

Test Measurement Design

The test is designed to measure acceptable competence in all aspects of the management of biosolids land application management. This includes the generation and transportation of biosolids, and the application of biosolids to agricultural land. Successful candidates must be able to demonstrate a broad knowledge of all aspects of biosolids land application management, even if their experience is limited to only one or two components of the field.

Complexity of the Test Questions

Since this test measures a broad knowledge and understanding of biosolids land application management, the questions will range from fairly easy to very difficult for an individual who minimally meets the experience and education requirements. Many items will require problem solving skills. Candidates should expect about half of the test items to require the recall of factual information, and the remainder of the test items to require higher level skills such as application, analysis, or synthesis of information.

Test Content Areas

TCA 100	Supervising Personnel (Approximately 15%-20% of Test)
101.	Supervision of field crew. Preparation and presentation of performance appraisals and discussion with employee. Making decisions regarding personnel, preparing verbal and written discipline, termination, and hiring, preparing and presenting performance evaluations and recommendations for discipline, promotion, hiring, and termination, resolving personnel problems, work environment issues, and employee conflicts in a legally defensible manner
102.	Scheduling, directing supervising, monitoring, and reviewing the work performed by subordinates
103.	Maintaining supervisorial records
104.	Assessing organizational records
105.	Planning work load and allocation of staff
106.	Coordination of inspection, enforcement, and permitting processes
107.	Coordination with farmers, drivers, spreaders, and project managers

TCA 200	Decision Making (Approximately 10%-15% of Test)
201.	Determining the path, throw, and speed of a tractor
202.	Determining the rate of tilling
203.	Determining the size of the disks and blades
204.	Determining the appropriate container to be used for the samples
205.	Following the regulations and guidelines set by 40CFR503
206.	Following the sample containment and transfer regulations as set by 40CFR503
207.	Determining the amount of all deliveries
208.	Oversight of daily activities including: scheduling the workforce, determining the land application, sampling, coordination with the project manager and farmers
209.	Development of a fixed asset budget and writing budget justifications
210.	Determining the need for replacement of parts for equipment

TCA 300	Communication With Other Branches Within The Organization (Up To 5% of Test)
301.	Communication with truck drivers on the rate of fill
302.	Communication with spreader on the rate of fill
303.	Receiving directions from supervisor
304.	Coordinating with field workers and project managers

TCA 400	Communication With People Outside The Organization (Approximately 5%-7% of Test)
401.	Communication with farmers and other farm staff, community people, public agencies, municipalities, regulatory and regional boards
402.	Communication with truck drivers
403.	Assurance of fair business practices among competitors by requiring compliance to pollution control regulations

Test Content Areas
continued

TCA 500	Safety (Approximately 5%-10% of Test)
501.	Knowledge of suitable clothing as described in the site safety manual: hardhats, non-permeable gloves, etc.
502.	Ability to read, interpret and follow all regulations set by CFR40
503.	Ability to read, interpret and follow all regulations set by OSHA, secure and maintain all first-aid
504.	Development, implementation, compliance with spill management regulations
505.	Keeping all sites clear of puddles, oil, sludge, or fuel
506.	Keeping tools in their appropriate storage areas
507.	Updating and distributing the on-site safety manual
TCA 600	**Vocational Specific Tasks (Approximately 10%-15% of Test)**
601.	Oversight of daily operations of farm equipment: tractors, tillers, loaders, blading, and disking
602.	Scheduling daily workloads and land application distribution
603.	Preparation of certificates of compliance
604.	Coordination of the permitting process and land application rates
605.	Monitoring all deliveries
606.	Scheduling and performing all equipment maintenance
607.	Taking and transporting daily soil samples
608.	Preparation and coordination of monthly sampling reports.
TCA 700	**Analysis of Results/Data (Quality Assurance) (Up To 5% of Test)**
701.	Use of proper containers for samples
702.	Use of proper storage and transportation of samples
703.	Preparation of certificates of compliance of samples to be tested in the lab
TCA 800	**Writing Reports/Computer Work (Up To 5% of Test)**
801.	Preparing and writing monthly sample reports
802.	Preparation of documentation for the permitting process
TCA 900	**Computer Work/Applications (Up To 5% of Test)**
901.	Knowledge of spreadsheet, word processing, forecasting, projecting, and estimating applications
TCA 1000	**Training Others (Up To 5% of Test)**
1001.	Ability to train personnel on the safety procedures and policies
TCA 2000	**Left Over and Small Tasks (0% of Test)**
none	none

TCA 3000	Knowledge, Skills, and Abilities (20% to 30% of Test)
3001.	Knowledge of basic farming operations including farming equipment such as tractors, tilling, blading, disking, loaders, and trucks
3002.	Knowledge of farm management including crop rotation, scheduling, and fertilizers, etc.
3003.	Excellent communication, interpretation, and reading skills
3004.	Above average math skills
3005.	Basic computer skills
3006.	Knowledge of basic bio-chemistry and microbiology
3007.	Ability to understand path throw and speed relationships
3008.	Understanding of the concept of soil composition
3009.	Excellent ability to follow directions
3010.	Excellent measurement and sample collecting skills
3011.	Metric conversion and calibration skills
3012.	Knowledge of ecosystems
3013.	Knowledge of Cation Exchange Capacity

Selected References

The following references may be useful when studying for the certification test. For information about obtaining these publications call the phone number listed in the reference. If no phone number is listed contact the publishing agency directly or contact your local library or bookstore.

Primary References

- Manual of Good Practice For Agricultural Land Application of Biosolids (1998), California Water Environment Association, Oakland CA, 510-382-7800
- 40 CFR 503 Regulations or the Plain English Guide EPA/832/R-93/003, 415-744-1235
  (40 CFR is available on the internet at http://www.epa.gov/epacfr40/)
- US EPA Process Design Manual - Land Application of Sewage Sludge

Supplementary References For Further Study

- US EPA Sampling Procedures
- US EPA Trace Metals Guidance
- U.S. EPA Part 503 Implementation Guidance

This reference list is intended to assist certificate candidates in preparation for the Biosolids Land Application Management certification test. Use of these references does not guarantee successful completion of the test. There may be other publications that may be helpful to candidates preparing for the test. CWEA encourages candidates to identify and utilize other resources in preparing for the test.

Sample Test Questions

Sample Test Questions
The following sample test questions are provided to help candidates become familiar with the multiple choice format. The following questions reflect only a sample of the subject matter covered on the test. For each question, choose the single most correct answer. An answer key is given at the end of this section.

1. Animals shall not be allowed to graze on land to which Class B biosolids have been applied for:

   a. 10 days after application of the biosolids.
   b. 30 days after application of the biosolids.
   c. 60 days after application of the biosolids.
   d. 90 days after application of the biosolids.

2. 25 tons of biosolids at 22% solids and 200 ppm nickel are applied to a site at a rate of 4 dry tons per acre. How much nickel is added by the biosolids to each acre of the site ?

   a. 0.16 lbs
   b. 0.22 lbs
   c. 1.6 lbs
   d. 2.2 lbs

3. How long can biosolids be placed on land before it is considered to be storage?

   a. 6 months, or less
   b. 1 year, or less
   c. 18 months, or less
   d. 2 years, or less

4. Class B biosolids must meet all of the regulatory requirements below except:

   a. meet ceiling concentration for all pollutants.
   b. meet pollutant concentration limits.
   c. have site restrictions
   d. need to track added pollutants.

5. The best reason to avoid non-emergency stops while transporting biosolids is to:

   a. reduce the time it takes to make a round trip.
   b. reduce potential adverse impacts such as odor complaints.
   c. reduce the amount of paperwork the driver needs to log.
   d. reduce methane buildup by keeping the trailer well-ventilated.

6. Biosolids provide 4.4 lbs plant available nitrogen (PAN) per wet ton, and contain 20% solids. The crop grown requires 200 lbs/acre of nitrogen. How many dry tons per acre are needed to be applied?

   a. 45 dt/acre
   b. 4.5 dt/acre
   c. 90 dt/acre
   d. 9.1 dt/acre

7. Incorporation of biosolids that do not meet vector attraction requirements upon leaving the generator's facilities before what time period following spreading on the land application site?

   a. 24 hours
   b. 6 hours
   c. 48 hours
   d. 18 hours

8. For what time period should "No Trespassing" signs be posted following the last application of biosolids on a site?

   a. 30 days
   b. 365 days
   c. 7 days
   d. 180 days

Answer Key	
#1	b
#2	c
#3	d
#4	d
#5	b
#6	d
#7	b
#8	a

Preparing For Your Test

This section addresses a few possible methods for preparing for the certification test. Since you are most familiar with your own abilities, you are responsible for determining the best method for preparing for your certification test. Following the suggestions in this section does not guarantee you will pass the certification test.

Determining Your Preparedness: An individual's preparedness for the certification test depends on a number of things including amount of practical experience in the vocation and years of education. If you are unsure how prepared you are for the test review the *Test Content Areas*. If you are not familiar with most of the subjects, you should consider reviewing some of the material listed in the *Selected References* section of this booklet.

Using The Selected References: After evaluating how well prepared you are for the test, you may want to review some of the *Selected References*. The references in this list may be used to review those Test Content Areas that you are not familiar with or those for which you have little background. Well prepared candidates may only have to brushup on a few topics while those less prepared may have to study extensively.

Using the Test Content Areas as a Guide to Your Study: The Test Content Areas (TCAs) are a basic outline of the test subject matter. You can use the TCAs as your study guide by referring to them in the primary *Selected References*. For example, if you find that you are unfamiliar with TCAs 800 (Writing Reports/Computer Work) and 900 (Computer Work/ Applications), you may review that material in the Manual of Good Practice for Agricultural Land Application of Biosolids (listed in the *Selected References* section of this booklet). You will see that these subject areas are covered in Chapter 4, Section III. Other sources not listed may also be helpful in reviewing these subjects.

The best preparation for the test is practical experience in the field. Biosolids Land Application Management certification is not a certification of completion of certain coursework, or certification of knowledge of the contents of a book. Instead, it is a *certificate of competence*. This implies that a certificate holder has demonstrated through experience, education, training, and successful completion of the test that he or she can effectively work in the field with minimal supervision and no further training. No single book is adequate to prepare individuals with very limited experience in Biosolids land Application Management.

FAQs

Frequently **A**sked **Q**uestions

Question: Is it required that I begin at the Grade I level then work my way up from there to higher levels?
Answer: No, you may take any test that you qualify for with your education and experience. However, if you are just starting out you can see by the education and experience requirements that you can work your way up the grade levels faster if you become certified at Grade I, then achieve each successive certification as soon as you get the required education and experience.

Question: If I take a Grade II, III, or IV test will I have to know the Test Content Areas for the lower level tests?
Answer: Yes, the subject matter for each test builds on the subject matter for those tests below its grade level. A thorough knowledge of the Test Content Areas for the grade level that you are taking is most important to your preparation, but you should expect questions from any of the lower grade levels.

Question: If I am re-taking a test that I had previously failed do I need to re-submit a full application and the entire application fee?
Answer: No, you must complete the Re-Test application with appropriate fees.

Question: Is continuing education required to renew my certification?
Answer: Yes. For any certificate earned on or after July 2001, you need to obtain 12 hours of continuing education every two years. For more information, visit www.cwea.org, or feel free to call the CWEA office.

Question: How long is the test?
Answer: All tests have about 75-100 questions and 3 hours are given for completion.

Question: Can I take more than one certification test at a same time?
Answer: Yes, but you can only take up to two at a same time (under a different vocation). You will be given a total of three hours to complete both tests.

Question: How do I get a receipt showing I paid for the test?
Answer: A receipt is sent to all applicants upon request. Hold on to this receipt until the certification process is over in case you have to submit it to your employer for reimbursement.

Question: If I am applying for the Grade IV test do I need to be a Supervisor?
Answer: No, you just need to have about one year of supervision experience, verified by your manager. You do not have to hold the title of "Supervisor."

Testing Window	Test Dates	Application Deadline
Spring	April 1 - June 30, 2009	February 27
Summer	July 1 - September 30, 2009	May 29
Fall	October 1 - December 31, 2009	August 31
Winter	January 1 - March 31, 2010	November 30

Other CWEA Certificate Programs

- Biosolids Land Application Management
- Environmental Compliance Inspector
- Laboratory Analyst
- Plant Maintenance
  - Electrical Instrumentation
  - Mechanical Technologist
- Industrial Waste Treatment Plant Operator

California Water Environment Association
7677 Oakport Street, Suite 600
Oakland, CA 94621

Have a question?
Give us a call at (510) 382-7800.