

**2013 ANNUAL REPORT  
OF THE  
UTAH  
WASTEWATER OPERATOR  
CERTIFICATION PROGRAM**

**DRAFT Only**



## Introduction

In March of 1991, following over 20 years of a voluntary certification program, certification of wastewater works operators became mandatory. This program is administered through the Division of Water Quality under rules adopted by the Utah Water Quality Board which established a wastewater operator certification council to provide guidance and stakeholder involvement in the program.

### The Utah Wastewater Operator Certification Council

On January 31, 2013, the terms of three council members expired. During the January 2013 Utah Water Quality Board meeting, the board appointed Kerry Eppich to represent wastewater management and reappointed Dan James to represent wastewater operators for the next 3-year term. The position representing the private sector was later filled at the February board meeting with the appointment of Richard Jex to serve the balance of the term. The Council members during 2013 were:

**Danny James, Chair**: represented certified wastewater operators. He is Maintenance Manager at Central Valley Water Reclamation Facility and is certified as a Grade IV Wastewater Treatment Operator. His term expires January 31, 2016.

**Clifton Specht, Vice-Chair** represented wastewater collection system operators. He is the Collection System Manager at North Davis Sewer District and is certified as a Grade IV Wastewater Collection System Operator and Grade II Wastewater Treatment Operator. His term expires January 31, 2015.

**Dr. Ramesh Goel**: represented Utah universities. He is an Associate Professor in the Department of Civil and Environmental Engineering at the University of Utah. His term expires January 31, 2014.

**Terral Dunn**: represented operators. He is a Wastewater Technician for the Rural Water Association of Utah and is a certified Grade II Wastewater Treatment Operator. His term expires January 31, 2015.

**Richard F. Jex**: represented the private sector wastewater industry. He is employed by SCG Enterprises in the private sector and is certified as a Grade II Wastewater Treatment Operator. His term expires January 31, 2016.

**Dr. James Callison**: represented vocational training. He is the Coordinator/Advisor for the Environmental Technology Program at Utah Valley State College. His term expires January 31, 2014.

**Kerry Eppich**: represented the management of municipal wastewater systems. He is the General Manager for Mt. Olympus Improvement District which has at least 15 certified operators. His term expires January 31, 2016.

**Ed Macauley:** represented the Division of Water Quality. He was the Engineering Section Manager, a senior engineer appointed as the non-voting member of the Council.

### Examinations

The Council continued to maintain membership as a certifying authority with the Association of Boards of Certification (ABC), an environmental control testing service headquartered in Ankeny, Iowa. The role of ABC is to provide examination services to the certification program, which includes exam development, scoring, and compilation of exam results. A three-year contract between ABC and the Division of Water Quality is in effect for state fiscal years 2014-2016. Exams were offered in the Spring and Fall with an alternate testing date during each session in conjunction with the Rural Water Association of Utah Annual and Northern Conferences.

The registration and attendance of the 2012 exam sessions is shown in the following table. These totals include the newer voluntary exams as well as the traditional mandatory ones.

	SPRING EXAM SESSION		FALL EXAM SESSION	
	MARCH	MAY	AUGUST	NOVEMBER
LOCATIONS	ST. GEORGE (IN CONJUNCTION WITH RWAU CONFERENCE)	UVU, OREM	LAYTON (IN CONJUNCTION WITH RWAU CONFERENCE)	UVU, OREM
		PRICE		RICHFIELD
		OGDEN		ST. GEORGE
				OGDEN
APPLICATIONS RECEIVED	39	125	50	136
TOTAL SCORED	38	121	49	135

Exam sessions were proctored by members of DWQ staff, DEQ District Engineers, current Council members or other individuals delegated by Council members. All examinations, regardless of grade, are 100-question, multiple-choice formats. Answer sheets are shipped to ABC for scoring and the results are compiled and returned to DWQ by electronic format for recording in the database and dissemination to the examinees. A score of 70% or above is necessary to pass an exam. The 2013 exams were compiled from ABC's data bank, with the exception of the Small Lagoon System exam, which is compiled from the Utah data bank maintained by ABC. The wastewater treatment and collection exams are "ABC standardized"

exams which meet ISO 17024 standard in order to ensure the validity, reliability, and legal defensibility of the certification exams. Exam questions are reviewed by ABC's technical committees on a regular basis to ensure applicability to current wastewater technologies and processes. During 2013, DWQ staff Paul Krauth and former Council member Lonn Rasmussen served on ABC committees.

The three new voluntary classifications of certifications were again offered in 2013, which include Biosolids Land Applier Grades I - II, Wastewater Laboratory Analyst Grades I - IV, and Plant Maintenance Technologist Grades I - III. Mandatory exams still include Collections Grades I - IV, Wastewater Treatment Grade I - IV, and Small Lagoons System Grade I. Cumulative Totals for the 2013 mandatory wastewater exam classifications are shown below.

<b>GRADE EXAM</b>	<b>TOTAL EXAMINEES</b>		<b>HIGH SCORE</b>	<b>LOW SCORE</b>	<b># PASS (≥70%)</b>	<b># FAIL (&lt;70%)</b>	<b>PASS %</b>
<b>C-I</b>	15		88	59	11	4	73
<b>C-II</b>	45		88	53	23	22	51
<b>C-III</b>	20		87	54	8	12	40
<b>C-IV</b>	41		90	50	19	22	46
<b>SLS-I</b>	11		95	59	10	1	91
<b>T-I</b>	45		95	32	16	29	36
<b>T-II</b>	63		88	30	25	38	40
<b>T-III</b>	29		83	42	6	23	21
<b>T-IV</b>	46		79	27	5	41	11
<b>TOTAL</b>	<b>315</b>		<b>NA</b>	<b>NA</b>	<b>123</b>	<b>192</b>	<b>39</b>

### **Training**

During 2013, Division of Water Quality staff and Certification Council members participated as instructors and presenters at conferences, seminars, and training sessions which provided training to wastewater personnel. The objective of these training opportunities was to facilitate compliance with UPDES permits, review subject matter in preparation for operator examinations, and earn required continuing education credits for renewals. Operators must obtain at least half of their required training for renewals from wastewater related educational opportunities other than attendance at major association conferences. Many of the training classes were offered through cooperative efforts with the Rural Water Association of Utah or the Water Environment Association of Utah.

Some council members and staff also participated with the Utah Water and Wastewater Training Coalition to provide a centralized calendar of seminars and training to make it easier for water and wastewater professionals to obtain needed training and continuing education for their respective fields. The council continued to support participation in the “on-line” calendar format

that was developed and implemented beginning with the 2006 calendar year. This calendar has greatly improved the communication and coordination between the members of the Coalition as well as the operators. Division of Water Quality staff and representatives of the member organizations maintain the calendar under the direction of the Coalition. Members of the Coalition are: Division of Drinking Water, Division of Water Quality, AWWA Small Water Systems, Water Environment Association of Utah, Rural Water Association of Utah, American Backflow Prevention Association, and Utah Valley University.

### **Renewal and Compliance**

The following statistics represent the certification actions taken during the year 2013:

<b>Action</b>	<b>Number</b>
Number of “new operators” added to wastewater certification database during 2013	81
Certificates expired December 31, 2012 – final notices mailed July 2013	71
Certificates expired 2012, reinstated prior to December 31, 2013 deadline	24
“Change in Status” certificates issued for current certifications	16
Certificates expiring December 31, 2013 – notices mailed January 2013	537
Certificates expiring December 31, 2013 – notices mailed August 2013	365
Certificates expiring 2013, renewals received prior to December 31, 2013	364
Certificates expiring 2013, renewed along with “Change in Status” requests	13
Certificates issued by “reciprocity” (equivalent certification from another state)	1
Issued Letter-of-Intent to issue certificate by “reciprocity” (not employed in Utah)	0
Number of “reciprocity” requests denied in 2013 (no current certificate)	1
Number of "active" individuals in database (participated in certification within last 3 years)	1,552
Number of certified wastewater operators as of January 1, 2014	1,169
Number of certified “treatment” operators	495
WW Treatment Grade	126
WW Treatment Grade II	137
WW Treatment Grade III	40
WW Treatment Grade IV	237
Number of certified “collection” operators	766
Collection Grade I	96
Collection Grade II	259
Collection Grade III	88
Collection Grade IV	369
Number of certified “small lagoon system” operators	127
Total number of current wastewater operator certifications as of January 1, 2014	1,480
Number of operators holding two classes of certifications, but not more than two	269
Number of operators holding three classes of certifications	41
Total number of publicly owned wastewater collection systems	187
Municipal Collection Class I systems	105
Municipal Collection Class II systems	42
Municipal Collection Class III systems	24

<b>Action</b>	<b>Number</b>
Municipal Collection Class IV systems	16
Total number of publicly owned wastewater treatment facilities	118
Municipal Treatment Class I facilities	72
Municipal Treatment Class II facilities	10
Municipal Treatment Class III facilities	21
Municipal Treatment Class IV facilities	16
Municipal Small Lagoon System I facilities (combination Treatment I & Collection I included in the above numbers)	63

The wastewater exams were taken predominantly by individuals from Utah. However, some exams were administered to people from Idaho, Nevada, California, Colorado, and Arizona.

New facility classification notices were sent to Heber Valley SSD, Santaquin City, and Mona City. Also, 23 collection systems were reclassified and notified of those changes when re-evaluated with the information available from the 2010 Federal Census.

Systems with no certified DRC operator of record as of January 1, 2014 are Little Mountain Service Area, Manila, Manti, Strawberry Lakeview Special Service District, Saratoga Springs, Ski Lake Special Service District, Vineyard, and White Hills Special Service District. All of those systems, except Vineyard and White Hills SSD, are within the one-year transition period following the loss of the DRC, such as when a contract expired, or the death of the operator. However, Vineyard has a certified operator under contract for water services, but not for wastewater; and Eagle Mountain City is still in the process of evaluating the condition of White Hills SSD's system in preparation for assimilating it into its own system according to the annexation agreement. The Water Quality Board provided funding to facilitate the evaluation.

Contracts for DRC services were submitted and approved for East Zion Special Service District, Emigration Improvement District, Twin Creeks Special Service District, and Mexican Hat Special Service District.

Our records indicate that all other municipal systems had DRC operators with at least "restricted" certificates at the required grades at the close of 2013.

### **Certification Council Meetings**

There were a total of four Council meetings held in 2013. The following items are of particular note:

- Due to SB 21 legislation in 2012, changes were made in the duties and responsibilities of the division director and environmental quality boards. As a result, DWQ staff proposed changes to Rule R317-10 to incorporate those changes. However, the proposed changes were deferred to the Council for consideration and its recommendations prior to beginning official rulemaking. The last two meetings of the year included additional representatives from the

wastewater industry who served along with the Council as a workgroup for the rule revision. The final draft is nearing completion and should be available in 2014 for consideration by the Board.

- Council decided to continue to offer the ABC exams for Wastewater Laboratory Analyst, Biosolids Land Applier, and Plant Maintenance Specialist during the regular testing dates. The Council agreed to offer them on a voluntary basis since there is no foundation in legislation for them to be included in the mandatory program. There were 27 total voluntary exams of various classifications administered during the year.
- Utah was represented at the Association of Boards of Certification Annual Conference by 5 individuals from Utah. Judy Etherington, Paul Krauth, Lonn Rasmussen, and Dan James represented wastewater and Kim Dyches from the Division of Drinking Water represented drinking water.
- Council continued to support ABC's efforts to accomplish on-going review of the item bank by supporting Paul Krauth's and Lonn Rasmussen's participation on technical committees and review workshops.
- Council regularly reviews all "Question Comment Forms" and corresponding questions submitted by examinees following the exams.
- The Council continued to cooperate with the Rural Water Association of Utah offering wastewater training and exams at its Annual and Northern Conferences in 2013. Some Council members and DWQ staff provided presentations and instruction in the associated training sessions..
- The Council continued to support maintaining the On-Line Training Calendar that was implemented at the end of 2005 for all members of the Water and Wastewater Operator Training Coalition in Utah.
- Council members continue to evaluate training requests submitted for continuing education credit (CEUs) to determine whether the training is relevant to the work of the wastewater operators.