State of California—Health and Human Services Agency
Department of Health Services

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June 24, 2002

ELAP PERFORMANCE EVALUATION STUDY PROGRAM
WATER SUPPLY (WS) STUDY SERIES
RADIOCHEMISTRY
VENDOR INFORMATION

In accordance with the United States Environmental Protection Agency, (USEPA), California State Environmental Laboratory Accreditation Program (ELAP) has directed its laboratories to participate in available performance evaluation (PE) studies for radiochemistry.

Laboratories are permitted to report multiple results for the same analytes from one sample. For this reason, laboratories have been instructed to make copies of the blank report forms to facilitate such reporting to the vendor of choice.

The enclosed information for the California ELAP certification program is for the vendor only and not to be shared with others. Please note, the enclosed information does not involve laboratories accredited through NELAP.

Please contact Fred Choske at (510) 540-2800, if you have any questions. Your cooperation is greatly appreciated.

Sincerely,

George C. Kulasingam, Ph.D.
Program Chief

[Signed by FC]

Fred Choske

Environmental Laboratory Accreditation Program

Enclosure:
Vendor Information
Method Description Tables

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Environmental Laboratory Accreditation Program
2151 Berkeley Way, Annex#2, Berkeley, CA, 94704-1011
510/ 540–2800, fax 510/849-5106
Internet Address: www.dhs.ca.gov/ps/ls/elap/Elapindex.htm

ELAP WS RADIOCHEMISTRY STUDY REQUIREMENTS
VENDOR INFORMATION
(JUNE 2002)

1. Laboratories certified by California ELAP will be notifying vendors to acquire performance evaluation study samples.

2. Laboratories are permitted to report multiple results for the same analytes from one sample. For this reason, laboratories have been instructed to make copies of the blank report forms to facilitate such reporting to the vendor of choice.

3. The PE provider must be in compliance with NIST handbook 150, NIST handbook 150-19, and USEPA Criteria Document (December 1998). This is inclusive of the manufacture/preparation of the PE study samples as well as other functions expected of the vendor for such studies.

4. The evaluation report, provided to the laboratory, must have the following minimum information:

   vendor's name, NIST accreditation number, location, telephone, fax
   type of sample and matrix
   study date (commencement and conclusion)
   study number
   laboratory's (participant) complete name and address
   if mobile, license number, vehicle identification number
   EPA laboratory ID number
   analyte name, analyte code
   method of analyses, method code
   reported results
   average of reported results
   standard deviation
   acceptance range
   true value (assigned value)
   evaluation.

5. Evaluation reports must be similar to past USEPA WSCHEM reports, i.e. the analytes, etc. should be on the same sheet, rather than on individual sheets. If an analyte or sample is invalidated for any reason, the evaluation report should contain the laboratory reported result, and the evaluation of "not evaluated" for the analyte(s) affected,

6. Evaluation reports shall be provided to the laboratory by the vendor within 21 days of the study completion date. Copies of these reports are expected to be sent to ELAP within the similar time frame. (Faxed copies and E-mailed copies of the evaluation reports are not accepted.)

7. Also, at the completion of a study, electronically transmitted evaluation report(s) in ASCII, comma delimited format as described in the U.S. Environmental Protection Agency Criteria Document of December 1998, on 3.5-inch diskettes must be mailed to Fred Choske with the hard copies of the evaluation reports, at the California State Department of Health Services, Environmental Laboratory Accreditation Program, 2151 Berkeley Way, Annex 2, Berkeley, CA 94704. (The fields for the electronic form of the evaluation report(s) must meet the requirements described in the U.S. Environmental Protection Agency, Criteria Document of December 1998. The only identification of the participant laboratory, in the electronic form of the evaluation report must be the EPA laboratory ID number which is the "participant identifier" in the U.S. Environmental Protection Agency Criteria Document Of December 1998.) In addition to the fields described in the U.S. Environmental Protection Agency Criteria Document of December 1998, fields designating the commencement arid conclusion of the study are required: study commencement date field identifier "date1" with MM/DD/YYYY entry format; study conclusion date field identifier "date2" with MM/DD/YYYY entry format. (The study commencement would be the date the first shipment of study samples is mailed out to the laboratories. The study conclusion would be the date of study closure.) Included on the diskette must be the study summary statistics as well as other files described in the USEPA Criteria Document (Dec. 1998).

8. Until the NELAC PT committee's analyte codes are accepted, the analyte codes, that appear in the USEPA Criteria Document (Dec. 1998) shall be used.

9. The method description for each laboratory's reported result is necessary for ELAP review. Tables have been enclosed to aid in the uniform reporting of the method description for efficient flow of information between the laboratory, the vendor and ELAP. Your cooperation would be greatly appreciated.

10. If a laboratory wishes to participate in a study for quality control purposes and requests that ELAP not receive a copy of the report, such a request must be made prior to participation in the study. To avoid confusion, such laboratories have been recommended to order blind quality control samples which are not part of on-going performance evaluation studies.

11. With the termination of the classic USEPA WS/VVP studies in 1998, uniformity in the administration of the performance evaluation studies ceased. However, through the use of the USEPA criteria document variables in the evaluation of participant results could be minimized. In order to ensure that the analytes, which appear in the USEPA criteria document, are scored uniformly throughout the country, all vendors must use the USEPA established acceptance limit criteria for these analytes. Deviation from such acceptance limit criteria is not acceptable to ELAP.

12. Contact for specifications and general questions from vendors should be directed to-.

    Fred Choske at (510) 540-[redacted] or FAX (510) 540-3141.

    Fred Choske is the primary contact person for California ELAP. In Fred Choske's absence the backup contact person is Jane Jensen at (510) 540-[redacted]

RADIOCHEMISTRY PT STUDY METHOD DESCRIPTIONS

The tables below describe the method descriptions that our laboratories will be reporting with their PT study data. These descriptions are to make uniform the reporting of method descriptions for efficient flow of information between the laboratory, the vendor, and ELAP. Your adoption of our short-handed method descriptions will aid in our review of each laboratory's participation in PT studies. Your cooperation would be greatly appreciated.

RADIOCHEMISTRY METHOD DESCRIPTIONS
(June 2002)

Analyte or Group-of-Analytes	USEPA Analyte Codes	NELAP Analyte Codes	Method Description	Reference Method
alpha	0001	2830	900.0	EPA 900.0
alpha	0001	2830	p1	EPA 600/4-75-008, p.1
alpha	0001	2830	00-01	EPA 00-01
alpha	0001	2830	00-02	EPA 00-02
alpha	0001	2830	1979p1	EPA (March, 1979), p.1
alpha	0001	2830	7110B	SM7110B
alpha	0001	2830	7110C	SM7110C
alpha	0001	2830	R1120-76	R-1120-76
alpha	0001	2830	D1943-90	D1943-90
alpha	0001	2830	76-177p7578	USGS 76-177, p.75 & 78
beta	0002	2840	900.0	EPA 900.0
beta	0002	2840	p1	EPA 600/4-75-008, p.1
beta	0002	2840	00-01	EPA 00-01
beta	0002	2840	1979p1	EPA (March, 1979), p.1
beta	0002	2840	7110B	SM7110B
beta	0002	2840	R1120-76	R-1120-76
beta	0002	2840	D1890-90	D1890-90
beta	0002	2840	76-177p7578	USGS 76-177, p.75 & 78
Cs-134	0005	2800	901.0	EPA 901.0
Cs-134	0005	2800	p4	EPA 600/4-75-008, p.4
Cs-134	0005	2800	1979p92	EPA (March, 1979), p.92
Cs-134	0005	2800	DOE4.5.2.3	DOE 4.5.2.3
Cs-134	0005	2800	7120	SM7120
Cs-134	0005	2800	7500CsB	SM7500Cs B
Cs-134	0005	2800	D2459-72	D2459-72
Cs-134	0005	2800	D3649-91	D3649-91
Cs-134	0005	2800	R1110-76	R-1110-76
Cs-134	0005	2800	R1111-76	R-1111-76
Cs-137	0006	2805	901.0	EPA 901.0
Cs-137	0006	2805	p4	EPA 600/4-75-008, p.4

Analyte or Group-of-Analytes	USEPA Analyte Codes	NELAP Analyte Codes	Method Description	Reference Method
Cs-137	0006	2805	1979p92	EPA (March, 1979), p.92
Cs-137	0006	2805	DOE4.5.2.3	DOE 4.5.2.3
Cs-137	0006	2805	7120	SM7120
Cs-137	0006	2805	7500CsB	SM7500Cs B
Cs-137	0006	2805	D2459-72	D2459-72
Cs-137	0006	2805	D3649-91	D3649-91
Cs-137	0006	2805	R1110-76	R-1110-76
Cs-137	0006	2805	R1111-76	R-1111-76
I-131	0008	2875	901.1	EPA 901.1
I-131	0008	2875	902.0	EPA 902.0
I-131	0008	2875	p6	EPA 600/4-75-008, p.6
I-131	0008	2875	1979p92	EPA (March, 1979), p.92
I-131	0008	2875	DOE4.5.2.3	DOE 4.5.2.3
I-131	0008	2875	7120	SM7120
I-131	0008	2875	7500IB	SM7500I B
I-131	0008	2875	7500IC	SM7500I C
I-131	0008	2875	D3649-91	D3649-91
I-131	0008	2875	D4785-88	D4785-88
Gamma:				
Co-60	0003	2815	901.1	EPA 901.1
Co-60	0003	2815	1979p92	EPA (March, 1979), p.92
Co-60	0003	2815	DOE4.5.2.3	DOE 4.5.2.3
Co-60	0003	2815	7120	SM7120
Co-60	0003	2815	D3649-91	D3649-91
Cs-134	0005	2800	901.1	EPA 901.1
Cs-134	0005	2800	1979p92	EPA (March, 1979), p.92
Cs-134	0005	2800	DOE4.5.2.3	DOE 4.5.2.3
Cs-134	0005	2800	7120	SM7120
Cs-134	0005	2800	D3649-91	D3649-91
Cs-137	0006	2805	901.1	EPA 901.1
Cs-137	0006	2805	1979p92	EPA (March, 1979), p.92
Cs-137	0006	2805	DOE4.5.2.3	DOE 4.5.2.3
Cs-137	0006	2805	7120	SM7120
Cs-137	0006	2805	D3649-91	D3649-91
Zn-65	0004	3070	901.1	EPA 901.1
Zn-65	0004	3070	1979p92	EPA (March, 1979), p.92
Zn-65	0004	3070	DOE4.5.2.3	DOE 4.5.2.3
Zn-65	0004	3070	7120	SM7120
Zn-65	0004	3070	D3649-91	D3649-91
Ba-133	0007	2765	901.1	EPA 901.1
Ba-133	0007	2765	1979p92	EPA (March, 1979), p.92

Analyte or Group-of-Analytes	USEPA Analyte Codes	NELAP Analyte Codes	Method Description	Reference Method
Ba-133	0007	2765	DOE4.5.2.3	DOE 4.5.2.3
Ba-133	0007	2765	7120	SM7120
Ba-133	0007	2765	D3649-91	D3649-91
Ra-226	0012	2965	903.0	EPA 903.0
Ra-226	0012	2965	p13	EPA 600/4-75-008, p.13
Ra-226	0012	2965	Ra-03	EPA Ra-03
Ra-226	0012	2965	7500RaB	SM7500Ra B
Ra-226	0012	2965	D2460-90	D2460-90
Ra-226	0012	2965	R1140-76	R-1140-76
Ra-226	0012	2965	903.1	EPA 903.1
Ra-226	0012	2965	p16	EPA 600/4-75-008, p.16
Ra-226	0012	2965	Ra-04	EPA Ra-04
Ra-226	0012	2965	1979p19	EPA (March, 1979), p.19
Ra-226	0012	2965	DOERa-05	DOE Ra-05
Ra-226	0012	2965	7500RaC	SM7500Ra C
Ra-226	0012	2965	D3454-91	D3454-91
Ra-226	0012	2965	R1141-76	R-1141-76
Ra-226	0012	2965	D3454-91	D3454-91
Ra-226	0012	2965	76-771p81	USGS 76-771, p.81
Ra-228	0013	2970	904.0	EPA 904.0
Ra-228	0013	2970	p24	EPA 600/4-75-008, p.24
Ra-228	0013	2970	Ra-05	EPA Ra-05
Ra-228	0013	2970	1979p19	EPA (March, 1979), p.19
Ra-228	0013	2970	7500RaD	SM7500Ra D
Ra-228	0013	2970	R1142-76	R-1142-76
Sr-89	0009	2995	905.0	EPA 905.0
Sr-89	0009	2995	p29	EPA 600/4-75-008, p.29
Sr-89	0009	2995	Sr-04	EPA Sr-04
Sr-89	0009	2995	1979p65	EPA (March, 1979), p.65
Sr-89	0009	2995	DOESr-01	DOE Sr-01
Sr-89	0009	2995	DOESr-02	DOE Sr-02
Sr-89	0009	2995	7500SrB	SM7500Sr B
Sr-89	0009	2995	R1160-76	R-1160-76
Sr-90	0010	3005	905.0	EPA 905.0
Sr-90	0010	3005	p29	EPA 600/4-75-008, p.29
Sr-90	0010	3005	Sr-04	EPA Sr-04
Sr-90	0010	3005	1979p65	EPA (March, 1979), p.65
Sr-90	0010	3005	DOESr-01	DOE Sr-01
Sr-90	0010	3005	DOESr-02	DOE Sr-02
Sr-90	0010	3005	7500SrB	SM7500Sr B
Sr-90	0010	3005	R1160-76	R-1160-76

Analyte or Group-of-Analytes	USEPA Analyte Codes	NELAP Analyte Codes	Method Description	Reference Method
H-3	0011	3030	906.0	EPA 906.0
H-3	0011	3030	p34	EPA 600/4-75-008, p.34
H-3	0011	3030	H-02	EPA H-02
H-3	0011	3030	1979p87	EPA (March, 1979), p.87
H-3	0011	3030	75003HB	SM7500(3H) B
H-3	0011	3030	D4107-91	D4107-91
H-3	0011	3030	D1171-76	D1171-76
Uranium	0014	3050	908.0	EPA 908.0
Uranium	0014	3050	908.1	EPA 908.1
Uranium	0014	3050	00-07	EPA 00-07
Uranium	0014	3050	1979p33	EPA (March, 1979), p.33
Uranium	0014	3050	DOEU-02	DOE U-02
Uranium	0014	3050	DOEU-04	DOE U-04
Uranium	0014	3050	7500UB	SM7500U B
Uranium	0014	3050	7500UC	SM7500U C
Uranium	0014	3050	D2907-91	D2907-91
Uranium	0014	3050	D3972-90	D3972-90
Uranium	0014	3050	D5174-91	D5174-91
Uranium	0014	3050	D1180-76	D1180-76
Uranium	0014	3050	D1181-76	D1181-76
Uranium	0014	3050	D1182-76	D1182-76