SEMINAR ON DRINKING WATER QUALITY SURVEILLANCE

Kabul, Demobratic Republic of Afghanistan

16 - 21 July 1986

by

Dr B. Commins
WHO Short term Consultant

1. INTRODUCTION

In his opening address, the Deputy Minister of Health, Dr Sayed Ahmed, provided the following message:

(Distinguished Delegates)

Let me convey my sincere thanks to all members of the seminar participating in Quality Control of Drinking Water. As all of us know water is one of the important components for life for all human beings.

The Seminar which is going to be inaugurated very shortly here for all participating, including those being involved in the supply of water or those dealing with quality control, has been organized by the Preventive Medicine Department and the Central Station of Sanitation and Epidemiology with the financial and technical assistance of WHO. Not only are the Afghan experts performing their duties by an exchange of experiences and ideas to the participants but two professional experts from WHO are also participating to assist in the better development of the methodology of the Seminar. We welcome their arrival and participation to our country and wish their stay in Kabul to be enjoyable and successful.

(Dear Colleagues)

Recently sanitation has been more widely defined as the provision of health in the human environment. Recent knowledge has obviously proved that the environment has a direct effect and impact on human beings. Therefore, it is better to improve and clear the environment as positively as possible. But the important factors from an environmental health point of view which play an important role for human health are as follows:

- Provision of residences built according to sanitary principles
- Water and garbage disposal by technical means without causing any danger to human beings
- Control of food premises and establishments including production, storage and distribution
- Control of air pollution
- Control of general public parks from a health point of view
- Control of water supplies, distribution systems and quality control.

In developed countries such problems have been solved, but environmental health in developing countries still remains a public health problem, which obviously imposes health problems and causes much incidence of disease.

Therefore one of the important tasks of the responsible person is to provide better health services, and better environmental health in their respective countries.

(Friends)

In connection with the present seminar, safe drinking water plays an important role for healthy living; on the other hand, polluted water causes many epidemics of disease and thereby causing the death of thousands of human beings.

If we look and consider the composition of the body from the medical point of view, the composition of the adults' body is composed of 70% of water and for children, 9D-95% of water. Additionally the water assists in the transport of dissolved substances within the body. Therefore, clean and safe water is considered as the daily need for human beings.

The quality of water is determined physically as pH, colour, odour, turbidity, and chemically as nitrate, nitrite, alkalinity, hardness, sulphate, etc. and also by biological properties.

Therefore the water being consumed should be physically, biologically, and chemically safe. The safe, clean water being used in a community is a good index of its health, whereas polluted water used in a community and not properly distributed, causes the incidence of many outbreaks of diseases.

The Ministry of Public Health in DRA, recognizing the importance of the subject, puts its effort in the provision of safe drinking water and tries to train and get up-to-date experience and information from experts in the field by organizing such seminars through the assistance of WHO. This enables an exchange of views, ideas, knowledge, and experience from WHO consultants which improves services in the respective field.

We welcome the opportunity to inaugurate this seminar and hope for its success for all those participating and thank the Technical and Financial assistance provided by WHO".

On behalf of the World Health Organization Mr I.G.Korabljov welcomed the participants to the Seminar and pointed out the importance of drinking water quality in achieving national health goals. He wished the Seminar every success on behalf of WHO.

2. JUSTIFICATION AND OBJECTIVES

Due to the economic situation in Afghanistan, the development of drinking water supplies and sewerage systems is not keeping pace with the demand. About 30% of the urban population is supplied with piped water and 4% with sewerage systems; the rural population has even less coverage. The lack of investment has restrained the development of these services. A programme of water quality surveillance is still to be established. Water testing laboratories do not exist in the Provinces. Only in the City of Kabul is water quality control practised. As many as 12% of the microbiological samples taken from piped supplies in Kabul fail to achieve values specified in the WHO Guidelines for defining safe drinking water. National drinking water quality standards have not yet been formulated.

WHO Guidelines for Drinking Water Quality which are to be used by countries as a basis for developing national standards, if properly applied can ensure the safety of drinking water supplies in Afghanistan.

As a consequence, it was felt useful to hold a National Seminar on Drinking Water Quality Surveillance to:

- (a) improve the understanding of Water Quality Criteria
- (b) to introduce the WHO Guidelines
- (c) to guide the development of Drinking Water Standards according to local conditions, and
- (d) to encourage the development of a quality control programme.

3. BACKGROUND TO SITUATION IN AFGHANISTAN

Afghanistan with a population of about 15 million is a landlocked country with an area of 636 000 km² bordered by the Soviet Union, Islamic Republic of Iran and Pakistan. The topography ranges from the mountainous central massif of the Hindukush, which rises to over 4,500 m, to the deserts of the South West, which lie below 1,500m. Average annual precipitation over most of the country is less than 400 mm. The low-lying areas of the South are arid whilst at high altitudes in the central massif heavy snow fall during the winter months provides surface runoff throughout the year. Temperatures fluctuate widely from over 40°C in the arid desert during summer months to well below freezing on the high land in winter.

Groundwater provides most of the drinking water supply for Kabul. The hydrogeological conditions are not well defined but there is a shallow aquifer down to 10m with a variable rest level of 1 - 6m., and two deep aquifers at 40 - 100m (rest level 2 - 20m). The older supplies relied on shallow wells and many of the houses in Kabul have their own wells with some community wells serving mosques, markets, etc. The increased water demand has been met by deep-well supplies and extending the distribution system. The future supplies will draw on more wells in the deep aquifer. The rest levels and recharge from snow-melt are now being monitored to assess the quantity of water available. No consolidated picture of the overall water resources situation is available.

Since the public supply is derived from deep groundwater, the quality is likely to be satisfactory and should meet WHO Guideline levels. However, shallow wells present a potential health hazard since the upper aquifer is known to be polluted by unsewered sanitation, surface

drainage and sullage. The large number of shallow wells are only partially controlled and disinfected by the Ministry of Public Health personnel but ideally, daily disinfection is needed. If the distribution system and deeper aquifer wells are developed, the Central Authority for Water Supply should be able to provide considerably more water for drinking. The shallow wells may still be used for washing and cleaning purposes but a health education campaign needs to be instituted to make the population generally aware of the great dangers of drinking polluted well waters.

The distribution system consists of piping materials made from steel, cement mortar lined iron, cement, asbestos-cement and plastic.

There are known to be problems with leakage and infiltration during intermittent supply and despite booster chlorination at service and supply reservoirs, some consumers do not receive water containing free chlorine. There is a need to institute a leakage control programme to improve and maintain the quantity and quality of the supply. In rural areas it is anticipated that many of the well-sources of drinking water would be highly contaminated; some spring sources and surface sources (streams) are used in remote areas.

To provide some indication of the problems faced by Afghanistan, data related to 1985 showed that the annual income per capita GNP was only US\$163, life expectancy at birth was only 41 years and the infant mortality (up to 1 year) was 182 deaths per 1000 live births; the incidence of water-borne diseases was estimated as 2214 cases per 100 000 people. Health education will be hampered by a very low adult literacy rate.

4. DISCUSSIONS

The problem of water shortage in Kabul was discussed in relation to a rapid population increase in Kabul.

The problems of zero levels of residual chlorine at the ends of distribution systems was referred to in situations where excessive levels were detected close to the point of entry of distributed water.

The problems of controlling bleaching powder dosing for the disinfection of water supplies was raised in relation to situations in Kabul.

The fact that relatively little disinfection of distributed water exists for Kabul was referred to; chlorination was practised more in the summer months. Difficulties in chlorination procedures were mentioned.

Levels of fluoride in drinking water sources were considered to be low: no fluoridation is carried out in Afghanistan.

The Kabul river is a serious health risk since it contains considerable amounts of sewage and it could cause in turn, highly undesirable pollution of shallow groundwater aquifers.

Some problems of algae formation in some storage reservoirs were mentioned.

The problem of different types of materials used in distribution systems was raised; leakage was a significant problem. Asbestos-cement, cement-lined pipes, cast iron, and plastic pipes have been used. It was reported that WHO do not consider the use of asbestos-cement pipes for distribution systems to represent a significant health risk to people drinking the water.

Improvements in water treatment for Afghanistan were considered and the particular value of slow-sand filtration was referred to.

The problems of kerez systems (canats) falling into disrepair were mentioned. Expert advice to renovate these useful water sources may need to be sought.

The difficulties which have resulted from finding very high nitrate situations in parts of Afghanistan were referred to. It appeared to be due to contamination due to the use of agricultural nitrate fertilizers. It was pointed out that the main risk to health was for infants and that an alternative source of supply should be sought for this portion of the population where they need water for drinking purposes.

Priority water quality parameters were discussed and a list starting with microbiological parameters, residual chlorine, including taste, odour, iron, nitrate, and total dissolved solids was considered likely to be appropriate for a number of situations in Afghanistan.

5. RECOMMENDATIONS

The members of the Seminar recommend to:

5.1 request all sectorial ministries to activate the implementation of the International Drinking Water and Sanitation Decade objectives for the benefit of the people of the Democratic Republic of Afghanistan, in order to ensure the fulfilment of the WHO Global Strategy "Health for All by the Year 2000". For this purpose the main WHO general principles for the Decade are needed:

- combining sanitation with water supply development
- focussing on both rural and urban under-served populations in relation to policies and programmes
- achievement of full coverage through reproducible self-reliant and self-sustaining programmes
- use of socially acceptable systems applying appropriate technologies
- involvement of the community with all stages of programmes and projects
- close liaison of water supply and sanitation programmes with those in other sectors and other health programmes.
- 5.2 appeal to the Government of the Democratic Republic of Afghanistan to ensure that water and sanitation have a higher priority in resource planning allocations at the national level.
- 5.3 organize the Decade Consultation Meeting in association with external support Agencies, bilateral non-governmental and UN financial bodies providing funds for development of drinking water supply and sanitation activities according to the Resolution 35/18 of the General Assembly of the United Nations at its Plenary Meeting on 10 November 1980.
- 5.4- request all sectorial ministries:
 - to seek low-cost options for investment
 - to save resources by ensuring adequate operation and maintenance of existing facilities
 - to generate local resources through community participation.
- 5.5- consider the urgent need for the establishment of water quality surveillance activities recommended by WHO for both the Ministry of Public Health and Sectorial Ministries responsible for water supplies.

- 5.6 -establish a network of laboratories for water quality throughout the country and to request WHO to assist the Ministry of Public Health in this matter to identify an external support Agency for this purpose:
- 5.7 -request WHO to assist the Ministry of Public Health as part of the framework of project AFG/CWS/001 in the formulation of national drinking water quality standards;
- 5.8 -request the WHO Office in Kabul to support annual seminars or refresher courses ordrinking water quality and sanitation problems:
- 5.9 -that the Ministry of Public Health strengthens its water quality surveillance activities in order to improve the quality of drinking water supplies in Afghanistan;
- 5.10-request advice from WHO regarding the problems of high nitrate levels in certain water supplies;
- 5.11-request WHO assistance regarding criteria in relation to acceptable distances between drinking water wells and disposal activities;
- 5.12-request further WHO expert advice regarding simple water treatment practices such as the use of slow sand filters;
- 5.13-requesting support from WHO in the training of water supply operators;
- 5.14-requesting WHO assistance in providing advice on the most appropriate types of materials and for distribution mains and service connections:

- 5.15-requesting WHO assistance in the management of leakage control on distribution networks;
- 5.16-requesting advice with WHO support regarding the use of disinfectants for chlorinating water supply systems including private well sources, especially where bleaching powder is used;
- 5.17-better coordination between Water Agencies and other bodies in Afghanistan in relation to the collection and analysis of samples would be advantageous;
- 5.18-there should be better coordination between town planning agencies and those supplying water services prior to and during the construction of buildings in order to ensure safe supplies.

ANNEX I

PROGRAMME

Wednesday, 16 July 1986

- Inauguration Speech by Dr Sayed Ahmad, Deputy of MOPHy
- Introduction by WHO Sanitary Engineer, Mr I.G.Korabljov
- Selection of Chairman, Vice Chairman and Rapporteurs
- Adoption of Agenda and presentation of papers
- Sources and types of water by Engineer A. Khabir (CAWS)
- Water distribution systems in Afghanistan by Eng. Salem (CAWS)
- Disinfection of drinking water supply under the present condition by Mr Kelak (MOPH)
- Water Quality by Mr Faramul (MOPH)
- Sources of Water Contamination by Dr N.A. Dadgar (MOPH)
- Drinking Water Quality and Health by Dr B. Gommins (EMRO)

Thursday, 17 July 1986

- Water Quality in relation to sources, treatment and distribution
 by Mr L.Hutton (EMRO)
- WHOM Guidelines Drinking Water Quality Structure and Philosophy by Dr B. Commins (EMRO)
- Drinking Water Quality parameters, criteria, standards by Dr B.Commins(EMRO)
- Microbiology guidelines by Mr L.Hutton (EMRO)

Saturday, 19 July 1986

- Inorganic Health-related Guidelines by Dr B.Commins (EMRO)

Sunday, 20 July 1986

- Sampling: WHO Guidelines by Mr L.Hutton (EMRO)
- Surveillance: WHO Guidelines by Dr B. Commins (EMRO)
- Sanitary Inspection: WHO Guidelines by Mr L.Hutton (EMRO)
- P Remedial and Preventive Measures: WHO Guidelines by Dr B.Commins (EMRO)
- Water-borne Diseases by Mr Sarvaz (MOPH)
- Setting National Water Quality Standards based on WHO Guidelines by Dr B.Commins (EMRO)
- Community Education situation in Afghanistan by Mr Mushfiq (MOPH)
- Summing up (discussion)

Monday, 21 July 1986

- Organic guidelines by Mr L.Hutton (EMRO)
- Taste and Aesthetics Guidelines by Dr B.Commins (EMRO)
- Biological and Chemical Water Sampling Equipment and Location of Water Sampling by Mr A. Hmadzai (MOPH)
- Developments in field testing by Mr L.Hutton (EMRO)
- Coordination with the Laboratory by Mr Matin (MOPH)
- Inspections of Water Supply and Special Inspection by Dr Arab (MOPH)
- Monitoring and Surveillance in Afghanistan by Mr Najimi (MOPH)
- Remedial and Preventive Measures in Afghanistan by Dr Yaqubi (MOPH)
- Field Trip half day
- Final plenary session to address aims of seminar and make recommendations
- Adoption of report
- Closing session

Dr G.A. Yaqubi President of Preventive Medicine Department of the MOPH

ANNEX II

LIST OF PARTICIPANTS

1.	Eng. Rahmatian	CAWS
2.	Eng. Zia Ahmad	CAWS
3.	Eng. Assad	CAWS
4.	Eng. Sharif	CAWS
5.	Eng. Massum	CAWS
6.	Eng. Nessar Ahmad	CAWS
7.	Eng. Sadozi	CAWS
8.	Eng. M.Y.Rahmanzai	CAWS
9.	Eng. Mahboob	CAWS
10.	Eng. Iahia	CAWS
11.	Eng. Latif	CAWS
12.	Eng. Nassir	Maintenance of Macroryan
13.	Eng. Isanullah	Institute of Geology and Mines
14.	Eng. Tahır	Institute of Geology and Mines
15.	Mr Khalak Azizi	Sanitarian (MOPH)
16.	Mr Panah	Sanitarian (MOPH)
17.	Mr Reshed	Sanitarian (MOPH)
18.	Mr Nazzir	Sanitarian (MOPH)
19.	Mr Qandagha	Sanitarian (MOPH)
20.	Mr Naim	Sanitarian (MOPH)
21.	Miss Suella	Sanitarian (MOPH)
22.	Miss Rahela	Sanitarian (MOPH)
23.	Miss Zarghona	Sanitarian (MOPH)
24.	Mrs Jamila	Sanitarian (MOPH)
25.	Mrs Sima	Sanitarian (MOPH)
26.	Mrs Soria	Sanitarian (MOPH)
27.	Mr Qadiri	Sanitarian (MOPH)
28.	Mr S.E.Hashemi	Sanitarian (MOPH)
29.	Mr Ghanimat	Sanitarian (MOPH)
30.	Mr Khelil	Sanitarian (MOPH)

31.	Miss Najiba	Control of Communicable Diseases Dept. (MOPH)
32.	Miss Khorshid	Control of Communicable Diseases Dept. (MOPH)
33.	Mr Shamsi	Control of Communicable Diseases Dept. (MOPH)
34.	Mr Assad	Urban Station of Sanitary Epidemiology Dept.
35.	Mr M.A.Majid	Urban Station of Sanitary Epidemiology Dept.
36.	Mr Wakil	Urban Station of Sanitary Epidemiology Dept.
37.	Mr Nabiullah	Disinfection Dept. (MOPH)
38.	Miss Sabera	Disinfection Dept. (MOPH)
39.	Mr Ezatullah	MOPH of Maiwand Hospital
40.	Mr Maruf	MOPH Pectoral Clinic
41.	Mr N.Nabi	Sanitarian (MOPH) Emergency of Avicina Hospital
42.	Mr A.Rassul	Sanitarian (MOPH) Infection Hospital
43.	Mr Sanuh	Sanitarian (MOPH) Children's Hospital
44.	Mr A.Hosor	Sanitarian, School of Hygiene Dept.
45.	Mr Gh.R.Zara	Sanitarian, Preventive Medicine Dept. (MOPH)
46.	Dr	Dr.,Preventive Medicine Dept. (MOPH)
47.	Mr Alik Hasan	Sanitarian, Health Center (MOPH)
48.	Dr Habib	Dr., (MOPH)
49.	Mr Ebrahim Nabizada	Sanitarian , Health Education Dept. (MOPH)
50.	Dr Qadir Awa	(MOPH)
51.	Dr B.Commins	WHO (EMRO)
52.	Mr L.Hutton	WHO (EMRO)
53.	Eng.I.G.Korabljov	Sanitary Engineer (WHO)
Chai	rman of the Seminar	Dr Yaqubi
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Mr Roshaa

Vice Chairman

This form is a means for us to obtain your opinion of how the seminar was conducted. It will help us to improve the next one.

Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 5 very clear
2.	Were the objectives met?	1 Not at all	2	3	4 5 to a high degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	n 1 ot at all	2	3	(4) 5 very appropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropriat	2 e	3	(4) 5 very appropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	(3)	4 5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 5 Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	(4) 5 Excēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	(4) 5 Very well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 ver	4 5 y well organised
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5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 Excellent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	Very well
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57	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	⑤ Yes
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

	manner?	Poorly or		-	ry well or	
10.	were the lectures present the material in an organized	1	2	3	6	5
	prepared for the presentation?	Poor			Very	well
9.	Were the lectures adequately	_1	2	3	4	5
	the material?	Poor	4	J	Ver	y well
8.	Were the lectures able to stimulate your interest in	1	2	3	(2)	E
	convey their knowledge of the subject to participants?	Poor	2	٩		5 cēllent
7.	Were the lectures able to	1	2	6	4	c
COMMENT	S ON LECTURURERS					
	type presentation be continued?	1 No	2	3	4	Yes
6.	•	4	2	2	,	6
	to your work?	No	2	J	4	Yes
5:	How useful do you think the material covered in the presentations will be	1	2	3	a	5
		nappropriat	\mathbf{U}	_	very appr	
4.	Were the activities used in seminar appropriate for the	1	(2)	3	4	5
	methods were appropriate to achieve the objectives?	Not at all	2	3	4 very appr	5 copriate
3.	•	on 1	2	a		F
2.	Were the objectives met?	1 Not at all	2	3	4 to a high	5 n degree
1.	Did you understand the objectives of the seminar?	Not at all	2	3	4) Very cla	5 ear

- 2 -								
12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 t	3	4 Sufficier			
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much			
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	(3) highly	4 deffective			
GENE	RAL COMMENTS							
15.	Name the topic you regard as MOST Backerological Lamen		the dry	uking W	alu .			
16.	Suggest any topics, not presently included in this presentation. - Walu breatment pl - Organization of a the parameters he analyses in this	auto (Hou	s they f	unefier)	 P			
17.	Any further comments/recommendation of transmission of	parficipa em the Valu Se	contact led the hewle	s Seme	hese her nigaes hans			

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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 5 very clear
2.	Were the objectives met?	1 Not at all	2	3	4 5 to a high degree
3.	methods were appropriate	1 1 ot at all	2	3	4 5 very appropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropriat	2 • e	3	4 5 very appropriate
57	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 (5) Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	5 Excēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 (5) Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	(4) 5 Very well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	(3) ver	4 5 cy well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	(3) ver	4 5 ry effective

12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 .t	3	(4) Sufficie	5 nt	
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	5	
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highl	(4) y éfféctive	5	
GENE	RAL COMMENTS						
15.	Name the topic you regard as MOST		ality.e		•••••		
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 5 very clear
2.	Were the objectives met?	1 Not at all	2	3	4 5 to a high degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives? No	n 1 ot at all	2	3	4 5 yery appropriate
4.	seminar appropriate for the	1 nappropriat	2 e	3	4 5 very appropriate
57	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 5 Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 5 Excēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 5 Very well
10.	were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3	4 5 very well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3	4 5 very effective

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12.	Was allowed sufficient tim L for discussion?	1 Insufficient	2 t	3	4 Sufficier
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highly	4 deffective
GENE	RAL COMMENTS				
15.	Name the topic you regard as MOST		• • • • • • • • • • • •	• • • • • • • • • •	•••••
16.	Suggest any topics, not presently included in this presentation. Walta Oua		Evor	onie	
17.	Any further comments/recommendation I Clommes of the lime be lime the lime the lime be lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the lime the l	Cor pa	ym Jepare Dyse eral	that elisa infor	- m Ls,

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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very c1	(3) ear
2.	Were the objectives met?	1 Not at all	2	3	4 to a hig	5 h degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	on 1 Not at all	2	(3)	4 very app	5 ropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropriat	2 :e	3	4 very app	5 ropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	5 Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4) E	5 xcēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 Ve	5 ry well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 Ver	5 y well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 ver	y Well o	5 rganised
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15.	Name the topic you regard as MOSThe heed for A	ST valuable.	ببو. مبب	ببل. ٤ بب ببوز ا	lance	4
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	Not at all	2	3 .	4 5 very clear	
2.	Were the objectives met?	1 Not at all	2	3	5 to a high degre	:е
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	on 1 Not at all	2	3	4 (5) very appropriat	:e
4.	Were the activities used in seminar appropriate for the subject matter?	1 Inappropriat	2 .e	3	4 (5) very appropriat	:e
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	(3)	4 5 Yes	
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 5 Yes	
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 5 Excéllen	ıt
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well	
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 5 Very well	
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 very	4 5 well organise	d
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 very	4 5 éffective	

Was allowed sufficient tim L for discussion?	1 Insufficien	2 nt	3	4 Suffici	(i ent
Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	(5)
How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highl	4 y effective	5 ê
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Suggest any topics, not presently included in this presentation.	ıncluded, w	hich you wou	ld have l	ıked	
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	Were the discussions beneficial and focused? How would you evaluate the overall effectiveness? RAL COMMENTS Name the topic you regard as MOST MOSTALLA COMMENTS. Suggest any topics, not presently included in this presentation. Any further comments/recommendati	Were the discussions beneficial and focused? How would you evaluate the overall effectiveness? Ineffective RAL COMMENTS Name the topic you regard as MOST valuable. Mostly. Suggest any topics, not presently included, wincluded in this presentation. Any further comments/recommendations?	for discussion? Were the discussions beneficial and focused? Not at all How would you evaluate the overall effectiveness? RAL COMMENTS Name the topic you regard as MOST valuable. Most included in this presentation. Any further comments/recommendations?	Were the discussions Insufficient Were the discussions beneficial and focused? Not at all How would you evaluate the overall effectiveness? Ineffective highl RAL COMMENTS Name the topic you regard as MOST valuable. Mostlia. Suggest any topics, not presently included, which you would have I included in this presentation. Any further comments/recommendations?	for discussion? Insufficient Sufficient Were the discussions beneficial and focused? Not at all very much How would you evaluate 1 2 3 4 the overall effectiveness? Ineffective highly effective RAL COMMENTS Name the topic you regard as MOST valuable. Mostlia. Suggest any topics, not presently included, which you would have liked included in this presentation.

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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very cle	ear 5
2.	Were the objectives met?	1 Not at all	2	3	4 to a high	5 n degre e
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	on 1 Not at all	2	3	4 very appi	⑤ ropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 Inappropriat	2 .e	3	very appi	5 ropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	(5) Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	5 Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 ′ Ex	(5) ccēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 Ver	5 well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	(4)	5 well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 ver	4 y well or	(5) rganised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 ver	4 y effecti	5 . ve

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12.	Was allowed sufficient tim L for discussion?	1 Insufficier	2 nt	3	Sufficier
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	very much
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 hig	thly effective
GENE	RAL COMMENTS				
15.	Name the topic you regard as MOST	valuable.	Vaivesis	5 5	faff
16.	Suggest any topics, not presently included in this presentation.	•		ľ	e liked
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1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very clear 5
2.	Were the objectives met?	1 Not at all	2	3	to a high degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	on 1 Not at all	2	3	4 (5) very appropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropriat	2 e	3	5 very appropriate
5:	How useful do you think the material covered in the presentations will be to your work?). 1 No	2	3	5 Yes
6.	Do you recommend that this type/presentation be continued?	1 No.	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	5 Excéllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 (5) Very well
10.	were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 very	4 5 well organised
11.	Did the lecture utilize	1	2	3	4 (5)
	the time effectively?	Very inef	fective	very	éffective

12.	Was allowed sufficient tim L for discussion?	1 Insufficient	2 t	3	Sufficien
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 high	4 nly éfféctivé
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15.	Name the topic you regard as MOST		· · · · · · · · · · · · · · · · · · ·		
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1.		1 ot at all	2	3	4 5 very clear
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3.	methods were appropriate	1 et at all	2	3	4 5 very appropriate
4.	seminar appropriate for the	1 appropriat	2 e	3	(4) 5 very appropriate
51	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 () Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 (5) ' Excellent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	(4) 5 Very well
10.	were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 ver	5 y well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 ver	4 5 y éffective

12.	Was allowed sufficient tim L for discussion?	1 Insufficie	2 ent	3	4 Sufficie	5 ent
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	(4) very much	5
14.	How would you evaluate the overall effectiveness?	 Ineffectiv	2 /e	3 hig	4) hly effective	5
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1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very cle	ear (5)
2.	Were the objectives met?	1 Not at all	2	3 t	to a high	5 n degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	n 1 ot at all	2	3 v	4 very appr	(5) copriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropriat	2 e	3 v	yery appr	5 copriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	(4)	5 Yes
6.	Do you recommend that this type presentation be continued?	1 No	2	3	4	(5) Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	(4) Ex	5 ccēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	(4) ver	5 ry well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 Very	(5) well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 very	well or	5 rganised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 very	4 effecti	5 Lve

12.	Was allowed sufficient tim L-for discussion?	1 Insufficie	2 ent	(3)	4 Sufficien	5 it
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	very much	5
14.	How would you evaluate the overall effectiveness?	1 Ineffectiv	2 re	3 high	ly effective	5
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15.	Name the topic you regard as MOST	r valuable. L.and.p.m	lophy	hushing.	waln qualty	me T
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 (5) very clear
2.	Were the objectives met?	1 Not at all	2	3	to a high degree
3.	Do you believe the presentati methods were appropriate to achieve the objectives?	on 1 Not at all	2	3	4 (5) very appropriate
4.	seminar appropriate for the	1 Inappropriat	2 :e	3	4 5 very appropriate
57	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 (5) Yes
6.	Do you recommend that this type presentation be continued?	1 No	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 (5) ' Excellent
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9.	Were the lectures adequately prepared for the presentation	1 Poor	2	3	4 (5) Very well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 v	4 (5) ery well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 f ectiv e	3 v	4 (5) ery effective

12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 t	3	4 Suffici	ent 5
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	(3)
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highly	4 effectiv	<u>(</u> 5)
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15.	Name the topic you regard as MOST Setting. The ste		for drink	ng wo	ter	
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very cle	ear (5)
2.	Were the objectives met?	1 Not at all	2	3	to a high	5 degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives? No	1 ot at all	2	3	4 very appr	5 copriate
4.	seminar appropriate for the	1 nappropriat	2 e	3	4) very appr	5 copriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	(5) Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 ′ Ex	(5) ccēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 Ver	(5) Ty well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	(4) Very	5 well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 ve	4 ry well or	5 ganised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 ve	try effecti	5 .ve

12.	Was allowed sufficient tim L for discussion?	1 Insufficient	2	3	4 Sufficie	(5 ent
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	(3)
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highly	4 y éfféctivé	, 5 ē
GENE	RAL COMMENTS					
15.	Name the topic you regard as MOST Concepts of Standards an		195.`		•••••	
16.	Suggest any topics, not presently included in this presentation.	included, w	hich you wou	ld have l	iked	
	to show the port of short micrological par instruments used a	tints te	Her to f	elly the ber spea how the	iking.	
17.	Any further comments/recommendation Different Ministry of Lives! Range, Ministry of Lives! There presents would the recommendations	t in the sock, Mu	nicipall	k. A. g rie 4. G. M	ulture, of Ather	he -

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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

DO NOT SIGN THE FORM: Did you understand the 1 3 objectives of the seminar? Not at all 2. Were the objectives met? high degree Not at all 3 Do you believe the presentation methods were appropriate 2 to achieve the objectives? Not at all Were the activities used in seminar appropriate for the 1 3 subject matter? Inappropriate very appropriate 5. How useful do you think the material covered in the presentations will be 1 2 to your work? No 6. Do you recommend that this 3 type presentation be 1 5 continued? No. COMMENTS ON LECTURURERS 7. Were the lectures able to convey their knowledge of 1 the subject to participants? Poor 8. Were the lectures able to stimulate your interest in 1 2 the material? Poor 9. Were the lectures adequately 2 1 3 prepared for the presentation? Poor 10. Were the lectures present the material in an organized 2 1 3 manner? Poorly organized very well organised

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Very ineffective

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11. Did the lecture utilize

the time effectively?

12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 at	3	Sufficient
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much (5)
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 high	d) 5 aly effēctive
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15.	Name the topic you regard as MOST Water 13 relation	valuable.	ralth	• • • • • • • •	
16.	Suggest any topics, not presently included in this presentation.	ıncluded, w	hich you wou	ld have	lıked
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	very clear
2.	Were the objectives met?	1 Not at all	2	3	to a high degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	n 1 ot at all	2	3	very appropriate
4.	seminar appropriate for the	1 nappropriat	2 e	3	4 5 very appropriate
5;	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 5 Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 5 'Excēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	Very well
10.	were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3	but 5 very well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3	very effective

12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 it	3	4 Sufficie	nt nt
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GENE	RAL COMMENTS					
15.	Name the topic you regard as MOST					
16.	Suggest any topics, not presently included in this presentation.	included, w	vhich you wou	ıld have l	liked	
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Please answer the following questions by circling the number you believe is more appropriate. Note the five point scale from negative to positive. There is room at the end for any additional comments you may wish to make.

1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	wery classification were	5 ear
2.	Were the objectives met?	1 Not at all	2	3	to a hig	5 h degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives?	n 1 ot at all	2	3	4 very app	5 ropriate
4.	Were the activities used in seminar appropriate for the subject matter?	1 nappropria	te	3	4 very app	5 ropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	(S) Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 ′ E	5 kcēllent
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9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 Ver	5 y well
10.	Were the lectures present the material in an organized manner?	1 Poorly o	2 rganized	(3) ver	4 y well or	5 r gan ısed
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GENE	RAL COMMENTS					
15.	Name the topic you regard as MOST Ur. b.o.n. and Rural w	valuable.	y steen	·		
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1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very cl	ear 5
2.	Were the objectives met?	1 Not at all	2	3	4 to a hig	h degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives? No	n 1 ot at all	2	3	4 very app	5 ropriate
4.	seminar appropriate for the	1 nappropriat	2 e	3	4 very app	5 ropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	5 Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	5 Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 , E	(5) xcēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 Ve	5 ry well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 Ver	(5) y well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 vei	4 ry well o	(5) rganised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 vei	4 ry effect	ive ⁵

12.	Was allowed sufficient tim L	1	2	3	4	(5)
	for discussion?	Insufficien	t		Sufficion	ent
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	(5)
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highly	4 y effêctive	(3)
GENE	RAL COMMENTS					
15.	Name the topic you regard as MOSTDrinking. water. 9.4	valuable. ality.a	nd He	ealth	• • • • • •	
16.	Suggest any topics, not presently included in this presentation.				ıked	
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DO NOI	Olon ing lown				_
1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	very clear
2.	Were the objectives met?	1 Not at all	2	3	4 (5) to a high degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives? No	1 ot at all	2	3	4 (5) very appropriato
4.	Were the activities used in seminar appropriate for the subject matter?	1 appropriat	2 e	3	4 5 very appropriate
5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 (5) Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 (5) Yes
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 5 'Excēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	(4) 5 Very well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 (5) Very well
10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3	4 (5) very well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3	4 () very éffective

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13.	Were the discussions beneficial and focused?	Not at all	2	3	, 5
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15.	Name the topic you regard as MOST	valuable.			.' .
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1.	Did you understand the objectives of the seminar?	1 Not at all	2	3	4 very clear
2.	Were the objectives met?	1 Not at all	2	3	4 (5) to a high degree
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5:	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4 (5) Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4 Ses
COMMENT	S ON LECTURURERS				
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 (5) 'ExcEllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	4 (5) Wery well
9.	Were the lectures adequately prepared for the presentation?	1 Poor	2	3	4 (5) Very well
10.	were the lectures present the material in an organized manner?	1 Poorly or	2 ganized	3 ve	4 (5) ry well organised
11.	Did the lecture utilize the time effectively?	1 Very inef	2 fective	3 ve	ry effective

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12.	Was allowed sufficient tim L for discussion?	† Insufficie	2 nt	3	Sufficie	5 ent
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	yery much	5
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highl	(4) Ly éfféctive	5
GENE	RAL COMMENTS					
15.	Name the topic you regard as MOST	valuable.	e Lemi	nor l	tas Untua	YE
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1.	Did you understand the objectives of the seminar?	1 Not at all	2	3 .	4 very cl	ear 5
2.	Were the objectives met?	1 Not at all	2	3	4 to a hig	5 h degree
3.	Do you believe the presentation methods were appropriate to achieve the objectives? No	n 1 ot at all	2	3	4 very app	5) ropriate
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57	How useful do you think the material covered in the presentations will be to your work?	1 No	2	3	4	(5) Yes
6.	Do you recommend that this type presentation be continued?	1 No.	2	3	4	(5) Yes
COMMENT	S ON LECTURURERS					
7.	Were the lectures able to convey their knowledge of the subject to participants?	1 Poor	2	3	4 ′ E	(xcēllent
8.	Were the lectures able to stimulate your interest in the material?	1 Poor	2	3	(4) _{Ve}	5 ry well
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10.	Were the lectures present the material in an organized manner?	1 Poorly or	2 ganızed	3 ve	4 ry well o	rganised
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12.	Was allowed sufficient tim L for discussion?	1 Insufficien	2 nt	3	4 Suffici	ent 3
13.	Were the discussions beneficial and focused?	1 Not at all	2	3	4 very much	(9
14.	How would you evaluate the overall effectiveness?	1 Ineffective	2	3 highl	4 y éfféctiv	(5)
GENE	RAL COMMENTS					
15	Name the topic you regard as MOST	valuable.	7. Water	·	Somal	i
16	Suggest any topics, not presently included in this presentation.					
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