केंद्रीय मुहर विभाग-2

संदर्भ: कें.मु.वि.-2/16:14543 **03 12 2018**

विषय: आई एस 14543:2016"पैकैजबंद पेयजल (पैकैजबंद प्राकृतिक मिनरल जल के अलावा)" की निरीक्षण और परीक्षण की योजना (एस आई टी) का Corrigendum

उपरोक्त विषय पर परिपत्र कार्यान्वयन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी (कें.मु.वि.-2)

प्रमुख (कें.मु.वि.-2)

सभी क्षेत्रीय /शाखा कार्यालयों/एफ ए डी/एल पी पी डी को परिचालित

प्रतिलिपि: आई टी एस - इंटरानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Our Ref : CMD-2/16:14543 **03 12 2018**

Subject: Corrigendum to Scheme of Inspection and Testing for Packaged Drinking Water (as per IS 14543:2016 with amendment nos. 1 and 2

Please find enclosed circular regarding the subject matter for implementation.

(Aditya Das)
Scientist C (CMD-2)

Head CMD-2

Circulated to all ROs/BOs/FAD/LPPD

Copy to: ITS for hosting on Intranet

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:14543 03-12-2018

Subject: Corrigendum to Scheme of Inspection and Testing for Packaged Drinking Water (as per IS 14543:2016 with amendment nos. 1 and 2

1. This has reference to the Scheme of Inspection and Testing for Packaged Drinking Water **Doc: SIT/14543/1 Nov 2018** which was circulated for implementation on 16-11-2018.

2. However, inputs have been received from BOs informing that there are certain typographical errors in the SIT .Having reviewed the SIT, the following typographical errors were discovered which have been corrected as follows:

Clause	Requirement	Frequency	**Test equipment requirement <u>Specified presently</u>**	**<u>Corrected</u> Test equipment requirement**
Table 1				
5.2.3	Faecal Streptococci and Staphylococcus aureus	Once in month	R	S
5.3 and Table 2	x) Aluminium (as Al)	Once in a week	S	R
Table 3				
7.3	Stack load Test	One day production	S	R
7.4	Drop test	Every hour for each machine	S	R
7.5	Ink Adhesion of Printed Pouches	One day production	S	R
7.6	Product resistance of printed Pouches	-do-	S	R
6.1.1	Description	Each roll of polyethylene film	S	R
6.1.2	Film Form	-do-	S	R
6.1.3	Winding of film	-do-	S	R
6.1.4	Odour	-do-	S	R
6.1.5	Thickness	-do-	S	R
6.1.6	Width	-do-	S	R

R- Test equipment required, S- subcontracting allowed

3. Modified SIT incorporating the above changes has been prepared and is enclosed. The same document number is being retained for the modified SIT (since it is only typographical correction).

4. BOs are requested to ensure implementation of this modified SIT instead of the SIT circulated on 16-11-2018.

Aditya Das
Sc. C

HCMD-2
ROs/BOs/FAD/LPPD

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ITSD - for hosting on BIS intranet

SCHEME OF INSPECTION AND TESTING
FOR CERTIFICATION OF PACKAGED DRINKING WATER (OTHER THAN PACKAGED NATURAL MINERAL WATER) ACCORDING TO IS 14543: 2016
(Incorporating Amendment No. 1and 2)

1.0 LABORATORY -A laboratory shall be maintained which shall be suitably equipped and staffed with competent testing person(s) to carry out the different tests in accordance with the methods given in the Indian standards.

Testing person(s) shall be science/engineering graduate from disciplines such as chemistry/chemical engineering/ microbiology/ biotechnology/ biochemistry/ food technology/ botany and other biological/ life sciences. Engineering graduates from disciplines such as chemical engineering may also be engaged as testing persons.

2.0 TEST RECORDS - All records of analysis and tests shall be kept in suitable forms approved by the Bureau of Indian Standards (BIS) for a minimum period of 5 years.

Copies of any records that may be required by BIS shall be made available at any time on request.

3.0 LABELLING AND MARKING - The Standard Mark, as given in the Schedule of the Licence shall be clearly marked legibly and indelibly on the label of the bottle/container or on the pouch as the case may be, provided always that the material on which this Mark is applied conforms to every requirement of the specification. The dimension of standard mark shall be in accordance with preferred specified design.

3.1 PACKING – The Packaged Drinking Water shall be packed as per clause 3.2, clause 5.1, clause 6 and Annex B of IS 14543:2016. The pouches and bottles/containers shall be supplied in secondary packaging as agreed to between the purchaser and the supplier.

3.2 MARKING – In addition to the Standard Mark as per clause 7. 3 of IS 14543:2016 the following information shall be given legibly & indelibly on each bottle/container or its label or directly printed on the pouch/bottle/container.

i. Name of the product (i.e. Packaged Drinking Water)
ii. Name and full address of the processor (i.e. manufacturer);
iii. Brand Name, if any;
iv. Batch or Code Number/Control Unit No.;
v. Date of processing/packing;
vi. Treatment of disinfection, if any;
vii. Best before…… (date/month/year in capital letters);OR Best before ……days or months from the date of packaging/manufacture;
viii. Net quantity;
ix. Direction for storage;
x. Keep the container away from direct sunlight; and
xi. Any other information required under the Legal Metrology(Packaged Commodity) Rules, 2011 and the Food Safety and Standards (Packaging and Labeling) Regulations 2011.
xii. Recycling symbol as per IS14535,
xiii. BIS website details: www.bis.gov.in

3.2.1 Minimum height of the BIS Standard Mark on different pack sizes of Packaged Drinking Water shall be as under:

S. No.	Size of Container	Min height of BIS Standard Mark*
1	Pouch/Cups/bottle(250 ml capacity & below)	5mm
2	Bottles upto500ml capacity & below (but greater than 250 ml capacity)	7.5mm
3	Bottles more than 500ml capacity	10mm
4	All re-useable Jars	15mm

(* other dimensions of the BIS Standard Mark shall be in appropriate proportions as per BIS guidelines).

3.3 Each secondary packing of pouches/bottles/containers shall be marked with the following, except where such secondary packing is transparent and the markings on the pouches/bottles/containers are legible through the secondary packing:

i. Indication of the source of manufacture;
ii. Number of pouches/bottles/containers
iii. Brand name, if any
iv. Nominal capacity;
v. Batch No. or Code No.

3.4 LABELLING PROHIBITIONS -The label on the bottles/containers/pouches and/or the secondary packaging shall not contain claims which are prohibited as per clause 7.2 of IS14543:2016.

4.0 LEVELS OF CONTROL -The tests as indicated in Table 1 and at the levels of control specified therein, shall be carried out on the whole production of the factory covered by this Scheme and appropriate records maintained in accordance with clause 2 of this Scheme. Entire production which conforms to the Indian Standard and covered by the licence shall be marked with Certification Mark of the Bureau.

5.0 CONTROL UNIT - For the purpose of this Scheme, the quantity of packaged drinking water treated/processed from each processing line and filled/packed in one day shall constitute a Control Unit.

5.1 On the basis of tests and analysis results, the decision regarding conformity or otherwise of a Control Unit to the given requirements shall be made.

5.2 In respect of all other clauses of the Standard (other than those mentioned under Levels of Control– Table1 of this Scheme) the factory shall maintain appropriate controls and checks to ensure that their product conforms to the requirements of the standard.

6.0 Microbiological Requirements - If any failure is noticed in any of the microbiological requirements, control units available in the stock shall be rechecked and released into the market only after conformity is ensured.

6.1 The licensee shall take immediate corrective actions, which would involve complete investigation of the reasons for contamination and non-conformity. The manufacturer should re-start marking and dispatch only after the completion of satisfactory corrective actions and availability of satisfactory results of all microbiological tests as applicable for each control unit, for next 2 consecutive control units. The manufacturer shall keep complete records of such instances for review by BIS for minimum period of 5 years.

7.0 SOURCE WATER - The source water used in production of Packaged Drinking Water shall be initially tested for Organoleptic and physical parameters (Table 1), Chemical requirements (Table2), and all microbiological requirements possible to be tested in house. Subsequently, its quality may be regularly assessed at least once in three months through the above tests. In addition, any other requirements as considered necessary for process control, are to be tested where the incidence of their presence in higher levels has been detected during the previous tests.

7.1 Whenever, the quality of processed water is found to be not meeting the requirements of IS 14543 for the tested parameters, the source water shall be checked again for such parameters in which failure is observed for deciding upon the necessary controls to be exercised for conformance of quality of processed water to IS 14543.

7.2 In case non-conformity is observed for radioactive residues, the source of raw water shall be abandoned and water shall be recalled immediately.

7.3 As and when there is change in source water or addition of new source of raw water, it shall be intimated to BIS. The raw water collected from the new source shall be tested in accordance with Clause

7 as above and the processed water produced from such source water shall be tested for conformity to IS 14543 from BIS recognized outside lab. The reports of source water and the product water produced from the new source shall be submitted to BIS for approval before commissioning for regular production and marking.

7.4 The source water shall be treated as per clause 5.1 of IS 14543:2016. In case the licensee carries out remineralization as part of its treatment process, the ingredients used shall conform to food grade/pharma grade quality. The test certificate of these ingredients shall be submitted to BIS.

7.5 The means adopted for disinfection of the product water shall be declared and shall be done in accordance with clause 5.1.1 of IS 14543:2016.

8.0 Plastic Jars/Bottles/Containers - The plastic containers used for packing the material shall conform to IS 15410:2003. The conformity assessment shall be carried in accordance with the levels of controls as given under Table2.

8.1 In addition, the top lid for glasses/cups shall be of suitable peelable structure in accordance with Clause 4.2.1 of IS 15410:2003.

8.2 Pouches–The polyethylene film and pouches shall conform to IS 15609. The conformity assessment shall be carried in accordance with the levels of controls as given under Table3.

9.0 REUSED CONTAINERS – Licensee shall ensure use of only such jars for packing the product water whose transparency continues to meet the requirements as per IS 15410 even after its repeated use. Jars which get soiled, de-shaped and/or mutilated during the course of use and refilling shall not be used.

9.1 Water to be used for the purpose of cleaning etc. IS 4251:1967 may be followed as Good Manufacturing practices.

10.0 HYGIENIC CONDITION - The source water shall be collected, processed, handled, stored, packed and marketed in accordance with the hygienic practices given under Annex B of IS 14543:2016. Other clauses shall also be complied in day to day production and quality control activities. Schedule for each activity for this purpose shall be displayed prominently in the factory premises and records of compliance shall be maintained for scrutiny by the Bureau. The hygienic conditions shall also be maintained at the site of water source. A check list for good hygienic practices and food safety system for packaged drinking water processing units is given in Annex C of IS 14543:2016.

11.0 REJECTION - Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016. A separate record providing the detailed information regarding the rejected control units and mode of their disposal shall be maintained. Such material shall in no case be stored together with that conforming to the specification.

IS 14543:2016 PACKAGED DRINKING WATER
(OTHER THAN PACKAGED NATURAL MINERAL WATER)
TABLE 1 LEVELS OF CONTROL
(Para 4 of the Scheme of Inspection and Testing)

TEST DETAILS				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.2	Microbiological Requirement						
5.2.1	Escherichia coli	--	IS 15185	R	One	Each control unit	
5.2.2	Coliform Bacteria	--	IS 5401 (Part-1)* or IS 15185	R	One	Each control unit	
5.2.3	Faecal Streptococci and Staphylococcus aureus	--	IS 5887 (Part-2)* or IS 15186	S	One	Once in month	
5.2.4	Sulphite Reducing Anaerobes	--	Annex C of IS 13428	R	One	Each control unit	
5.2.5	Pseudomonas aeruginosa	--	Annex D of IS 13428	R	One	Each control unit	
5.2.6	Aerobic Microbial Count	--	IS 5402	R	One	Each control unit	
5.2.7	Yeast &Mould	--	IS 5403	R	One	Each control unit	
5.2.8	Salmonella and Shigella	--	IS 15187 & IS 5887 (Part-7), respectively	S	One	Once in month	
5.2.9	Vibrio cholera and V. parahaemolyticus	--	IS 5887 (Part-5)	S	One	Once in month	

TABLE 1 (continued)

TEST DETAILS					**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement		Test Method			No. of Sample	Frequency	
			Clause	Reference				
5.3	Description		5.3	IS 14543	R	One	Each Control Unit	-
5.3 and Table 1	i)	Colour	-	IS 3025 (Part 4)	R	One	Each Control Unit	See Note 2
-do-	ii)	Odour	-	IS 3025 (Part 5)	R	One	Each Control Unit	-do-
-do-	iii)	Taste	-	IS 3025 (Part 8)	R	One	Each Control Unit	-do-
-do-	iv)	Turbidity	-	IS 3025 (Part 10)	R	One	Each Control Unit	-do-
-do-	v)	Total Dissolved Solids	-	IS 3025 (Part 16)	R	One	Each Control Unit	See Note 3
-do-	vi)	pH	-	IS 3025 (Part 11)	R	One	Every four hours	See Note 2
5.3 and Table 2	i)	Barium (as Ba)	-	Annex F of IS 13428 or IS 15302 or IS 3025 (Part 2)	S	One	Once in a month	See Note 4
-do-	ii)	Copper (as Cu)	-	IS 3025 (Part 42)* or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	iii)	Iron (as Fe)	-	IS 3025(Part 53)*or IS 15303 or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	iv)	Manganese (as Mn)	-	IS 3025 (Part 59)* or IS 3025 (Part 2)	S	One	Once in a month	-do-
-do-	v)	Nitrate (as NO3)	-	IS 3025 (Part 34)	R	One	Once in a week	-do-
-do-	vi)	Nitrite (asNO2)	-	IS 3025 (Part 34)	R	One	Once in a week	-do-
-do-	vii)	Fluoride (as F)	-	IS 3025 (Part 60)	S	One	Once in six months	See Note 6
-do-	viii)	Zinc (as Zn)	-	IS 3025 (Part 49)* or IS 3025 (Part 2)	S	One	Once in a month	See Note 5
-do-	ix)	Silver (as Ag)	-	Annex J of IS 13428	S	One	-Once in six months -See Note 6 also	-Once in a month for licensees using silver in any form. -See Note 5 also
-do-	x)	Aluminium (as Al)	-	IS 3025 (Part 55) or IS 15302	R	One	Once in a week	See Note 4
-do-	xi)	Chloride (as Cl)	-	IS 3025 (Part 32)	R	One	Each control unit	-
-do-	xii)	Selenium((as Se)	-	IS 3025 (Part 56)	S	One	Once in six months	See Note 6
-do-	xiii)	Sulphate (asSO4)	-	IS 3025 (Part 24)	R	One	Each control unit	-
-do-	xiv)	Alkalinity as (HCO3)	-	IS 3025 (Part 23)	R	One	Each control unit	-

TEST DETAILS				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.3 and Table 2	xv) Calcium (as Ca)	-	IS 3025 (Part 40)* or IS 3025 (Part 2)	R	One	Once in a week	See Note 4
-do-	xvi) Magnesium (as Mg)	-	IS 3025 (Part 46)* or IS 3025 (Part2)	R	One	Once in a week	See Note 4
-do-	xvii) Sodium (as Na)	-	IS 3025 (Part 45)* or IS 3025(Part 2)	S	One	Once in six months	See Note 6
-do-	xviii) Residual Free Chlorine	-	IS 3025 (Part 26)	R	One	Each control unit	-
-do-	xix) Phenolic compounds (asC6H5OH)	6	IS 3025 (Part 43)	S	One	Once in a month	See Note 5
-do-	xx) Mineral Oil	6	IS 3025 (Part 39)	S	One	Once in a month	See Note 5
-do-	xxi) Anionic surface active agents (as MBAS)	-	Annex K of IS 13428	S	One	Once in a month	See Note5
-do-	xxii) Sulphide (as H2S)	-	IS 3025 (Part 29)	R	One	Once in a week	See Note 4
-do-	xxiii) Antimony (as Sb)	-	Annex G of IS 13428* or IS 15303	S	One	Once in a month	See Note 5
-do-	xxiv) Borates (as B)	-	Annex H of IS 13428* or IS 3025 (Part 2)	S	One	Once in a month	See Note 5
-do-	xxv) Bromates (as BrO3)	-	ISO 15061	S	One	Once in six months	See Note 6
5.3 & Table 3	i) Mercury (as Hg)	-	IS 3025 (Part 48)	S	one	Once in six months	See Note 6
-do-	ii) Cadmium (as Cd)	-	IS 3025 (Part 41)	S	one	-do-	-do-
-do-	iii) Arsenic (as As)	-	IS 3025 (Part 37)	S	one	-do-	-do-
-do-	iv) Cyanide (as CN)	2	IS 3025 (Part 27)	S	one	-do-	-do-
-do-	v) Lead (as Pb)	-	IS 3025 (Part 47)	S	one	-do-	-do-
-do-	vi) Chromium (as Cr)	-	Annex J IS 13428* or IS 3025 (Part 2)	S	one	-do-	-do-
-do-	vii) Nickel (as Ni)	-	Annex L IS 13428	S	one	-do-	-do-
-do-	viii) Polychlorinated biphenyl(PCB)	-	Annex M of IS 13428	S	one	-do-	-do-
-do-	ix) Polynuclear aromatic hydrocarbons	-	APHA 6440	S	one	-do-	-do-

TEST DETAILS				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		REMARKS
Clause	Requirement	Test Method			No. of Sample	Frequency	
		Clause	Reference				
5.3 & Table 4	i) Alpha emitters	-	IS 14194 (Part 2)	S	one	Once in five years	
-do-	ii) Beta emitters	-	IS 14194 (Part 1)	S	one	-do-	
5.4	Pesticide Residues	5.4	Annex D of IS 14543				See Note 1 below
i)	Pesticide residues considered individually	5.4.1	IS 14543**	S	One	Once in 6 months in 1st operative period	See Note 1 below
ii)	Total pesticide residue	-do-	-do-		-do-	-do-	-do-
-	Shelf Life Assessment	-	-	R	One (of each type of container)	Once in six months	See Note 8 below

In case of dispute, methods given at column 4 and wherever indicated by "*" shall be the reference method.
**Shall be got tested from BIS recognized laboratory using internationally established test method as specified in Annex D of IS 14543 : 2016

Note 1: In case no failure is observed during the first operative period (sample tested every 6 months) the frequency of such test may be reduced to one year. In case any failure is observed, the frequency shall be increased to once in three months. The original frequency of once in 6 months may be restored only if two consecutive samples pass.

Note 2: In case of failure in any requirement like colour, odour, taste, turbidity, Chloride, Sulphate, Alkalinity, Residual free chlorine the frequency to be increased from each control unit to every four hours for one month. Thereafter frequency of each control unit may be restored if all the samples during the month are found passing. For pH, in case of failure, the frequency to be increased from every four hours to every hour for a week. Thereafter frequency of every 4 hours may be restored if all the samples during the week are found passing.

Note 3: In case of failure in total dissolved solid, the frequency to be increased from each control unit to every four hours for one month. Thereafter frequency of each control unit may be restored if all the samples during the month are found passing.

Note 4: In case of failure in any requirement like Barium, Copper, Iron, Manganese, the frequency to be increased from once in a month to once in a week for one month. Thereafter frequency of once in a month may be restored if all the samples during the month are found passing. For Nitrate, Nitrite, Aluminium, Calcium, Magnesium, and

Sulphide in case of failure the frequency to be increased from once in a week to each control unit for one month. Thereafter frequency of once in a week may be restored if all the samples during the month are found passing

Note 5: In case of failure in any requirement like Zinc, Phenolic Compounds, Mineral Oil, Anionic surface active agents, Antimony, Borate, Silver (For licensee using silver in any form) the frequency to be increased from once in a month to each control unit once in a week for one month. Thereafter frequency of once in a month may be restored if all the samples during the month are found passing.

Note 6: In case of failure in any requirement like Fluoride, Silver, Selenium, Bromate, Sodium, Mercury, Cadmium, Arsenic, Cyanide, Lead, Chromium, Nickel, PCB, PAH, the frequency to be increased from once in 6 months to once in 3 months for 6 months. Thereafter frequency of once in 6 months may be restored only if both the samples tested at each quarter are found passing.

Note 7: Approved international standard test methods from organizations like ISO/ APHA/ ASTM/ AOAC/EPA/EN may also be permitted for performing tests given in Table 2 & 3. In case of dispute, methods given at column 4 and wherever indicated by "*" shall be the reference method.

Note 8: Shelf Life testing shall be done in house for all possible tests for description, organoleptic, physico-chemical, chemical, and microbiological parameters which are possible to be tested in house as per test methods prescribed in IS 14543. Records of shelf life studies to be maintained. In case of failure, the manufacturer shall review the shelf life declaration and re-declare the suitable revised shelf life. **Declared Shelf life shall not be less than 30 days**.

Note-9: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-10: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.

FORM 1
REPORT FOR FOUR HOURLY PH TESTING

Date of Production	Batch Number/ control unit number	pH	Remarks
1	2	3	4

FORM 2

REPORT FOR DAILY/ EACH CONTROL UNIT TESTING

Date of Production	Batch Number/ control unit number	Description	Colour	Odour	Taste	Turbidity	TDS	Chloride	Sulphate	Alkalinity	Residual Free chlorine	E.coli	Coliform Bacteria	Sulphite reducing anaerobes	Pseudomonas aeruginosa	Aerobic microbial count		Yeast & Mould	Remark
																20-220C	370C		
1	2	3					4	5	6	7	8	9	10	11	12	13	14	15	16

FORM 3
REPORT FOR WEEKLY & MONTHLY TESTING

Date	Batch/ control unit no.	Barium	Copper	Iron	Manganese	Nitrate	Nitrite	Aluminium	Calcium	Sulphide	Magnesium	Antimony	Borate	Phenolic Compounds	Mineral Oil	Zinc	Anionic Surface Active Agents	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

FORM 4

FORMAT FOR TESTING FROM BIS RECOGNIZED OUTSIDE LABORATORY

Month & Year	Batch No./DOM	Type of packing	Dates on which sample sent	Lab to which sample sent	Test report number & date	Results	Remarks

1. REPORT FOR MONTHLYTEST

i. Faecal streptococci and S. aureus, Salmonella and Shigella, V. cholera and V.parahaemolyticus

ii. Mineral Oil, Zinc, Anionic Surface Active Agents, Phenolic Compounds, Antimony,Borates,

iii. Barium, Copper, Iron, Manganese (If done from BIS recognized outside laboratory)

2. REPORT FOR SIX MONTHLYTEST

i. Mercury, Cadmium, Arsenic, Cyanide, Lead, Chromium, Nickel, Fluoride, Selenium, Sodium, PCB, PAH,Bromates

ii. Silver (as applicable)

iii. Pesticide Residues

3. REPORT FOR FIVEYEARLYTEST

I. Radio Active Residues (Alpha and Beta Emitters)

FORM 5

SOURCE WATER TESTING (3 MONTHLY TESTS)

Month & Year	Source of water	In-house testing	Outside testing (if done)			Record of in-house testing/outside TR	Results	Remarks
			Name of lab	sample sent on	TR No. & Date			

FORM 6

RECORD FOR PLASTIC CONTAINERS USED FOR PACKING WATER

Date of receipt	Type of packing material	Name of supplier	Quantity received	Whether ISI marked	Details of outside testing		Results			Remarks
					Name of lab	Date of sending samples	Overall migration	Colour migration	Remaining parameters as per IS 15410	

FORM 7

RECORDS FOR SHELF LIFE ASSESSMENT (SEPARATE FOR EACH TYPE OF CONTAINER BEING USED)

Date on which sample kept	Batch No./DOM	Type of packing whose sample kept	Declared shelf life	Periodicity of testing	Date of Testing	Requirements Tested	Results	Remarks

FORM 8

FORMAT FOR PEFILM

Date of Receipt of Rolls	Name of Supplier	Quantity Received (No. of Rolls)	Details of Test report from O S Lab. With date	Description	Film Form	Winding of Film	Odour	Thickness	Width	Overall Migration	Tensile Strength	Elongation at Break	Dart Impact Resistance	Results	Remark
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

FORMAT FOR POUCHTESTING

Date of Pouch Production	Time of production	Total quantity produced	Drop Test					Stack Load Test	Ink Adhesion of Printed Pouches	Product Resistance of Printed Pouches	Water Potability Test	Results	Remarks
			Machine No.										
			1	2	3	4	Etc.						
(1)	(2)	(3)	(4)					(5)	(6)	(7)	(8)	(9)	(10)

TABLE 2
GUIDELINES ON ENSURING CONFORMITY OF CONTAINERS USED FOR PACKAGED DRINKING WATER

Type of container	Parameters	Options for mode of conformity	Frequency to be followed by licensee
a) Plastic Jars	i) Overall migration and colour migration as per Clause 6 of IS 14543 & ii) Conformity to IS15410	i) 'ISI'marked, OR ii) In-house Test Reports of licensee, if facilities exist; OR iii) BIS recognized outside laboratory Test Report of the samples got tested by licensee; OR iv) Combination of the above.	a) In case jars are received from outside, source options as given at i) to iv) as given in Column 3may be followed for each consignment of specific size/ material of jars received by the licensee b) In case jars are manufactured from the PDW manufacturer himself, conformity to be ensured through in-house testing or BIS recognized outside lab test report for each batch of jars manufactured. (See Note 1 below)
b) Plastic Bottles, Glass/ cups	i) Overall migration and colour migration as per Clause 6 of IS 14543& ii) Conformity to IS15410	i) 'ISI'marked OR ii) In-house Test Reports of licensee, if facilities exist OR iii) BIS recognized outside laboratory Test Report of the samples got tested by licensee	a) In case bottles, glasses/ cups are received from outside source options as given at i) to iii) as given in Column 3 may be followed for any one consignment received during a period of every six months for each capacity, shape and material b) In case bottles, glasses/cups are manufactured by the PDW manufacturer himself, conformity to be ensured through in-house testing or BIS recognized outside lab test report for each batch of bottles/glass/cups manufactured. (See Note 1 below)
c) Plastic cap (closures) of containers	Overall migration and colour migration as per Clause 6 of IS 14543	i) Declaration/ certificate w.r.t. food grade quality, as permitted under IS14543 , AND ii) In house test report of licensee, if facilities exist OR	a) In case caps (closures) are received from outside source options as given at i) to iii) as given in Column 3 may be followed for each consignment received.

		iii) BIS recognized outside test report of samples got tested by licensee	b) In case caps (closures) are manufactured by the PDW manufacturer himself, conformity to be ensured through in-house testing or BIS recognized outside lab test report for each batch of caps (closures) manufactured. (See Note 1 below)
d) Foil (for sealing of plastic cups/ glasses)	Overall migration and colour migration as per Clause 6 of IS 14543:2016&	i) Declaration/ certificate w.r.t. food grade quality of the material used for the plastic film, AND ii) In house test report of licensee, if facilities exist OR iii) BIS recognized Outside test report of samples got tested by licensee	a) In case foils are received from outside source options as given at i) to iii) as given in Column 3 may be followed for each consignment received. b) In case foils are manufactured by the PDW manufacturer himself, conformity to be ensured through in-house testing or BIS recognized outside lab test report for each batch of foils manufactured.

Note 1: **Definition of batch**: Jars / bottles/cups/ caps/closures of each size and shape manufactured from each consignment of preforms / raw material shall constitute a batch. If clear and tinted preforms are received in one consignment of preform /raw materials, clear preform /raw materials and tinted preform /raw materials will form separate batches. Certificate for the resin shall be obtained from the resin manufacturer

Note 2: Licensee to keep records for all types of containers and closures received along with the corresponding test certificate/ reports and to be verified by BIS during periodic inspections for adequacy of the system being followed by licensee to control quality of packaging material received, accepted, rejected and method of disposal.

TABLE 3

Levels of control for Polyethylene Flexible Pouches for the packing of Packaged Drinking Water as per IS 15609

TEST DETAILS				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		
Clause	Requirement	Test Method			No. of Samples	Lot size	Remarks
		Clause	Reference				
5	Material	5	IS 15609	S	One	Each consignment of Polyethylene film	i) ISI Marked, OR BIS recognized outside laboratory Test Report of the samples got tested by licensee
6.1		Requirement for Polyethylene Film					
6.1.1	Description	6.1.1	IS 15609	R	One	Each roll of polyethylene film	All rolls to be checked before using the same for making pouches. All such rolls which do not conform to the requirement shall be rejected
6.1.2	Film Form	6.1.2	-do-	R	-do-	-do-	-do-
6.1.3	Winding of film	6.1.3	-do-	R	-do-	-do-	-do-
6.1.4	Odour	6.1.4	-do-	R	-do-	-do-	-do-
6.1.5	Thickness	6.1.5	-do-	R	-do-	-do-	-do-
6.1.6	Width	6.1.6	-do-	R	-do-	-do-	-do-
6.1.7	Overall Migration	6.1.7	-do-	S	-do-	One consignment from each source	i) ISI Marked, OR ii) In house test report, if facility exist with the licensee OR iii) Outside approved laboratory test report of the sample got tested by licensee If the sample does not conform to the requirement, the consignment shall be rejected.

Table 3 contd…

TEST DETAILS				**Test equipment requirement** R: required (or)S: Sub-contracting permitted	LEVELS OF CONTROL		
Clause	Requirement	Test Method			No. of Samples	Lot size	Remarks
		Clause	Reference				
6.1.8	Tensile strength	6.1.8	-do-	S	-do-	-do-	-do-
6.1.9	Elongation of break	6.1.9	-do-	S	-do-	-do-	-do-
6.1.10	Dart impact resistance	6.1.10	-do-	S	-do-	-do-	-do-
	7 Requirement for Flexible Pouches						
7.2	Water Potability Test	Annex E	-do-	S	-do-	Once in two months	Sample of each size shall be tested by rotation so that all the sizes shall be tested in one operative period.
7.3	Stack load Test	Annex F	-do-	R	-do-	One day production	If the sample does not conform to the requirement the same day production shall be rejected.
7.4	Drop test	Annex G	-do-	R	-do-	Every hour for each machine	If the sample does not confirm to the requirement, the licensee shall follow the criteria for acceptance and retesting as per clause G-3 of IS 15609:2005. If it does not conform then the same day production shall be rejected.
7.5	Ink Adhesion of Printed Pouches	Annex H	IS 15609	R	-do-	One day production	If the sample does not conform to the requirement the same day production shall be rejected.
7.6	Product resistance of printed Pouches	Annex J	-do-	R	One	-do-	-do-

Note-11: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-12: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.