DJS 51: 202X
ICS 85.080.20

Draft Jamaican Standard

Specification

for

Paper: Toilet tissue

BUREAU OF STANDARDS JAMAICA

Comment period:
21 December 2021 to 21 February 2022

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Plant Certification Mark

Certification of Agricultural Produce (CAP) Mark

Jamaica-Made Mark

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Paper: Toilet tissue

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Third revision

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Jamaican Standards establish requirements in relation to commodities, processes and practices, but do not purport to include all the necessary provisions of a contract.

The attention of those using this standard specification is called to the necessity of complying with any relevant legislation.

Amendments

No.	Date of Issue	Remarks	Entered by and date

Contents

Foreword

This standard specifies the general and detailed requirements for toilet tissue in single and two-ply form. Since the preparation of the original standard and its publication in 1977, followed by revisions in 1988 and 2014, a number of developments have taken place in the tissue paper industry at both the local and international levels.

In our Jamaican society, the use of toilet tissue paper is extensive at home and in the workplace. The introduction of new manufacturers within the local industry and the increasing levels of importation, led to more stringent quality inspections of imports at the ports of entry to ensure compliance and to create a level playing field for imported and locally manufactured toilet tissue products.

The revision of the standard has become necessary for Jamaica to address the quality of the product and begin closer testing and monitoring of toilet paper. By all indications there is an imperative need for safer paper or raw materials to be used to manufacture the product. The revision of the standard includes a requirement that no pathogens (bacteria, fungi and viruses) should be found when tested in accordance with the requirements of section 9 in this standard.

This standard is compulsory.

Committee representation

The preparation of this standard for the Standards Council, established under the Standards Act 1968, was carried out under the supervision of the Bureau's Tissue Paper Technical Committee, which at the time comprised the following members:

Acknowledgement

Acknowledgement is made to the following institutions for permission to reproduce material from the following documents:

Barbados National Standards Institution	BNS 24
Canadian Government Specification Board	CGSB 9-GB-BC
General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and Standardization Administration (SAC) of the People's Republic of China	GB 20810-2006
Trinidad and Tobago Bureau of Standards	TTS 543: 2002 (1st Revision)
U.S. Federal Supply Service, General Services Administration	UUP-556f

Related documents

This standard makes reference to the following:

JS 349	Jamaican Standard Specification for The labelling of goods —: General requirements
JS 350	Jamaican Standard Specification for The labelling goods-: Specific requirements for pre-packaged goods
JS 1: Part 26	Jamaican Standard Specification for The labelling of commodities Part 26: Labelling of tissue products

Draft Jamaican Standard Specification for Paper: Toilet Tissue

1. Scope

1.1 This standard applies to toilet tissue in single-ply and two-ply roll form, made of virgin or recycled fibre or any mixture of the two. It does not cover facial tissue or paper towels.

2. Terms and definitions

For the purpose of this standard the following terms and definitions apply:

2.1 basis weight. The weight of paper expressed in grams per square metre determined under standard test conditions.

2.2 bursting strength. The maximum uniformly distributed pressure applied at right angles to its surface, which a test piece of paper will stand under conditions of the test.

2.3 dry tensile strength. The limiting resistance of a test piece of paper subjected to a breaking force applied to each of its ends.

2.4 ply. A thickness or layer of paper.

2.5 pulp. The fibrous cellulose material of natural vegetable origin, which has been prepared for the manufacture of paper.

2.5.1 *virgin pulp.* Pulp prepared from 100% cellulose.
2.5.2 *chemical pulp.* Paper pulp prepared by a chemical process.
2.5.3 *mechanical pulp.* Pulp prepared by a mechanical process.

2.6 recycled fibre. Toilet tissue containing 60% or more of secondary fibre.

2.7 seconds. Rolls of toilet paper rejected by the manufacturers because of one or more defects.

2.8 secondary fibres. Pulp prepared from reclaimed waste paper.

2.9 sheet. The proportion of toilet tissue between two consecutive perforations on a roll. A sheet may comprise one or more plies depending on whether the toilet tissue is single-ply or two-ply.

2.10 specimen. The sheet of toilet tissue selected at random for testing purposes.

3. Classification

Toilet tissue shall be of the following types and grades:

Type I	Single-ply, roll form
Type II	Two-ply, roll form
Grade I	100% virgin pulp
Grade II	Mixed virgin and secondary fibres (chemical or mechanical pulp)
Grade III	100% recycled fibre

4. General requirements

4.1 Material and workmanship

4.1.1 The toilet tissue shall be manufactured from virgin, chemical or mechanical pulp or secondary fibres from the same pulp or a mixture of both or recycled paper.

4.1.2 The tissue shall be unglazed, soft, flexible and of even formation.

4.1.3 The tissue shall be free from visible wood-splinters, specks, breaks, holes, wrinkles and other imperfections.

4.1.4 The dye used in coloured rolls shall be colourfast to water and shall not be harmful or cause irritation to humans.

4.2 Roll

4.2.1 The sheets comprising the roll shall be sound, i.e. not torn or otherwise mutilated.

4.2.2 The start of the roll of the tissue shall be easily discernible and detachable.

4.2.3 Single roll shall contain not less than 280 sheets. Multi-pack rolls shall contain not less than 80 sheets. A variance of ± 5 sheets per roll would be deemed acceptable.

4.2.4 A sheet shall have a minimum height of 9.5 cm ± 2% (3.74 in ± 2%).

4.2.5 A sheet shall have a minimum length of 9.2 cm ± 2% (3.62 in ± 2%).

4.2.6 The minimum area of each sheet shall be 87.40 cm^2 ±2% (13.55 in^2 ±2%).

4.2.7 Glue spots are permissible only on the four sheets nearest the core.

4.2.8 The roll shall be wrapped in a protective covering and closed at both ends to prevent contamination during handling and storage.

4.2.9 Where required by large-scale purchasers, multi-packs may be wrapped in the same protective covering, provided all other requirements of this standard are met.

4.3 Core

4.3.1 The paper shall be evenly wound on a stiff cylindrical core made of paste board or other suitable material (see the example in figure 1) and having an inside diameter of a minimum of 3.2 cm (1.25 in), not exceeding 5.0 cm (2.0 in).

4.3.2 The height of the core shall be 9.5 cm ± 2% (3.74 in ± 2%), as illustrated in figure 1.

4.3.3 The core shall be sufficiently rigid so as not to collapse under normal conditions of transportation, storage and usage.

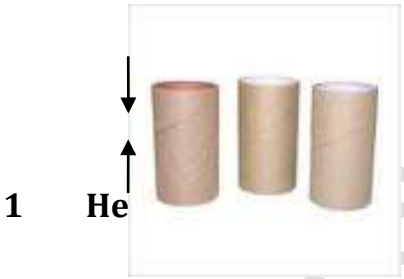

Figure 1. Typical tissue paper core for single-ply and two-ply rolls

5. Detailed requirements

5.1 Basis weight

The minimum basis weight of the roll of toilet tissue shall be as specified below when tested according to appendix A:

[(a)] Type I 19 – 21.5 g/m^2
(b) Type II 13.5 – 16.5 g/m^2

5.2 Caliper

The minimum caliper of eight sheets shall be as follows:

(a) Type I 0.660 mm (0.026 in)

(b) Type II 0.508 mm (0.020 in)

5.3 Dry tensile strength

The average dry tensile strength in the machine direction shall be not less than the values specified below when tested according to appendix B:

(a) Type I 0.34 kg125 mm-wide strip (0.75 lb/in-wide strip)

(b) Type II 0.40 kg125 mm-wide strip (0.88Ib/in-wide strip)

5.4 Bursting strength

The minimum bursting strength of a sheet of toilet tissue shall be as specified when tested according to appendix C:

(a) Type I 0.20 – 0.24 kg/cm^2 (2.84 lb/in^2 – 3.41 lb/in^2)
(b) Type II 0.40 – 0.48 kg/cm^2 (5.69-lb/in^2 -6.83lb/in^2)

5.5 Absorption

The average absorption time shall not be more than 25s when tested according to Appendix D.

5.6 Perforations

5.6.1 The paper shall be completely perforated across the width of the roll (see section 4.2.5) at 9.2 cm intervals with a permissible tolerance of 2%.

5.6.2 The perforations shall be uniform and they shall extend along the entire width of the roll.

5.6.3 The perforations shall be perpendicular to the edges of the sheets and shall be such that the sheets can be easily separated.

6. Handling, transportation and storage

6.1 Toilet tissue shall be manufactured, wrapped and packed and stored under hygienic conditions. These conditions are:

(a) minimal handling;
(b) avoidance of direct sunlight;
(c) off-the-ground or elevated storage; and
(d) proper sanitary conditions.

6.2 Clean vehicles shall be adopted for transportation of the bathroom tissue paper so as to avoid product contamination. During the handling, paper pieces shall not be thrown from the high so as to avoid damage of the external package.

6.3 The toilet tissue shall be well preserved in dry, ventilated and clean places so as to prevent rain and moisture from affecting the paper quality.

7. Labelling

7.1 Labelling shall comply with the requirements of JS 349, JS 350 and JS 1: Part 26.

7.2 Where cellophane or similar transparent material is used as the protective wrapper and the colour of the roll is evident, it shall not be necessary to state the colour.

7.3 Where non-transparent outer packaging or cartons are used this outer packaging shall be labelled with the following minimum information:

a) name and traceable street address of the manufacturer or supplier;
b) the name of the item;
c) trade name if any;
d) number of plies;
e) the size of each sheet;
f) number of sheets per roll;
g) number of rolls per carton;
h) colour of tissue; and

i) whether recycled paper is used, if so by printing the word 'recycled' or with the symbol including the word paper on the label.
j) indication of scented;, fragranced etc.,
k) ingredient list to include chemical additives/perfumes if the tissue is scented through the paper and not the core.
l) If textural additives are used e.g. aloe vera, these ingredients should be declared.

8. Sampling requirements

8.1 Label assessment

8.1.1 *Normal scale of sampling*

The minimum number of units to be selected at random from the lot (shipment) or batch (local manufacture) shall be in accordance with table 1.

Table 1. Selection of units (Normal scale of sampling)

No. of units in lot or batch	No. of units to be selected
5 and less	all
6 -100	5
101 - 300	8
301 - 500	13
501 and over	20

8.1.2 *Selection of units and test specimens*

8.1.2.1 Sample shall be taken from rolls which satisfy these criteria:
(a) Rolls which are not crushed, creased or affected by liquid contact; and
(b) Rolls which were not exposed to heat, direct sunlight, varying humidity or other adverse environmental conditions.

8.1.2.2 All damaged layers on the outside of the roll together with the first three undamaged layers, shall be removed. The test specimen shall be taken from the remainder of the roll.

8.1.2.3 Test specimens shall be kept flat and free from wrinkles and folds.

8.1.2.4 Test specimens shall not be exposed to heat, direct sunlight, varying humidity or other adverse conditions which may influence the test results.
8.1.2.5 Handling of test specimens shall be kept to a minimum so as to avoid contact with moisture or perspiration.

8.1.3 *General criteria for acceptance of lot or batch*

8.1.3.1 The lot or batch shall be deemed to conform to this Jamaican Standard if the test samples / units satisfy all of its requirements.

8.1.3.2 If a sample fails to meet two (2) or more of the requirements of this standard, the lot or batch from which the samples were taken shall be deemed as not in conformance.

8.1.3.3 If a sample fails to meet one (1) of the requirements, then a second sample of the same size shall be taken from the batch and tested. The following should be observed if a second sample is taken:

(a) The number of failures found in the first samples shall be accumulated.
(b) If the cumulative number of failures is still equal to one (1), then the batch shall be considered acceptable.
(c) If the cumulative number of failures is equal to or greater than two (2), then the batch shallbe deemed as not in conformance.

8.2 Microbial analysis

8.2.1 *Sample size*

8.2.1.1 At least 12 samples of the minimum sale packages are taken with the same batch number. One third of the samples are used in testing, one third for sample reservation and the other one third for re- inspection/ re-testing if necessary.

8.2.2 *Determination of acceptability*

8.2.2.1 If the microbial indicators or materials of the batch of bathroom tissue or bathroom tissue base paper are deemed as unacceptable, the batch will be rejected.

9. Microbial testing methods

Microbial indicators of tissue paper shall meet those specified in table 2.

2 Table 2. Microbial indicators of bathroom tissue paper

Indicators		Unit	Requirements
Microbe	Total quantity of bacterial colonies ≤	CFU/g	600 1000 **(maximum critical acceptable limit)**
	Pathogens:		
	Coliform bacteria	-	Shall not be detected
	Staphylococcus aureus	-	Shall not be detected
	Hemolytic *streptococcus*	-	Shall not be detected

9.1 Detection for the total number of bacterial colonies

9.1.1 *Operation procedure*

In a controlled environment, use aseptic techniques and make a 1 in 20 dilution using 10 g of product to 190 mL Normal Saline. Ensure that sampling is done from various parts of the product. Sample should be disintegrated well before pipetting. After the above-mentioned sample solution settles naturally, the supernatant is taken for colony counting. Altogether 5 petri dishes are inoculated. 1mL each sample solution is added into five petri dishes then 15 mL~20 mL (molten) nutrient agar is cooled at around 45º C and poured into each petri dish and the mixture is mixed sufficiently and uniformly.

Allow plates containing agar to solidify, invert and promptly incubated at 35º C ±2º C to for 48 h. After incubation, count and record results of bacterial colonies on the plates. Calculate results using the formula in **9.1.2**.

9.1.2 *Result report*

The plate on which the bacterial colonies take on lamellar growth should not be adopted; the colony counting on qualified plates is calculated according to the formula below:

$X = A \times K / 5$

where:

X is the total number of bacterial colonies, CFU/g;

A is the total number of bacterial colonies on 5 nutrient agar medium plates, CFU/g;

K is the dilution factor

Report results in standard form with two significant figures. If the total number of sample bacterial colonies exceeds 10% specified in this standard, re-inspection/ re-testing and reporting are carried out according to sub-clause **9.1.3**.

9.1.3 *Re-inspection*

The reserved samples are re-inspected / re-tested twice according to the above-mentioned procedure. If both averages meet the requirements of this standard, the inspected samples are judged as qualified; if any of the result averages exceeds that specified in this standard, the inspected samples are judged as unqualified.

9.2 Detection of coliform bacteria

9.2.1 *Operation procedure*

From a 1 in 20 dilution, place 5 mL sample solution inoculate 50mL lactose bile salt broth (Brilliant Green Bile Broth), and then placed under 35ºC ±2ºC to be cultivated for 24h. If neither acid nor gas is produced, the coliform colony will be reported as negative.

If acid and gas is produced, a line is drawn and the mixture is inoculated on the eosin methylene blue agar plate and incubated at 35ºC ± 2ºC to be cultivated for 18h~24h, then the colony shape on the plate is observed. The typical coliform colony is round, black-purple or red-purple with regular edge as well as smooth and wet surface and it has metallic luster; while some coliform colony is purple- black without metallic luster or with slight metallic luster and other colony is pink with a deeper center.

1~2 suspected colonies are picked for gram stain microscopy; and the lactose ferment broth is simultaneously inoculated and put under 35ºC ± 2ºC to be cultivated for 24h then gas production is observed.

9.2.2 *Result report*

If acid and gas is produced in lactose bile salt broth or Brilliant Green Bile Broth or gas is produced in lactose ferment broth, the typical coliform colony exists on the eosin methylene blue agar plate, when

the gram stain is negative non-spore bacillus, it may be reported that coliform is discovered in the inspected samples.

9.3 **Detection of *Staphylococcus aureus***

9.3.1 *Operation procedure*

A 5 mL sample solution is taken and added into the 50 mL 7.5% sodium chloride broth medium, then the mixture is mixed sufficiently and uniformly; and incubated at 35ºC ±2ºC to be cultivated for 24h.

1~2 inoculating loops are taken from the above-mentioned enrichment broth, a line is drawn and the loops are inoculated in the blood agar medium under 35ºC ± 2ºC to be cultivated for 24h~48h. The colony on the blood agar plate is golden yellow, big and bulged and is round with smooth surface as well as hemolytic circle around.

The typical colony is picked and the smear is used for gram stain microscopy. If the colony is in botryoidalis without spore and capsule, the following tests shall be carried out:

1. **Microbial indicator 1 mannitol fermentation tube test**

   The above-mentioned colony is taken and inoculated in the mannitol fermentation medium, then put under 35º C ± 2º C to be cultivated for 24 h, and the ferment mannitol that produces acid is positive.

2. **Plasma coagulase test**

Slide method: taking clean and dry slide → dripping 1 drop of normal saline and rabbit plasma at each end respectively → picking colonies to mix with them for 5 min.

If neither of them coagulates, they will be regarded as negative; if any mass or particle coagulates inside the plasma while the normal saline is still uniformly turbid without coagulase, it will be regarded as negative. If both of them coagulate, test tube coagulase test shall be carried out again.

Test tube method: place 0.5 mL fresh plasma (1:4) in a small sterile test tube → adding equal amount of Staphylococcus to be detected for 24 h and 0.5 mL broth medium and mixing uniformly → putting into the incubator or water bath under 35º C ± 2º C→ observing every 0.5 h→ presenting coagulum within 24 h, then it is regarded as positive.

Meanwhile, 0.5 mL positive plasma-coagulase and negative bacterial strain broth medium is taken respectively for positive and negative comparison.

9.3.2 Result report

When suspected colony grows on the agar plate, the microscopy is regarded as the gram positive staphylococcus, if it is along with ferment mannitol and acid production as well as with positive plasma coagulase, it may be reported that the *Staphylococcus aureus* is detected in the inspected samples.

9.4 Detection of hemolytic streptococcus

9.4.1 *Operation procedure*

A 5mL sample liquid is taken and added in the 50mL nutrient broth and cultivated for 24 h under 35º C ± 2º C.

The culture is marked out, inoculated to the blood agar plate and cultivated for 24 h under 35º C ± 2º C to observe features of the bacterial colony. The hemolytic streptococcus is incanus on the blood

plate, translucent or opaque with needlepoint-shaped bulge as well as smooth surface, regular edge and colorless transparent hemolysis ring around it.

Typical bacterial colony is taken to smear gram stain microscopy and it shall be a kind of gram positive coccus arranged in chain. If the microscopy meets the above conditions, the following tests shall be carried out:

1. Streptokinase test

Pipetting 0.2 mL potassium oxalate plasma →adding 0.8 mL sterilized normal saline and 12 mixing uniformly → adding 0.5 mL 24 h broth culture and 0.25 mL % 0.25 calcium chloride in the bacterium to be inspected and mixing uniformly → placing it in the water bath under

35º C ± 2º C and checking once every 2 min (generally, it may be solidified within 10min) → after the plasma is clotted, continuing to observe and record the melting time → if it fails to be melted within 2h, it shall be continued to be placed for 24 h for observation. If the coagulum is totally melted, it will be positive; if it is still not melted within 24 h, it will be negative.

2. Bacitracin sensitivity test

Coating the inspected bacterium solution on the blood agar platelet → taking each scrip containing 0.04 unit bacitracin with a sterilized tweezer and placing it on the plate, and making comparison with the known positive bacterial strain → placing it for 18 h~24 h under 35º C ± 2º C→ that containing bacteriostatic belt will be positive.

9.4.2 *Result report*

Microscopy is carried out for the gram positive cocci arranged in chain; where a hemolytic circle is presented on the blood agar plate and the streptokinase and bacitracin tests are positive, it may be reported that the examined samples have been detected with hemolytic streptococcus.

Appendix A

Determination of basis weight

A.l Apparatus

(a) Cutting device
(b) *Balance* with a sensitivity to ± 0.2% change in load and accurate to ± 0 5% of correct weight over the range used.

A.2 Conditioning

The test shall be carried out in a conditioned atmosphere of temperature 27 ± 2° C (80.6 ± 3.6° F) and 65 ± 2 % relative humidity.

A.3 Procedure

Measure the area of each specimen. Measurements shall be read to within ± 1.2 mm. If necessary, trim the sides of the specimen using the cutting device. The trimmed specimen shall have a surface area as near to that of the untrimmed piece as possible. The area of each test specimen shall preferably be not less than 150 cm^2. For each determination, not less than 10 specimens shall be used. Weigh specimens in batches of two to the nearest mg.

A.4 Calculation

Calculate the basis mass of each batch according to the following formula:

where:

$$\text{Basis weight} = \frac{W \times 10\,000}{A} \ g/m^2$$

W is the weight of the two specimens (g); A is the area of the two specimens (cm^2)

Record the mean of the five determinations as the basis weight of the toilet rolls.

Appendix B

Determination of dry tensile strength

B.l Apparatus

(a) *Tensile tester.* Cutting device and template capable of cutting specimens accurately.

B.2 Conditioning

The tests shall be carried out in a conditioned atmosphere of temperature 27 ± 2°C (80.6 ± 3.6°F) and relative humidity 65 ± 2%.

B.3 Test specimens

The width of the specimens shall be 25 ± 0.1 mm (0.98 ± .003) and the full length between perforations.

B.4 Procedure

B.4.1 Set the jaws of the tensile tester at a distance of 100 ± 2 mm (3.94 ± 0.08 in) apart. Clamp the test piece with the jaws of the machine so that no slipping occurs during the test. Put the moving clamp in motion and extend the specimens to the point of rupture. Record the breaking load results and breaking extension at rupture of the specimen.

B.4.2 Ignore tests which result in failure within 10 mm of the lines of contact area of the clamp.

A minimum of 10 tests shall be carried out.

B.5 Expression of results

B.5.1 Calculate the arithmetic mean of the breaking load results and express the result in kg/25 mm or lb/in.

B.5.2 Calculate the arithmetic mean of the breaking extension and express it to two significant figures as a percentage of the initial length of the test specimen between the jaws.

Appendix C

Determination of bursting strength

C.1 Apparatus

(a) *Mullen bursting strength tester*
(b) *Clamping system.* This system shall consist of two annular plane, parallel, hard surfaces which shall be smooth (but not polished) with grooves. The upper clamping plane shall be held in a swivel joint to ensure an even pressure distribution.
(c) *Diaphram.* The diaphram shall be circular elastic.
(d) *Hydraulic system.* This shall be preferably motor-operated using a suitable liquid, forced by a piston.
(e) *Pressure gauge.* A maximum reading Bourdon type is recommended, preferably to be used in the range 25% to 75% full scale. It shall be installed on a horizontal surface free from external vibrations.

C.2 Conditioning

Tests shall be carried out in a conditioned atmosphere of temperature 27 ± 2°C (80.6 ± 3.6° F) and 65 ± 2 % relative humidity.

C.3 Procedure

Insert the test specimen in position using the full clamping area if possible. Apply the clamp to the test piece with sufficient force to prevent slippage during the test. Care should be exercised in order to prevent rupture around the edges of the test area.

Apply the hydraulic pressure until the test specimen bursts. The pumping rate shall be 95 ± 5 mL/min. Read the pressure on the gauge to three significant figures. If the reading on one sheet is less than 70 KPa (0.7 kg/cm^2) then the minimum number of sheets which is required to give a reading of 70 KPa, shall be burst simultaneously. The sheets shall be arranged with the machine direction parallel. Ten tests shall be made with the wire side uppermost and ten with the top side uppermost.

C.4 Expression of results

The bursting strength is obtained by dividing the gauge reading by the number of sheets tested simultaneously, and expressed as kg/cm^2.

Appendix D

Determination of absorption time

D.1 Apparatus

The apparatus shall consist of a cylindrical basket made of 0.81 mm aluminum wire or 0.5 mm copper wire. The basket shall have a diameter of 5 cm, a length of 8 cm, a weight of 3.0 ± 1 g and shall have one end open.

D.2 Conditioning

The test shall be carried out in a conditioned atmosphere of 27 ± 2°C (80.6 ± 3.6°F) and 65 ± 2% relative humidity.

D.3 Procedure

Cut a 5 g sample of the paper to measure about 7.62 cm (3 in) in width (cross direction), roll it loosely with the ends open and insert it into the open end of the basket.

If the paper is creped, the creping lines shall run parallel to the depth of the basket. The paper shall not project over the end of the basket. Hold the basket, with its longitudinal axis horizontal, approximately 1.27 cm (0.5 in) above the surface of distilled water at about 25° C (77° F). Allow the basket to drop on the water and, with a stop watch, determine the time in seconds required to complete submersion of the paper.

Report the absorption time as the average of 10 tests.

Standards Council

The Standards Council is the controlling body of the Bureau of Standards Jamaica and is responsible for the policy and general administration of the Bureau.

The Council is appointed by the Minister in the manner provided for in the Standards Act, 1969. Using its powers in the Standards Act, the Council appoints committees for specified purposes.

The Standards Act, 1969 sets out the duties of the Council and the steps to be followed for the formulation of a standard.

Preparation of standards documents

The following is an outline of the procedure which must be followed in the preparation of documents:

1. The preparation of standards documents is undertaken upon the Standard Council's authorisation. This may arise out of representation from national organisations or existing Bureau of Standards' Committees of Bureau staff. If the project is approved it is referred to the appropriate sectional committee or if none exists a new committee is formed, or the project is allotted to the Bureau's staff.

2. If necessary, when the final draft of a standard is ready, the Council authorises an approach to the Minister in order to obtain the formal concurrence of any other Minister who may be responsible for any area which the standard may affect.

3. The draft document is made available to the general public for comments. All interested parties, by means of a notice in the Press, are invited to comment. In addition, copies are forwarded to those known, interested in the subject.

4. The Committee considers all the comments received and recommends a final document to the Standards Council

5. The Standards Council recommends the document to the Minister for publication.

6. The Minister approves the recommendation of the Standards Council.

7. The declaration of the standard is gazetted and copies placed on sale.

8. On the recommendation of the Standards Council the Minister may declare a standard compulsory.

9. Amendments to and revisions of standards normally require the same procedure as is applied to the preparation of the original standard.

Overseas standards documents

The Bureau of Standards Jamaica maintains a reference library which includes the standards of many overseas standards organisations. These standards can be inspected upon request.

The Bureau can supply on demand copies of standards produced by some national standards bodies and is the agency for the sale of standards produced by the International Organization for Standardization (ISO) members.

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