

GUIDELINES FOR DEVELOPMENT OF TAPPI TECHNICAL INFORMATION PAPERS

Introduction

This manual contains the regulations and style guidelines for TAPPI Technical Information Papers (TIPs). The regulations and guidelines are developed and approved by the Quality and Standards Management Committee with the advice and consent of the TAPPI Board of Directors.

If you are a Working Group Chair preparing a Technical Information Paper or reviewing an existing TIP, you will find the following important information in this manual:

- * How to write a Technical Information Paper using proper terminology and format
- * Use of a checklist to make sure all required sections have been included in the document
- * How Working Group Chair and Working Groups fit into the process of preparing a Technical Information Paper

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Regulations and Style Guidelines for TAPPI Technical Information Papers

1. Scope

This document describes the guidelines for style and format of TAPPI Technical Information Papers (TIPs, formerly known as Technical Information Sheets). The Quality and Standards Management Committee (Q&SMC) of the TAPPI Board of Directors is responsible for the overall management of the TIPs program. Q&SMC may, with advice and consent of the Board, from time to time revise these Guidelines in order to provide continuity and continual improvement of the TAPPI TIPs program. Editorial changes may be made by approval of the Q&SMC Chair.

Technical “tip sheets” contain specialized information (e.g., data, software, calculations) used in the manufacture, evaluation and description of pulp, paper, and related products, and are written in a standardized format which is readily useable by the industry. Technical Information Papers may contain testing procedures or methods used to evaluate equipment but do not contain pulp and paper testing procedures or methods.

2. Terms and Definitions

The following definitions describe terms used in the management of TAPPI TIPs:

Automatic Review: A review of a TIP that is initiated automatically in accordance with the category that the TIP falls under and the regulations governing TIPs (see Section 5.4). Work Items for automatic reviews are initiated one year prior to the end of the prescribed review period.

Automatically Periodically Reviewed TIP: A Technical Information Paper that, in the opinion of technical experts, should be reviewed on a regular basis.

Data and Calculations TIP: A Technical Information Paper containing data, calculations, and other similar information that remains constant over time.

Draft: A document which may be a proposed new or revised TIP for consideration as a new document or a revision of an existing document.

Effective Date of Issue: The date on which final approval for a new or revised TIP is achieved.

Overdue TIP: A TIP in review whose current edition is beyond the prescribed review period.

Reaffirmation: A TIP issued that indicates no changes have been made since the previous edition of the TIP.

Resource Information TIP: A Technical Information Paper that contains references for resources which should be checked and verified at least every two years.

Review: A procedure wherein a Working Group must be formed to examine an existing TIP and either reaffirm, revise, or withdraw the TIP. The necessity for review and the review period

for each TIP depends on the nature of the TIP and is determined by the responsible Working Group (see 5.1 and 5.4), with the intent being to take action within one year of initiation of the Work Item for the review.

Revision: A TIP issued that indicates changes have been made since the previously issued edition of the TIP.

Subject Category: An entry on a listing of technical areas relating to the pulp, paper, and allied industries. The listing is maintained by the TAPPI Standards Manager and is used for determining areas of interest, primarily for the numbering of TIPs. The listing of Subject Categories may be found in Appendix 3 of these guidelines.

TIP Category: One of three groups that all TAPPI TIPs will be assigned to in accordance with the nature of the TIP (see Section 5.1).

Withdrawal: Removal of an existing TIP from the current set of TIPs. Withdrawn numbers are not reused unless a withdrawn TIP is reinstated.

Work Item (WI): An activity undertaken to develop technical information of significant and timely value to the industries TAPPI serves. Work Items are used as a tracking system by TAPPI staff to keep up with progress on development or review of TIPs.

The following definitions describe the persons, groups or people involved in the TAPPI TIPs program:

Division Chair or Committee Chair: Individuals responsible for TIPs within the TAPPI Division who are required to notify the Standards Manager of the name(s) of any TIP Coordinators within the Division or Committee. Changes should be reported within 15 days of those changes being effective.

Quality and Standards Management Committee. This Committee, frequently referred to by its initials, Q&SMC is a committee reporting to the TAPPI Board of Directors and is appointed by the TAPPI Board Chair. Its scope is:

The Quality and Standards Management Committee is responsible for the administration and maintenance of the procedures and guidelines relevant to TAPPI Standards, Technical Information Papers, and Useful Methods. The Committee coordinates with other groups in achieving all appropriate strategic outcomes, takes action to ensure progress, and recommends changes in strategic direction as necessary. The Committee maintains liaison with internal and external groups as appropriate, including ANSI as it relates to TAPPI's accreditation as a standards development organization. The Committee brings major policy proposal changes to the Board of Directors.

Q&SMC has become active in coordinating TAPPI relationships with several other groups, including the U. S. Technical Advisory Groups (TAGs) to ISO (International Organization for Standardization) TC 6 (Pulps, Paper, and Paperboard), ISO TC 176 (Quality Management), and ISO TC 207 (Environmental Management), the American Society of Testing and Materials (ASTM) D10 Committee on Packaging, Pulp and Paper Technical Association of Canada (PAPTAC), Canadian

Corrugated and Containerboard Association (CCCA), Paper and Paperboard Packaging Environmental Council [Canada] (PPEC) and European Federation of Corrugated Board Converters (FEFCO).

Q&SMC has overall responsibility for TAPPI TIPs activity, including the withdrawal of TIPs that have not been reviewed in a timely fashion; however, it should be understood that any references to the Quality and Standards Management Committee in these guidelines simultaneously refers to any subcommittee of Q&SMC which has been charged with responsibilities relating to the procedures as stated in these guidelines. Another activity of Q&SMC is to take action on TIPs or Test Methods which are “overdue” for required review.

The Chair of the Q&SMC is appointed by the TAPPI Chair of the Board. The Q&SMC Secretary is a member of the TAPPI professional staff, whose duties include recording and distributing minutes of Q&SMC meetings, arranging for meetings as requested by the Q&SMC Chair, and maintaining records of TAPPI Standards, TIPs and Useful Methods.

Standards Manager: For the purposes of reference in these guidelines, a member of the TAPPI professional staff responsible for overseeing and administering the TIPs program. Usually, the Standards Manager and the Q&SMC Secretary are the same person. The Standards Manager duties may also be combined with the duties of another staff member. The official title of the staff person acting as Standards Manager (as defined in these guidelines) may be different.

TIP Coordinator: An individual within a Committee or Division of TAPPI who holds responsibility for assigning Working Group Chairs and ensuring timely review of TIPs for the respective Committee or Division.

Working Group (WG): A group of persons, generally TAPPI Members, which has responsibility for a specific TIP, new or review.

Working Group Chair (WGC): A member of a Working Group who leads the activity of the Working Group.

Working Group Member: A person having expertise or interest in a specific TIP, including new TIPs and existing TIPs in review. Nonmembers of TAPPI may serve as Working Group Members and may vote within the Working Group, but do not count in the minimum requirement to have at least three TAPPI members from different companies in each Working Group.

3. Responsibilities of Working Group Chairs

3.1 The Working Group Chair (WGC) is responsible for a particular Work Item. The WGC is required to set up a Working Group of at least two additional persons to work on the assignment and approve the final document, but ultimate responsibility for development of the TIP belongs to the WGC. TAPPI members from three different companies, at a minimum, must be represented on any Working Group. While the target for the group is to reach consensus and for the TIP to represent the full breadth of the expertise of the group, it is important that the finished TIP is acceptable to a majority of the companies represented. If a consultant or consulting firm represents the interests of any other Working Group member, the company that they will be deemed to be representing will be the client company. The WGC must notify the Standards

Manager, the appropriate TAPPI Division and Subcommittee Chairs, the TAPPI Staff Manager for the TAPPI Division with responsibility for the TIP and, if appointed, the appropriate TIP or Standards Coordinator of the scope of any newly proposed TIP for the purpose of sending notifications to other TAPPI members interested in the TIP as outlined in 5.2.1 and 5.4.4.

3.2 The Working Group Chair must be familiar with the guidelines governing the TIPs program as well as access to more detailed information contained in the procedures.

3.3 The WGC prepares a draft TIP for review by the Working Group. The WGC must obtain copyright releases for any charts, graphs, etc. reproduced from other publications. If the TIP needs illustrations, include original artwork, photographs, drawings, or digital equivalents. If necessary, contact the TAPPI Standards Manager for assistance.

3.4 The WGC must achieve consensus of the Working Group on the document before submitting it for final publication. Once completed, the WGC submits the document to the Standards Manager as described in 5.2 and 5.4. In addition, copies are to be sent to the appropriate TAPPI Division, Committee and Subcommittee Chairs, the TAPPI Staff Manager for the TAPPI Division with responsibility for the TIP and, if appointed, the appropriate TIP or Standards Coordinator. Objections to publication of the TIP should be raised within 15 days of receipt of the final draft. Objections are to be resolved by the WGC prior to resubmittal for publication.

4. Format and Style of TAPPI TIPs

The recommended format and general style of TAPPI TIPs are described in this section. It is intended to establish and maintain uniformity among TAPPI TIPs and is to be used in writing new or revising existing TIPs. A TAPPI TIP should represent a consensus as to the best document for the intended use. It should be supported by experience and adequate data obtained from available sources.

4.1 Terminology

4.1.1 Language

Write the Technical Information Paper in plain, simple language. Use the present tense throughout and the active voice. Do not use jargon, ambiguous statements, or undefined abbreviations. Consult a standard unabridged dictionary, e.g., *Webster's Third New International Dictionary* or the *Oxford English Dictionary* for general terms or *The Dictionary of Paper*, latest edition, for papermaking terms.

4.1.2 Units

The International System of Units (SI) is the preferred system of measurement for use in TAPPI Test Methods, TIPs, and Standard Practices. Use SI units or other units recommended in T 1210 and TIP 0800-01 "Units of Measurement and Conversion Factors" in all Test Methods, TIPs and Standard Practices as the primary means of expressing quantities, dimensions, tolerances, and results. Immediately follow the SI units with English units or commonly used units (such as Gurley stiffness units) in parentheses. In cases where TIPs were originally developed using the English system of measurement units, or where the majority of instruments in current use are designed to English unit specifications, or for which there is such a considerable body of existing

measurement data within the industry that conversion to SI units for reporting results would cause considerable confusion, use English units. Round non-critical equivalent values to convenient reasonable numbers and insert the word “nominal,” “approximately,” or “about” before the equivalent value in the parentheses.

4.1.3 Abbreviations

In general, do not abbreviate in text, except for “Fig., No., Eq., Ref.” or others allowed by TAPPI publication style.

4.1.4 Notes

The use of informative notes is permitted but they should be used sparingly.

4.2 Format

Write the sections in the following order, omitting inapplicable sections and adding appropriate ones where needed. The order of the sections may be changed if the documentation does not naturally fit the order prescribed.

- Title (mandatory)
- Scope (mandatory)
- Definitions
- Materials
- Safety precautions (mandatory)
- “Content” (mandatory – however, do not label this section as “Content”; use an appropriate section heading that is relevant to the actual content)
- Statement of accuracy
- Keywords (mandatory)
- Additional information (mandatory: must include Effective Date of Issue)
- References

Not all of these headings may be required for a particular TIP. Additional headings which are included to cover specialized subjects should appear in the most appropriate place, depending on their relation to the sections listed above.

4.3 Contents of sections

4.3.1 Title (mandatory)

The title should be concise but complete enough to identify the nature of the TIP, the material to which it is applicable, and to distinguish it from other similar titles. Titles are used frequently in lists, tables of contents, indexes, tabulating card systems, etc., and therefore should be brief but inclusive. Select words that lend themselves to indexing. The essential features of a title are the particular property or constituent being determined, the material to which the TIP is applicable, and, when pertinent, the technique or instrumentation.

4.3.2 *Scope* (mandatory)

Include here the value, purpose and application of the TIP. State the recommended range of application as completely as possible, as to types of materials and to limiting values of the properties or constituents.

4.3.3 *Definitions*

Include only definitions or descriptions of terms which are required for the correct interpretation. Include definitions which are not given in standard dictionaries. State definitions in short form which does not repeat the term being defined, e.g., *Sample*: a specified number of test units selected according to a prescribed procedure to represent the lot.

4.3.4 *Materials*

List and describe the essential features of any special materials required for the TIP. Illustrations may be added if needed.

4.3.5 *Safety precautions* (mandatory)

4.3.5.1 If there are no safety precautions, state so in the document.

4.3.5.2 If there is a hazard in performing the test such as explosion, fire, toxicity, etc., include a warning of the dangerous step here. Repeat the warning in the text at the appropriate point and include the word “CAUTION.” Note safety equipment required and refer user to SDS (Safety Data Sheets) when applicable.

4.3.5.3 The accepted TAPPI Chemical Caution Statement should appear in a box on page 1 of the TIP if the sheet contains the use of any chemical other than water. The statement is:

This TIP may require the use, disposal, or both, of chemicals which may present serious health hazards to humans. Procedures for the handling of such substances are set forth on Safety Data Sheets which must be developed by all manufacturers and importers of potentially hazardous chemicals and maintained by all distributors of potentially hazardous chemicals. Prior to the use of this Technical Information Paper, the user should determine whether any of the chemicals to be used or disposed of are potentially hazardous and, if so, should follow strictly the procedures specified by both the manufacturer, as well as local, state, and federal authorities for safe use and disposal of these chemicals.

4.3.6 *Content* (mandatory)

4.3.6.1 Use an appropriate heading for this section such as technical information, procedure, data, or method.

4.3.6.2 Describe in proper sequence the procedure to be followed, the technical

information to be conveyed, the data, or the method. Subheadings may be used if they will help the organization of the material.

4.3.6.3 Indicate the number of significant figures required in weighing and other operations, as well as in reading and recording the observations.

4.3.6.4 *Calculations (or Interpretations of the Observations)*

Give directions for calculating the result. Give all mathematical formulas necessary, using letter symbols in the equation. Include a brief description of the derivation of any calculation factor needed to calculate the final value(s). Define the symbols in a list following the equations, listing the symbol first, followed by an equals sign, followed by a description of the symbol, followed by a comma, followed by the units to be used. For example:

$$F = C/(A - B)$$

where

F = zinc equivalent of ferrocyanide solution, g/mL

A = solution required to titrate the zinc solution, mL

B = solution required to titrate the blank, mL

C = zinc used, g

Specify the basis used for the calculation. When practical, use an example to illustrate the calculation.

When results are obtained using a computer program, include the program steps or the formulas used in the spreadsheet to calculate the data.

When results are obtained directly from a measurement, then include a statement that no calculations are necessary.

When results are in descriptive form, relative terms, or abstract values, this subsection may be titled "Interpretations of the Observations."

4.3.7 *Statement of accuracy*

Statements addressing precision are optional for TAPPI TIPS. If precision statements are used, state precision, degree of agreement expected between results, in terms of repeatability and reproducibility as defined in TAPPI T 1200 "Interlaboratory Evaluation of Test Methods to Determine TAPPI Repeatability and Reproducibility." It is essential to indicate the number of determinations per result for which the precision statement was calculated.

4.3.8 *Keywords (mandatory)*

4.3.8.1 List appropriate terms for indexing, selected from both the title and body of the document and including general, vernacular, and trade terms. These terms are the basis for preparing index terms.

4.3.8.2 To assure consistency in selecting keywords for indexing purpose and in selecting the proper form of a keyword, use the *Thesaurus of Pulp and Paper Terminology*, published by the Renewable Bioproducts Institute, formerly the Institute of Paper Science and Technology. Terms that appear in this Thesaurus are preferred keywords and shall be used in the majority of cases. However, the Q&SMC shall maintain a supplemental keyword list which is included as Appendix 2 in these guidelines. Included on this list will be terms that Q&SMC has chosen as part of the supplement to the Thesaurus.

4.3.8.3 The Working Group Chair should select keywords and include them in the draft, but these keywords must be reviewed by the TAPPI Standards Manager for their acceptability in accordance with the Thesaurus and the supplemental list. If the Working Group Chair and/or the TAPPI Standards Manager determine that, for ease of use or clarity, additional terms need to be included in a particular TIP, then these terms shall be approved by the Q&SMC. When a majority of the members of Q&SMC approve the inclusion of a new keyword, the new keyword shall be added to the supplemental list and to the TIP for which it was proposed.

4.3.9 *Additional information (mandatory)*

The first paragraph shall state, “Effective date of issue: (to be assigned).” TAPPI Headquarters will insert the effective date of issue upon publication.

The second paragraph shall include a listing of the Working Group Chair and Working Group members.

The membership of the working group is to be included with the WGC name and company affiliation listed first, then all other members of the Working Group listed alphabetically with their company affiliation. Subsequent paragraphs may be added to this section to include any other information that would be helpful or useful for the user of the TIP.

The footer on the first page shall include “TIP Category:_____.” In the blank, insert the appropriate category as determined by the WG (see Section 5.1), and state the review period (if applicable).

4.3.10 *References/Literature cited*

List the title of any documents, including other TAPPI documents or documents from other societies, which may be useful or necessary (or are referenced) in the understanding of the TIP. References that are cited in the text shall be numbered in the order of their appearance in the text and listed under the heading “Literature cited.” List any references that are not cited in the text under the heading “References.” Do not include restricted publications that are not generally accessible. Do not reference private communication. It is the responsibility of the Working Group Chair to make sure that references are complete and accurate.

4.3.11 *Checklist*

Appendix 1 shows a checklist relating to the proper format for drafts. Use this checklist

during the development or review of a TIP to make sure all requirements have been met. WGCs must ensure that all requirements have been met prior to submitting the TIP for publication.

5. Procedures for review and approval of TIPs

5.1 TIP Categories

5.1.1 All TAPPI Technical Information Papers must be placed in one of the established TIP Categories as outlined in these guidelines. Categorization takes place at the time of approval and finalization of new TIPs or TIPs may be recategorized at the time of review. (Section 5.2).

5.1.2 The following are the categories of TIPs:

Data and Calculations: TIPs that contain basic data, calculations, and other similar information that would be constant over time and would normally only need to be reviewed if an error was discovered or a special request for review is received. These TIPs must contain a notice as part of the TIP indicating that any user of the TIP should contact the TAPPI Standards Manager if there is evidence that a review is needed, or an error has been discovered.

Resource Information: TIPs that contain references for resources (with proper disclaimers); this is information that may not need to be reviewed as regularly as other TIPs, but the accuracy of the information should be checked and verified at least every two years.

Automatically Periodically Reviewed: TIPs that, in the opinion of technical experts, should be reviewed on a regular basis. The Working Group that approves the TIP shall determine the period of review and note this time period on the published TIP. The period of automatic review shall be no shorter than five years and no longer than ten years.

5.2 Development of new TIPs

5.2.1 Any individual or technical group within TAPPI may draft new TIPs or may be called upon for expertise in reviewing or revising existing TIPs (see 5.3) in accordance with these guidelines. Anyone proposing a new or revised TIP must proceed up their Division's chain of responsibility through the Committee Chair, Division Chair, TIP Coordinator if applicable, and the TAPPI Staff Manager. Any technical group may form a Working Group which shall follow the format and style guidelines in Section 4 to prepare a draft of a new TIP. Each Working Group formed must select one of these individuals as Working Group Chair (WGC). The WGC must submit a description of the project to the Standards Manager, who shall post the information in the *TAPPI Standards and TIPs Action Report* (STAR), and any other media deemed necessary for review by any members of TAPPI. The Standards Manager shall also distribute the information to the chairs of any working technical committees or groups within TAPPI that would have an interest in the subject matter in the TIP. In order to officially submit a TIP for publication, there must be at least three individual TAPPI members from three different companies participating in the Working Group. See Section 5.4 for specific steps in reviewing an existing TIP.

5.2.2 The WGC should reach consensus within the Working Group on any questionable points prior to finalizing the draft. When developing a new TIP, the WGC must first check to see whether the proposed procedure duplicates or relates to any existing TIPs or test methods. If it

duplicates any existing document within TAPPI, the WGC must notify the Standards Manager, who will coordinate the decision as to whether the work on drafting the new TIP should be revised or discontinued accordingly.

5.2.3 The TIP, as developed and approved by the Working Group, is submitted for official publication through the Standards Manager, who must determine if the document follows proper format and style as outlined in these guidelines and must consult with the WGC with changes that need to be made to conform to proper style before the document is processed for publication. The WG must also indicate the proper TIP Category and, if necessary, the Automatic Review Period (see 5.1). Once the final draft is submitted, the Standards Manager shall assign a Work Item number for the project for tracking purposes.

5.2.4 After following the procedure outlined above and after determining that all necessary changes have been made so that the draft conforms to proper format and style, the Standards Manager will prepare the document for publication and will publish a notice of availability in the *TAPPI Standards and TIPs Action Report (STAR)* and other media as deemed necessary. The WGC will be sent a proof copy of the TIP for review prior to publishing. The Standards Manager will endeavor to publish each reviewed TIP within one month of review.

5.2.5 Working Groups are responsible for verifying that all other TIPs referenced in a TIP are still active at the time of review. If substantial changes are made to a TIP, it will be the responsibility of Working Groups to be aware of other TIPs that refer to the TIP under review and verify the reference is still valid.

5.3 Withdrawn TIPs

Withdrawn TIPs will be kept on file by the TAPPI Service Line and will be available upon request. The Standards Manager should have the reason for withdrawal inserted on the master copy to provide this information to persons requesting copies.

5.4 Review of Existing TIPs

5.4.1 TIPs that fall into the category of Automatically Periodically Reviewed TIPs (see 5.1.2) must be reviewed on a regular basis, with the WG responsible for determining the appropriate time period for review. All TIPs that come up for review will be reviewed under the regulations of these guidelines. The WG will be required to determine the TIP Category and, if an Automatically Periodically Reviewed TIP, to also determine the review period (to be no shorter than five years and no longer than ten years).

5.4.2 TIPs that are placed into the category of Data and Calculations (see 5.1.2) are not required to be reviewed periodically. However, TIPs in this category shall be reviewed whenever circumstances arise that require a review of the information contained in the document, for example, the discovery of an error in the material or the acquisition of new technical information that needs to be added or which would result in changes in the information already in the document. These TIPs must contain a notice as part of the TIP indicating that any user of the TIP should contact the TAPPI Standards Manager if there is evidence that a review is needed or an error has been discovered. If a TIP in this category needs to be reviewed, the procedure is the same as that established for TIPs that are reviewed on a regular basis.

5.4.3 TIPs that are placed in the category of Resource Information are to be reviewed for the accuracy of the information listed in the TIP. The Standards Manager shall initiate a Work Item at least every two years after initial publication of the TIP and shall contact the Committee or Division Chair and TIP Coordinator responsible for the TIP to recruit a Working Group Chair. The WGC is typically the same as the WGC for the previous review. Resource Information TIPs that are not completed by the one year deadline shall be subject to withdrawal by the Q&SMC until such time as the Working Group completes the review.

5.4.4 A Work Item will be initiated by the Standards Manager for each TIP requiring review, and the Standards Manager shall inform the Committee or Division Chair or TIP Coordinator responsible for the TIP. In addition, the Standards Manager shall send a notice of the new WI to the chair of any existing technical committees or groups within TAPPI which may have an interest in the subject matter of the TIP. For Periodically Automatically Reviewed TIPs, the Work Item shall be initiated one year prior to the end of the periodic review date (for example, if the review period is five years, then the Work Item shall be initiated four years after the last publication date). The respective Division or Committee chair or TIP Coordinator is responsible for recruiting the Working Group Chair, who normally will be the last person who served as WGC for the TIP. The WGC will then select the other members of the Working Group, which may include members who also were part of the Working Group for the last version of the TIP. The Working Group must include at least three individual TAPPI members from three different companies. Nonmembers of TAPPI may be invited to participate in a WG in order to obtain specific expertise, but they do not count toward the required minimum of three persons from different companies as part of the WG.

5.4.5 As a result of reviewing a TIP, each TIP shall be either reaffirmed (with or without editorial corrections), revised, or withdrawn. If, in the process of reviewing a TIP, a Working Group wishes to place in the *TAPPI Standards and TIPs Action Report* (STAR) a notice with the purpose of soliciting comments from TAPPI members or nonmembers outside the WG, the WGC must submit this notice to the Standards Manager.

5.4.6 If the WG determines that the TIP is accurate and does not require any revision, the WG shall reaffirm the document and notify the Standards Manager. The date of reaffirmation shall be indicated on the TIP as the Effective Date of Issue, and the date for the next automatic review, if applicable, shall be kept on record at TAPPI for initiation of the next review.

5.4.7 If the Working Group for an Automatically Periodically Reviewed TIP determines that reaffirmation of a TIP is not granted and a revision is indicated, the revision must be completed by the Working Group within one year from the initiation of the Work Item. A time extension will be permitted to the Working Group Chair only in extenuating circumstances and will require the approval of the Q&SMC Chair. The WGC must submit a request for an extension of the Work Item to the Q&SMC Chair.

5.4.8 If no action is taken within one year by the Working Group after a Work Item for review of an Automatically Periodically Reviewed TIP is initiated, the Standards Manager shall notify the WGC, Division chair, Committee chair and TIP Coordinator if applicable that the TIP is overdue and request a status report. If the person(s) so notified determine(s) that the assigned WGC is no longer a TAPPI member, or if there is no response to the request for a status report, the Division Chair, Committee Chair, or TIP Coordinator shall recruit a new WGC to take over the Work Item. If no action has been taken within two years of the date of initiation for the Work Item, then the TIP will be placed on the list of overdue TIPs for the next meeting of Q&SMC. If no action

is taken before the next Q&SMC meeting, Q&SMC may, by e-mail ballot or vote at a meeting, either send a notice to the WGC asking for action by the next Q&SMC meeting, or may withdraw the TIP.

5.4.9 If a TIP has been withdrawn by Q&SMC because of a lack of action by the responsible WG, it may be reinstated only after the WG has completed the work and submitted a final draft. Lack of action means that the document has not been revised, reaffirmed, or withdrawn within one year of the date that the review Work Item was opened.

5.5 Corrections and revisions

Correction of an existing TIP shall be made upon approval by the responsible Working Group Chair. Such corrections, generally referred to as “editorial corrections,” include errors in printing, format, spelling, punctuation, as well as improvements in clarity of expression or to reduce or eliminate ambiguity but may not include any that would in any way make substantive changes in the TIP. The corrected version shall be printed with a notation designating the year of correction; the number of designation and effective date of issue of the sheet, however, shall not change, so that the automatic review of the document will still be initiated one year prior to the date of expiration.

6. Revision Schedule for the Guidelines

6.1 The Quality and Standards Management Committee approved an Automatic Periodic Review every 7 years for all Guidelines that fall under the jurisdiction of the Q&SMC to determine if the existing guidelines should be revised or modified. This review shall be initiated one year prior to the end of the periodic review date, which will be included on the Guidelines and listed on the Q&SMC meeting agenda.

6.1.1 Minor editorial corrections, including errors in printing, format, spelling and punctuation may be updated by TAPPI between reviews with a notation designating the year of correction as long as it does not include any changes that would in any way make substantive changes to the Guidelines.

Appendix 1

Checklist for Working Group Chairs

Use this checklist to indicate that all sections of draft have been included as appropriate and that all responsibilities of WGC have been addressed. Return this list with complete draft and/or WGC report.

TIP Number (if assigned) _____ WI number (if assigned) _____

Title _____

Have the following sections been included (as applicable)?

Have the following actions been taken, or the following style guidelines been followed?

Title (mandatory)

Proper voice and mood for each section (see Guidelines Section 4.1.1).

Scope (mandatory)

SI and English units have been used.

Materials

All figures (line drawings and photographs) have been included, and captions noted.

Safety precautions (mandatory)

All tables have been properly identified and included.

Content (mandatory)

Trade names and trademarks have been avoided.

Statement of Accuracy

Copyright releases obtained for figures and photographs.

Keywords (mandatory)

Review completed by a minimum of three TAPPI members from different companies as part of the Working Group (refer to Guidelines Section 5).

Additional Information (mandatory; must include: (1) paragraph for Effective Date of Issue [date to be assigned after completion]); (2) TIP Category; and (3) List of Working Group Chair and Members

References

Appendix 2
Supplemental Keyword List

The following supplemental list of keywords includes **both** (1) terms that are *not* found in the Thesaurus of Pulp and Paper, but which have been approved by the Q&SMC for use as keywords for the Test Methods or Technical Information Papers listed, in accordance with paragraphs 7.4.18.1, 7.4.18.2, and 7.4.18.3 of the Test Method guidelines and paragraphs 4.3.8, 4.3.8.1, 4.3.8.2, and 4.3.8.3 of the TIPs Guidelines, **and** (2) terms that have been approved for addition in the next edition of the Thesaurus (indicated on this list as “To appear in the next published edition of the Thesaurus”).

Airlaid nonwoven machines	To appear in the next published edition of the Thesaurus
Air staging	TIP 0416-25
Alkaline peroxide mechanical pulping	To appear in the next published edition of the Thesaurus
Alkaline peroxide mechanical pulps	To appear in the next published edition of the Thesaurus
Alkaline reserve	T 553
Alum	To appear in the next published edition of the Thesaurus
Anilox coaters	TIP 0304-39
Anvil wear	TIP 0305-39
Attenuator	Added Oct. 3, 2018; can be used in future documents
Backing Blade	TIP 0425-06
Backtrap mottle	To appear in the next published edition of the Thesaurus
Bankruptcy	To appear in the next published edition of the Thesaurus
Bids	To appear in the next published edition of the Thesaurus
Biodiversity	To appear in the next published edition of the Thesaurus
Blade holder	TIP 0404-67
Bleach liquor	T 611, T 700
Bleached board	TIP 0404-14
Bleached chemithermomechanical pulping	To appear in the next published edition of the Thesaurus
Bleached chemithermomechanical pulps	To appear in the next published edition of the Thesaurus
Blowdown	TIP 0416-04
Boiler tubes	TIP 0402-31, TIP 0402-32
Bubbling fluidized beds	To appear in the next published edition of the Thesaurus
Business strategy	To appear in the next published edition of the Thesaurus
Butt welds	TIP 0402-31
Cartonboards	To appear in the next published edition of the Thesaurus
Cellulose whiskers	To appear in the next published edition of the Thesaurus
Char	To appear in the next published edition of the Thesaurus
Chlorine free bleaching	To appear in the next published edition of the Thesaurus
Chrome	TIP 0304-53
Chromium trioxide	T 619
Circulating fluidized bed boilers	To appear in the next published edition of the Thesaurus
Coating thickness	TIP 0304-53
Coating weight	UM 542
Coefficient of friction	T 549
Computer graphics	To appear in the next published edition of the Thesaurus
Computer monitors	To appear in the next published edition of the Thesaurus
Concentricity	TIP 0304-56
Contact technique	TIP 0402-32
Contaminants	TIP 0404-38
Conversion factors	T 1210
Corrugated fluted crush test	T 824
Corrugated packaging	To appear in the next published edition of the Thesaurus

Creative paper	To appear in the next published edition of the Thesaurus
Deforestation	To appear in the next published edition of the Thesaurus
Demand	To appear in the next published edition of the Thesaurus
Diatomaceous silica	T 658
Die mounting	TIP 0305-21
Digital printing	To appear in the next published edition of the Thesaurus
Doctor Blade Holder	TIP 0425-06
Drainage factor	TIP 0809-01
Dryer fabric	Added Jan. 28, 2014; can be used in future documents referring felts
Dryers	Added Oct. 3, 2018; can be used in future documents
Drying rate	TIP 0404-07
Dry-laid nonwovens	TIP 0502-16
Durability	To appear in the next published edition of the Thesaurus
Durometer	TIP 0306-20
E-commerce	To appear in the next published edition of the Thesaurus
Edge Fingers	TIP 0425-06
Edge nail strength	T 1004
Effective residual ink concentration (ERIC)	T NEW (WI 3026 and 3027)
Elemental chlorine free bleaching	To appear in the next published edition of the Thesaurus
Elemental chlorine free pulps	To appear in the next published edition of the Thesaurus
Elliptical technique	TIP 0402-32
Engineered wood	To appear in the next published edition of the Thesaurus
Environmental regulations	To appear in the next published edition of the Thesaurus
Equilibrium moisture	T 550
Equivalent black area	T 213, T 437, T 563
Fabric	Added Jan. 28, 2014; can be used in future documents referring felts
FAC	TIP 0402-36
Feedwater	TIP 0416-03
Fiber glass mats	T 1006, T 1007, T 1008, T 1009, T 1010, T 1011, T 1012, T 1013, T 1014, T 1015, T 1016, T 1017
Financial loss	To appear in the next published edition of the Thesaurus
Financing	To appear in the next published edition of the Thesaurus
Flash cyclone	To appear in the next published edition of the Thesaurus
Flexible barrier materials	T 557
Flexible beam crush tester	TIP 0304-20
Float curl method	T 832
Fluoropolymers	TIP 0402-37
Foreign investment	To appear in the next published edition of the Thesaurus
Forming fabric	Added Jan. 28, 2014; can be used in future documents referring felts
Globalization	To appear in the next published edition of the Thesaurus
Graphical user interfaces	To appear in the next published edition of the Thesaurus
Greenhouse gases	To appear in the next published edition of the Thesaurus
Headbox	Added Oct. 3, 2018; can be used in future documents
Heating value	T 684
Hexenuronic acid	To appear in the next published edition of the Thesaurus
Horizontal plane method	T 549
Horizontal planes	T 549, T 816
Hypo number	T 253
Ink jet papers	To appear in the next published edition of the Thesaurus
Interlaboratory evaluation	T 1200

Internal bond	T 833
Internet	To appear in the next published edition of the Thesaurus
Ion chromatography	To appear in the next published edition of the Thesaurus
Jet dryers	Added Oct. 3, 2018; can be used in future documents
Joint ventures	To appear in the next published edition of the Thesaurus
Kinetic friction	T 549
Lactates	T 699
Laser papers	To appear in the next published edition of the Thesaurus
Laser printing	To appear in the next published edition of the Thesaurus
Life cycle assessment	To appear in the next published edition of the Thesaurus
Litigation	To appear in the next published edition of the Thesaurus
Loss on ignition	T 618, T 658, T 665, T 1013
Machine tenders	T 1501
MAP	TIP 0425-05
Mechanical Stop	TIP 0425-06
Mesh residue	T 658, T 661, T 673, T 681
Metering size press coating	To appear in the next published edition of the Thesaurus
Moisture sensitivity	T 1014
Monoammonium Phosphate	TIP 0425-05
Multinip calendars	To appear in the next published edition of the Thesaurus
Nanotechnology	T NEW WI 3021
Natural binders	UM 542
Nip-dewatering	TIP 0404-67
Nonwovens machines	TIP 0502-16
Northern bleached softwood kraft pulps	To appear in the next published edition of the Thesaurus
OEM Tolerances	TIP 0306-20
Old corrugated containers	To appear in the next published edition of the Thesaurus
Oleophobic oils	UM 555
Oleophobic rating	UM 555
Oriented strand boards	To appear in the next published edition of the Thesaurus
Outliers	T 1205
Outsourcing	To appear in the next published edition of the Thesaurus
Overfire air	TIP 0416-25
Overlays	Added Oct. 3, 2018; can be used in future documents
Ownership	To appear in the next published edition of the Thesaurus
Oxygen delignification	To appear in the next published edition of the Thesaurus
Paper machine components	To appear in the next published edition of the Thesaurus
Paper quality	To appear in the next published edition of the Thesaurus
Partnerships	To appear in the next published edition of the Thesaurus
Permanence	T 509, T 529
Personnel training	To appear in the next published edition of the Thesaurus
Ply separation	T 812, T 833
Potassium dichromate	T 610
Press fabric	TIP 0404-64
Price changes	To appear in the next published edition of the Thesaurus
Printing industry	To appear in the next published edition of the Thesaurus
Process water	T 620, T 631
Product quality	To appear in the next published edition of the Thesaurus
Profiling Screws	TIP 0425-06
Profitability	To appear in the next published edition of the Thesaurus

Psychrometric charts	TIP 0404-45
Pulp mill equipment	TIP 0402-32
Pulp quality	To appear in the next published edition of the Thesaurus
Qualification	TIP 0402-21
Quercus chapmanii	To appear in the next published edition of the Thesaurus
Quercus faginea	To appear in the next published edition of the Thesaurus
Quercus geminata	To appear in the next published edition of the Thesaurus
Raw Yankee	TIP 0425-05
Recovery boilers	To appear in the next published edition of the Thesaurus
Recycled content	To appear in the next published edition of the Thesaurus
Recycled paperboard	TIP 0404-47
Renewable resources	To appear in the next published edition of the Thesaurus
Repeatability	T 1200, T 1206
Residual lignin	To appear in the next published edition of the Thesaurus
Restructuring	To appear in the next published edition of the Thesaurus
Ring crush/SCT resistance	TIP 0304-40
Ring crush/SCT tests	TIP 0304-40
Roll cleaning	TIP 0404-67
Roll cover selection	TIP 0306-20
Rotary	TIP 0305-39
Salt cake	T 619
Sanitary tissue	T New (WI 3005)
Selective catalytic reduction	TIP 0416-25
Selective noncatalytic reduction	TIP 0416-25
Settlement	To appear in the next published edition of the Thesaurus
Shipments	To appear in the next published edition of the Thesaurus
Shipping sack papers	T 815, TIP 0304-34
Shoe presses	To appear in the next published edition of the Thesaurus
Short span compressive strength	T 826
Silver tarnishing	T 444
Slide angle	T 815
Sodium hydrosulfide	T 622
Sodium polysulfite	T 694
Solvent holdout	T 528
Somerville fractionator	UM 242
Species identification	T 259
Specimen wetting	UM 566
Standard solutions	T 610
Step-Up Strip	TIP 0425-06
Strategic alliances	To appear in the next published edition of the Thesaurus
Stress assisted corrosion	TIP 0402-38
Sulfide-free reducing compounds	T 624
Supply chain management	To appear in the next published edition of the Thesaurus
Sustainable forest management	To appear in the next published edition of the Thesaurus
Synthetic silicate pigments	T 661
Tail-edge pick	T New (WI 3029)
Tensile energy absorption (TEA)	T 220, T 494
Terminology	T NEW WI 3021
Test conditions	T 402, T 1008
Test determinations	T 1205

Thermal spray	TIP 0402-32
Total chlorine free bleaching	To appear in the next published edition of the Thesaurus
Total indicated runout	TIP 0304-56
Total reducing compounds	T 624
Training	T 1501
Troubleshooting	Added Oct. 3, 2018; can be used in future documents
Uhle box	TIP 0404-27
Uniformity	T 1015
Uranyl zinc acetate method	T 623
Vacuum drying	To appear in the next published edition of the Thesaurus
Visual defects	T 1015
Visual grading	T 515
Water drop tests	T 831, T 835
Water vapor transmission rate	To appear in the next published edition of the Thesaurus
Waterside cracking	TIP 0402-38
Wet ash method	T 245
Wet-laid nonwovens	TIP 0502-16
Wetting tension	T 552, T 698
Williams freeness	TIP 0809-01
Williams tester	UM 203
Wiper roll	TIP 0306-20
Yankee dryers	TIP 0425-05

In addition, the following terms listed in the 1991 edition of the Thesaurus were **changed** as noted in 2003 and will appear with the change in the next edition:

Computer printout papers	<i>changed to</i>	Digital papers
Mergers	<i>changed to</i>	Mergers and acquisitions
Typewriter papers	<i>changed to</i>	Office papers

Appendix 3

Subject Categories for TAPPI Technical Information Papers

SUBJECT CATEGORIES FOR TAPPI STANDARDS AND TIPS

0100	Coating & Graphic Arts (General)		
0101	Basestock		
0102	Coating Additives		
0103	Coated Paperboard	0600	Pulp Manufacture (General)
0104	Coating Binders	0601	Alkaline Pulping
0105	Coating Fundamentals	0602	Fiber Raw Material Supply
0106	Coating Pigments	0603	Fiber Recycling
0108	Printing and Imaging		
0109	Specialty Coated Papers	0605	Mechanical Pulping
0110	Coating Process	0606	Pulp Bleaching
0114	Fillers and Pigments Testing	0607	Sulfite & Semicheical Pulping
0116	Technical Trends	0609	Nonwood Plant Fibers
0117	Calendering	0618	Wood Chemistry
		0619	Biorefinery
0200	Polymers, Laminations & Coatings. (General)		
0201	Flexible Packaging	0700	Research & Development (General)
0205	Extrusion Coating	0701	Forest Resources
0206	Hot Melt	0702	Information Management
0207	High Barrier Packaging	0708	Paper Physics
0209	Film Extrusion	0709	Research Management
0214	Plastic Laminates		
0300	Corrugated Containers (General)	0800	Process and Product Quality (General)
0301	Safety	0802	Chemical Properties
0302	Engineering	0804	Optical Properties
0303	Productivity Improvement	0808	Physical Properties
0304	Process Control & Quality Assurance	0809	Pulp Properties
0305	Production	0810	Quality Management
0306	Flexo Printing and Graphics		
0307	Human Resource Development (Corrugated)	0900	Environmental (General)
0308	Fiberboard Shipping Container Testing	0904	Environmental Management
0309	Corrugated Board Technical Service	0906	Water Quality
		0907	Residuals Management
		0908	Air Quality
0400	Engineering (General)		
0401	Pulp & Paper Safety	1000	Finishing & Converting (General)
0402	Corrosion & Materials Engineering	1004	Packaging
0403	Training & Performance Development	1005	Shipping, Receiving, & Warehousing
0404	Water Removal	1006	Sheeting
0408	Engineering Management	1008	Winding
0410	Fluid Mechanics		
0412	Material Handling & Industrial Engineering	1100	Process Control, Electrical & Info. (General)
0416	Steam & Power/Energy Management	1101	Process Control
0418	Process Engineering	1102	Electrical Engineering
0420	Maintenance & Mechanical Engineering	1103	Millwide Control and Information
0425	Yankee Dryer Safety and Reliability		
0430	Process Simulation	1200	Nonwovens (General)
		1201	Nonwovens Binders & Additives
0500	Paper & Board (General)	1202	Building & Industrial Mat
0502	Papermakers	1203	Nonwovens Properties and Performance
0506	Papermaking Additives	1204	Nonwovens Filtration Media
0507	Microbiology and Microbial Technology	1205	Nonwovens Fibers
0508	Stock Preparation	1207	Nonwovens Process Technology
0509	Paper Permanence		
		1400	Nanotechnology