



Organization and Procedures for Standardization of Oilfield Equipment and Materials

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Upstream Segment
1220 L Street, NW
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FOREWORD

The American Petroleum Institute (API) is chartered to promote the interests of the petroleum industry and to encourage the development and dissemination of petroleum technology. Its overall Mission Statement is shown in Appendix A. The API voluntary standards program is a means to achieve the standards development and technical cooperation objectives of the Mission.

The API Executive Committee on Standardization of Oilfield Equipment and Materials (Executive Committee) issues this document to support the voluntary standards program. The mission of this committee is to provide leadership in the efficient development and maintenance of technical standards for the domestic and global oil and gas exploration and production industry. These standards must meet the priority needs of this industry by minimizing the need for individual company standards, promoting the broad availability of safe, interchangeable oilfield equipment and materials, and promoting the broad availability of proven engineering and operating practices.

1. SCOPE

1.1 Purpose

This document provides information on policies and procedures for the Executive Committee on Standardization activities and guidelines for its conduct. Standards under the jurisdiction of this committee shall be developed, adopted, maintained, and interpreted in accordance with the requirements described in this document.

1.2 Authorization

The Board of Directors of the API authorized the standardization program, including a program of licensing manufacturers to use the API Monogram, and delegated the authority to implement the program to the various Segments. A program of licensing manufacturers to use the API Monogram was adopted by the Board on October 20, 1924, and was restated by them on November 14, 1977 (see Appendix B). The Upstream Committee of the API has delegated the authority to manage its program for standardization of oilfield equipment and materials to this Executive Committee

The Executive Committee is responsible for developing those policies, procedures and guidelines necessary to implement the program in consonance with directives from the Upstream Committee, the API Board, and the President of the Institute. API Policy 104 (see Appendix C) and the API Standards Procedures (see Appendix D) establish uniform procedures for the conduct of API standards activities. This document supplements Policy 104 and the API Standards Procedures, in accordance with Appendix D, to address particular aspects of the API Upstream Committee organization, scope and process. Committees established by the Executive Committee are responsible for managing the standardization work program to assure efficient use of resources pursuant to the mission defined in Appendix A; and their subcommittees are responsible for developing, reviewing and revising the standards required to implement the

program. The General Manager of the API Upstream Segment, through the Upstream Segment staff, is responsible for the administration of the program.

2. DEFINITIONS

The following definitions apply for the purposes of this document.

2.1 API Member

An organization or individual who has paid the required fees for current membership in the API.

2.2 Committee, Subcommittee or Task, Work, Resource or Advisory Group Member

A person who has been officially designated by the appropriate appointing authority (see Table 1) to represent his / her company or interest in the standards development business of the Committee, Subcommittee or Group to which they are appointed.

2.3 Company

A legally defined entity. "Company" refers to a parent company and its wholly owned subsidiaries or affiliates.

2.4 Interchangeable

Conforms in every detail, within specified tolerances, to both fit and function of a safe design, but not necessarily to the form.

2.5 Interest Category

A grouping of subcommittee members for the purpose of voting on API standards. The interest category identifies the voting subcommittee member according to the member's overall interest in a particular standard. Interest categories include:

- a) **User** - An individual or company who is the ultimate purchaser and end user of equipment, materials or services covered by API standards, and who implements recommended practices for oil and gas operations or facilities. This category broadly includes petroleum and natural gas exploration and production companies and drilling contractors.
- b) **Manufacturer** - An individual or company who makes or processes equipment and/or material for which API standards have been or are being formulated.
- c) **General Interest** - An individual or company other than a manufacturer or user with an interest in the development, maintenance, and use of API standards. General interest entities may be consultants to the oil and gas industry, academics, government regulators, etc.

Other interest categories may be established within a standards subcommittee in order to ensure adequate levels of representation.

2.6 Participant

Any non Member who attends meetings or is involved in the standards development activities of a Committee, Subcommittee or Groups. Participants contribute to the consensus building process, but are not eligible to vote.

2.7 Safe

Conforms in every detail to a design which has been demonstrated to perform satisfactorily in the service intended.

2.8 Shall

As used in a specification, "shall" denotes a minimum requirement in order to conform to the specification. The word "shall" generally is avoided in recommended practices, but may be appropriate in some cases to denote a recommended practice that is considered a minimum requirement that has universal applicability to that specific activity.

2.9 Should

As used in a specification, "should" denotes a recommendation or that which is advised but not required in order to conform to the specification. As used in a recommended practice, "should" denotes a recommended practice: (1) for which alternative practices may be equally safe and/or effective; or, (2) which may not be practical under some circumstances or applications.

2.10 Standard

Refer to Appendix C and Appendix D.

2.11 Technical Report

An informational publication which does not constitute a standard but provides technical information concerning products, services, processes, or practices within the scope of the authoring committee or subcommittee. As an example, a Technical Report might present results of an API sponsored research project.

2.12 Voting Member

Any Member of the Executive Committee or of a Committee, whose company or organization is also an API Member; any Member of a Subcommittee or Task, Work, Resource or Advisory Group.

3. GENERAL POLICIES

3.1 Principles

The "Principles for Standards Activities" defined in API Policy 104 (Appendix C) shall apply in all API Upstream Segment standards activities.

Standards should be written in clear and unambiguous language, and specification requirements should be specific and surveyable.

Standards should be written in a manner that minimizes need for users of the products involved to develop supplemental company standards or exceptions. Layered levels of specification requirements should be considered when standardizing products for which different applications or environments require significantly different levels of performance capabilities.

3.2 Legal Considerations

3.2.1 Limitations of API Standards and API Responsibility

API standards are only intended to satisfy the principles of the program as stated in Section 3.1. The American Petroleum Institute makes no representation, warranty or guarantee and specifically denies any liability or responsibility for loss or damage resulting from using API standards or products made to API standards. To assure communication of these limitations each API standard shall include appropriate policy statements approved by the API Office of General Counsel.

3.2.2 Antitrust Laws

It is the policy of the API to strictly comply with the antitrust laws. It is the responsibility of every committee member, officer and employee of the API to comply with the antitrust regulations. An Antitrust Compliance Guide has been developed by the API Office of General Counsel, and can be obtained from the API Upstream Segment to assist in identifying situations which may have antitrust implications.

The development of standards is recognized as an important and legitimate function of trade associations; however, care must be exercised in the manner in which standards are formulated. Following are some important, but not all-inclusive, examples of antitrust compliance precautions:

- All interested parties, whether or not they are members of a trade association, should have the right to comment on proposed standards that affect their business.
- All comments and suggestions received should be given serious consideration.

- Regardless of which standards are adopted, there should be no agreement to adhere to association standards. Each company should be free to decide whether or not to accept a standard.
- The standards should not give unfair advantage to any vendor or group of vendors, should not discourage or inhibit design developments, and should not prohibit use of innovations.

3.3 National and International Standardization

API Standards and the API standardization program are recognized worldwide, and API encourages representatives of companies and organizations involved in use or manufacture of oilfield equipment in any country to actively participate in the API standardization program. It is the policy of the API to cooperate with international standardization bodies such as International Organization for Standardization (ISO). This requires adequate representation by users, manufacturers, and API staff, and close coordination of related API and ISO efforts (see Section 5.3). Additionally, API is a member of the American National Standards Institute (ANSI) which coordinates the adoption of American National Standards and is the United States' member of ISO. API standards are processed through ANSI for adoption whenever practical.

3.4 Metrication

In recognition of increasing worldwide acceptance of the metric (SI) system, and Federal legislation initiating domestic use of that system, API will support a coordinated and orderly conversion and will encourage national standardization efforts that are also compatible with such efforts worldwide.

4. COMMITTEE ORGANIZATION

4.1 General Organization

Figure 1 illustrates the typical organization of API Upstream standardization committees. In this API Upstream standardization program, **committee** (see Section 4.4) denotes a unit directly below the Executive Committee, **subcommittee** (see Section 4.5) denotes a unit directly under and stemming from a committee, and **task group** (see Section 4.6), **resource group** or **advisory group** (see Section 4.6.1.4) denote a unit directly under a committee or subcommittee. Task groups typically are temporary units with specific assignments and time lines, but may be formed as resource or advisory groups to act in an advisory capacity in a particular subject area (see Paragraph 4.6.1.4). Task groups having substantial assignments may temporarily appoint small groups of their member as work groups (see Paragraph 4.7) to address parts of the assignment.

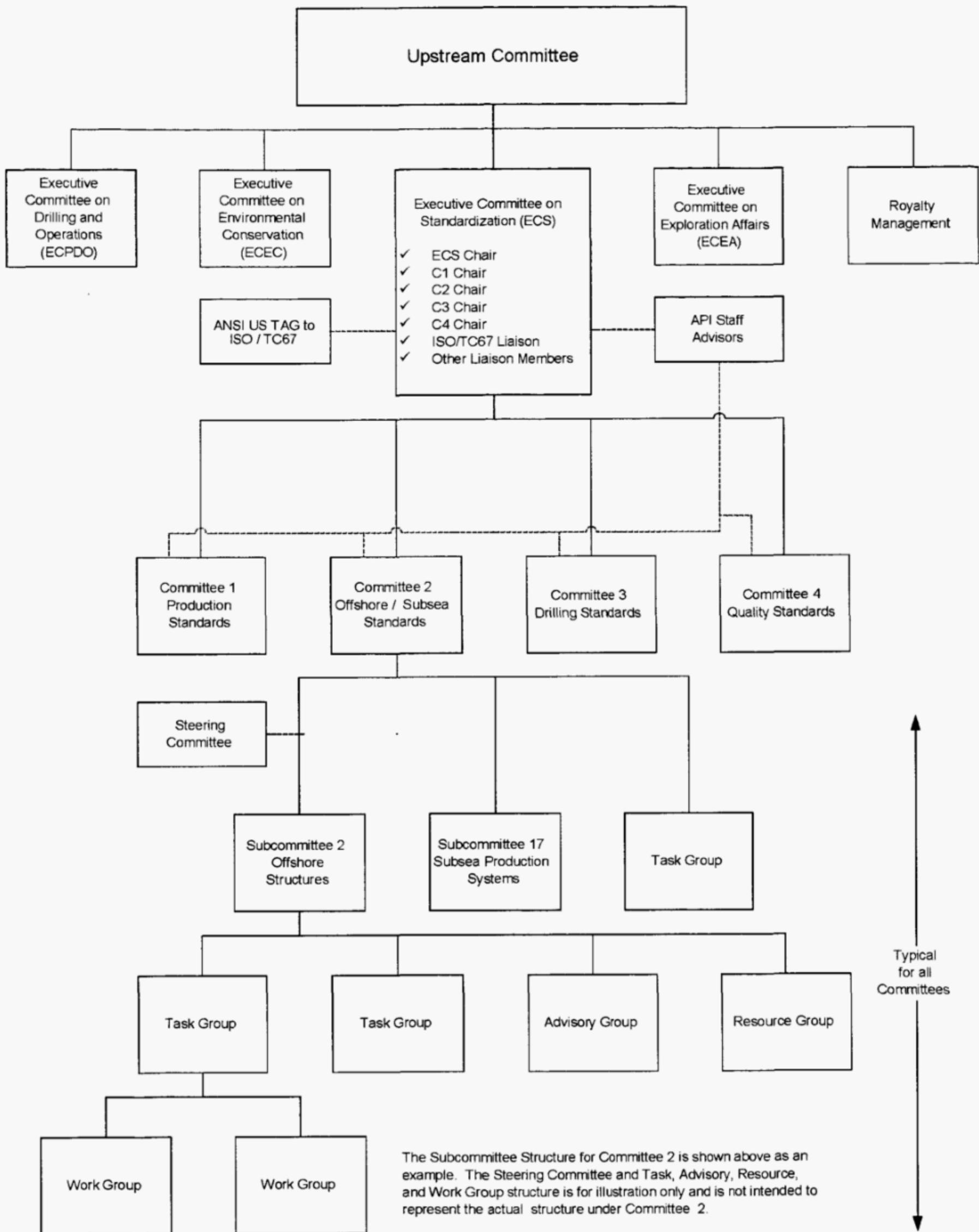


Figure 1 -- Typical Organization Chart

4.2 Responsibilities of Officers and Members

The officers and members of all organizational units described in Section 4 have the following general responsibilities.

4.2.1 Chairs

Chairs guide the activities of their respective membership in the accomplishment of the purpose for which it was appointed and in conformance to the policies and procedures herein. The Chair is the presiding officer at all meetings, and establishes the time, place, date, and agenda for meetings in accordance with Section 5.4 of this document. The Chair has appointing authority in accordance with Section 5.1, and assures preparation of and approves meeting minutes and attendance records in accordance with Paragraph 5.4.4.3.

4.2.2 Vice Chairs (when appointed)

The Vice-Chair assists the Chair in all administrative, leadership and long-range planning duties. In absence of the Chair, or at the Chair's request, the designated Vice-Chair assumes the duties of the Chair. A Subcommittee Chair may elect to appoint more than one Vice Chair, and assign specific administrative or advisory duties to each.

4.2.3 Secretaries (when appointed)

The Secretary is responsible for the preparation of minutes and record of attendance of all meetings (see Paragraph 5.4.4.3).

4.2.4 Members

Members are expected to actively participate in the accomplishment of the purpose of the organizational unit to which they belong. As a minimum, members of any organizational unit described in Section 4 are expected to attend or be represented at all meetings of that organizational unit, and members of committees and subcommittees are expected to return a completed letter ballot on all items submitted to the membership for vote.

4.3 Executive Committee

4.3.1 Function

The Executive Committee supervises the committees reporting to it, determines policy relative to all formative and administrative aspects of the standards program, and periodically reviews and approves the scope, priorities and resource commitments of the work program in accordance with Sections 5.2 and 5.10.2. It may form and discharge committees, subcommittees and task groups as warranted. It considers, adopts, modifies, or rejects all reports of committees. It also coordinates with the US Technical Advisory Group (TAG) to ISO/TC 67, Technical Committee

for Materials, equipment, and offshore structures for petroleum and natural gas industries on international standardization issues.

4.3.2 Officers

Officers shall be a Chair, a Secretary and, at the Chair's discretion, a Vice-Chair (see Section 4.2 for general responsibilities). The Chair shall be from a user interest category company. The Chair may appoint subcommittees or task groups as necessary for investigation of policy or procedural problems, or as advisory groups. The Chair reports at least once each year to the API Upstream Committee.

4.3.3 Members

Members shall be the Executive Committee Chair and the Chairs of all committees reporting to the Executive Committee. The Chair of ISO/TC 67 shall be invited to serve as a non-voting liaison representative. The Executive Committee Chair may appoint other voting members, participants, and non-voting liaison representatives from industry associations, regulatory agencies, etc., as are required to meet the representational needs of the Executive Committee.

4.3.4 ANSI US TAG for ISO/TC67

The ANSI US Technical Advisory Group (TAG) to ISO/TC 67, Technical Committee for Materials, equipment, and offshore structures for petroleum and natural gas industries coordinates with the Executive Committee, and operates under the TAG procedures found in Appendix F.

The Chairman of the Executive Committee on Standardization is the chair of the **ANSI US TAG** to ISO/TC67 and represents the TAG on the Executive Committee.

4.4 Committees

4.4.1 Function

Committees are created and discharged by the Executive Committee as warranted. Each committee manages the work program for a category of equipment or materials standards and/or recommended operating practices, including review and approval of work items, scopes, justifications, priorities, resources, etc. in accordance with Sections 5.2 and 5.10.2. Each committee may form and discharge subcommittees and task groups as necessary for detailed investigation of items selected for consideration. Committees do not ballot individual standards unless there is a question of whether a particular standard or revision will meet the needs of the industry if passed (see Section 5.5).

4.4.2 Officers

Officers shall be a Chair, a Secretary and, at the Chair's discretion, a Vice-Chair (see Section 4.2 for general responsibilities). The Chair shall be from a user interest category company. The Chair shall report to the Executive Committee at least annually detailing the work program, plans, progress, and member meeting days of the committee and its subcommittees (see Sections 5.2 and 5.10.2), and shall report at other times at the call of the Executive Committee Chair.

4.4.3 Members

Members of committees shall be representatives of API member companies in the user or manufacturer interest categories.

Membership shall normally be limited to one representative per company, including its affiliates or subsidiaries; however, the company represented by a committee Chair may designate a second full member. A member may name one or more alternate members from their company. The alternate does not automatically succeed to committee membership upon the member's resignation.

It is the responsibility of each committee Chair to ensure adequate membership to perform the tasks assigned and represent the interests concerned. At the discretion of the committee Chair, additional representatives from API member companies in the user or manufacturer interest category may be added to the committee. Additional members may include multiple representatives from one company, when required to meet these objectives; however, for voting purposes to meet Policy 601, Appendix E, only one member from each company may vote on their company's behalf.

4.5 Subcommittees

4.5.1 Function

Subcommittees are created and discharged by a committee as warranted. Within the work program approved by their parent committee, subcommittees supervise the detailed development and maintenance of standards and are the primary ballot authority for approval of standards. Each subcommittee may form and discharge task groups and work groups as necessary for detailed investigation of items selected for consideration. Any subcommittee may initiate new work proposals in accordance with Section 5.2, and is responsible for the initial assessment and prioritization of proposals received from its task groups or interested parties.

4.5.2 Officers

Officers shall be a Chair, and at the Chair's discretion, one or more Vice-Chairs and a Secretary (see Section 4.2 for general responsibilities). The Chair shall report to the parent committee at least annually detailing the work program, plans, and progress, of the subcommittee and its task

groups (see Sections 5.2 and 5.10.2), and shall report at other times at the call of the parent committee Chair.

4.5.3 Members

4.5.3.1 General

Members of a subcommittee shall be representatives of companies or interests whose principal business is directly and materially affected by the standards under the subcommittee's jurisdiction. Members may include users and manufacturers of products covered by the standards, plus other particularly qualified individuals. They shall be qualified by reason of training, experience and company responsibilities. Membership shall be limited to one representative per company, including its affiliates or subsidiaries; however, the company represented by a committee Chair may designate a second full member. Members may name one or more alternate members from their company. The alternate does not automatically succeed to subcommittee membership upon the member's resignation. Members or alternates (if a company is already represented on the subcommittee) may be from the related ISO/TC67 Work Group(s) or Subcommittee(s), or their subordinate groups. Such members / alternates are encouraged to facilitate the joint development of ISO / API standards or their maintenance.

4.5.3.2 Balance of Interests

Subcommittee membership should have a balance of the principally affected interests concerned with the specific topics addressed by the subcommittee. As a general guideline for subcommittees dealing with product standards, the combined number of voting members representing user and general interests should equal or exceed the number of voting members representing manufacturer interests. The Chair of the subcommittee or its parent committee should take reasonable measures when needed to maintain adequate membership size and representation. As examples, such measures may include adjusting the subcommittee scope or organization, increasing the size of an under-represented interest category, or limiting the size of an over-represented interest category.

4.5.3.3 Diversity of Interests

On subcommittees which have a diversity of interests, each potential member may be required to declare their company's interest category and to identify the specific standards or types of standards (product lines) under the subcommittee's jurisdiction for which their company wishes interest rights. Such declarations will be the basis for determining who may vote on specific standards or revisions to existing standards, and for assessing the representation of the principally affected interests.

4.6 Task Groups

4.6.1 Function

Task groups perform the detailed standards development work (e.g., draft a new standard, review and revise an existing standard, supervise a research project in support of standards work, etc.). Task groups are formed and discharged by committee or subcommittee Chairs as the need arises. The Chair of the parent committee or subcommittee shall give each task group a work scope and an estimated date for completion. Close liaison between committee, subcommittee, and task group Chairs is necessary.

Assignments shall be made so that each charge can be accomplished in a reasonable length of time. Task group work should be scheduled with recognition of the urgency of the matter being studied or developed. Urgency may dictate that action be accomplished by correspondence, telephone or electronic media exchanges among task group members, or that members be divided into temporary work groups in accordance with Paragraph 4.8.

Task groups shall confine their activities within the limits of their assignments unless their assignments are revised by the Chair of the parent committee or subcommittee. Task groups are expected to meet as often as necessary to complete their assignments and submit a report to the API Upstream Segment office in time to be included in the parent subcommittee or committee agenda for the Standardization Conference. If completion of a task group assignment depends on research or compilation of data over an extended period of time, the task group Chair shall submit a progress report for inclusion in the agenda. Task groups shall be discharged as soon as their mission is accomplished.

4.6.2 Officers

Officers shall be a Chair and, at the Chair's discretion, a Vice-Chair and Secretary (see Section 4.2 for general responsibilities). The Chair shall pursue timely completion and submittal of the Task Group's final report or a progress report to API prior to the Standardization Conference for inclusion in the parent committee or subcommittee agenda in accordance with Paragraph 4.5.2. The Chair shall submit progress reports at other times at the call of the Chair of the parent committee or subcommittee.

4.6.3 Members

Members shall be selected for qualification as to the problem at hand and shall be drawn insofar as possible from the membership of the parent committee or subcommittee. Whenever this source is inadequate, the Chair of the task group may appoint any particularly qualified individual, but such appointments shall not convey membership on the parent committee or subcommittee.

4.7 Resource and Advisory Groups

4.7.1 Function

At the discretion of the parent committee or subcommittee, task groups may be formed as resource or advisory groups and kept on the committee or subcommittee roster without a specific work assignment or time line, subject to review per Section 5.10.2. Resource groups typically provide standardization expertise in a subject area for which ongoing but infrequent activity is anticipated. Advisory groups serve in an "on call" capacity for a particular subject area. Resource or advisory groups shall become active only with the prior approval of the Chair of the parent subcommittee or committee, and when activated shall operate under the same procedures as task groups.

4.7.2 Officers

Officers and their responsibilities shall be the same as for a Task Group.

4.7.3 Members

Members shall be selected on the same basis as for Task Groups.

4.8 Work Groups

4.8.1 Function

Work groups may be formed by any higher committee, and operate under the same procedures as task groups (See Section 4.6). They typically are formed by task groups desiring to facilitate timely completion of particularly large or complex assignments by distributing the work among small (2 to 4 person) subgroups of their members for completion on an ad hoc basis (e.g., write a section of a new standard). Work Groups function on a short term basis, are dissolved upon completion of their work, and the full task group incorporates results into the overall assignment as appropriate.

4.8.2 Officers

Officers and their responsibilities shall be the same as for a Task Group.

4.8.3 Members

Members shall be selected on the same basis as for Task Groups.

5. PROCEDURES

5.1 Appointments

5.1.1 Appointing Authorities

Table 1 defines authorities for appointing officers and members of the Executive committee, committees, subcommittees, and task groups.

Table 1 -- Appointing Authorities

<u>Officers/Members to be Appointed</u>	<u>Appointing Authority</u>
Executive Committee Chair & Vice-Chair Secretary Members (not designated elsewhere in S1)	Upstream Committee Chair Position held by API staff Executive Committee Chair
Committees Chair Vice-Chair Secretary Members	Executive Committee Chair Committee Chair Position held by API staff Committee Chair
Steering Committee Members (other than Subcommittee Chairs)	Committee Chair
Subcommittees Chair Vice-Chair and/or Secretary Members	Chair of the parent Committee Subcommittee Chair Subcommittee Chair unless sooner appointed by the Chair of the parent committee
Task Groups, Resource Groups, Advisory Groups Chair Vice-Chair and/or Secretary Members	Chair of parent committee or subcommittee Task Group Chair Task Group Chair unless sooner appointed by the Chair of the parent committee or subcommittee

<u>Officers/Members to be Appointed</u>	<u>Appointing Authority</u>
Work Groups Chair Vice-Chair and/or Secretary Members	Chair of parent Task Group Work Group Chair Work Group Chair unless sooner appointed by the Chair of the parent Task Group

5.1.2 Appointment Letters

To keep API records as complete and up-to-date as possible, all appointing authorities shall inform the API Upstream Segment of desired appointments, and the Segment office will issue all appointment letters on behalf of the appointing authorities.

5.1.3 Tenure of Appointments

5.1.3.1 Officers

The Chairs of the Executive Committee, committees, and subcommittees serve three-year terms, unless service is sooner terminated by resignation. A committee or subcommittee Chair normally serves until July 1 of the year nearest the third anniversary of that Chair's appointment. The Chair of the Executive Committee may consider longer or shorter terms for committee Chairs in order to stagger the rotation of Executive Committee memberships. Committee and subcommittee Chairs may be re-appointed. The tenure of appointments of other officers, and task group Chairs, should be defined by the appointing authority when making the appointment.

5.1.3.2 Members

Committee, subcommittee, and task group members serve until relieved by resignation, discharge of the unit, or application of the process described in Section 5.10.3.

5.2 Project Justification and Assessment

5.2.1 Establishment of New Work Items

5.2.1.1 General

Any person, organization, committee or subgroup may request a committee to address a new work item. New work items, including development and oversight of research per Paragraph 5.7, typically involve:

- a. **New Standards or Major Reviews/Revisions.** New work items of this type typically require formation of a new group, or a major increase or change in the scope or workload of an

existing group. The prioritizing of proposals for such work should include consideration of effects on overall resource commitments and member meeting days.

- b. Piecemeal Revision Work Items.** New work items of this type typically involve expanding the scope of an existing group to investigate or develop one or more related revisions to specific technical requirements in a standard (e.g., add or alter physical property requirements in a particular paragraph or table). The responsible subcommittee and committee should consider limiting the frequency and accumulation of piecemeal work items affecting a particular standard.

5.2.1.2 Project Justification

A Project Justification shall be completed for all new work items of either type described in Section 5.2.1.1, shall be prioritized and approved in accordance with Paragraph 5.2.1.5. Appendix D includes example considerations for new work justifications; however, the Executive Committee may establish more specific forms and assessment procedures consistent with the purpose of the standards program.

5.2.1.3 New Work Proposals

Proposals for new work items should describe and justify the work (standard to be written or revised), identify the intended international or domestic status of the standard (see Section 5.2.1.4), describe resource needs (type and number of members, number of meetings, etc.), list available or proposed participants, and include a time line for major milestones in completing the work. A minimum of two user representatives shall volunteer to participate in the work before it is initiated.

5.2.1.4 Identifying International and Domestic Status of New Standards

The development of standards intended for adoption as international standards by the ISO requires special coordination. To assure such coordination needs are considered in the assessment of new work proposals, all proposals for new standards should identify the intended international or domestic status of the standard:

- a. Equivalent API and ISO Standard.** An Equivalent API and ISO Standard is one that is expected to be published worldwide by ISO as an ISO Standard and in the US by API as an ISO / API standard. The development and revision of such standards is to be coordinated with ISO in accordance with Section 5.3, submitted to the ISO and API processes (as necessary), and adopted as both ISO and API standards essentially unchanged.

API will maintain effective and ongoing influence in the standards by participation in ISO and the ISO subcommittees and work groups responsible for these standards. International involvement by members of the relevant ISO subcommittee or work group in the API organization developing the standard should also occur; however, the standard development activity is not to be duplicated in both standards development organizations..

- b. ISO Standard only.** An international standard that addresses an area not covered by an API standard and not of sufficient interest to the US petroleum and natural gas industry to be adopted back as an equivalent ISO/API standard. There may be less need for active API participation in the responsible ISO subcommittee or for significant oversight by an API subcommittee or committee.
- c. API Standard only.** Standards such as installation, care-and-handling and similar type documents, which do not fall within the purview of ISO or other national bodies, or standards specific to US operations are unlikely ever to be replaced by ISO or other national documents. These standards will be maintained as API standards only, and no coordination with ISO on such standards is required.

5.2.1.5 Assessment of New Work Proposals

Using forms and procedures prescribed by the Executive Committee, each subcommittee shall assess and prioritize all new work proposals and justifications developed by its members, subgroups or interested parties, and submit a written report to its parent committee on all subcommittee approved proposals, justifications and priorities. Each committee will summarize new work item reports received from its subcommittees, as part of the committee report to the Executive Committee.

5.3 Coordination and Adoption of Equivalent API and ISO Standards

The processes related to the adoption of equivalent API and ISO standards (5.2.1.4a) and their relation to ISO standards only (5.2.1.4b) and API standards only standards (5.2.1.4c) are depicted on Chart 1, below.

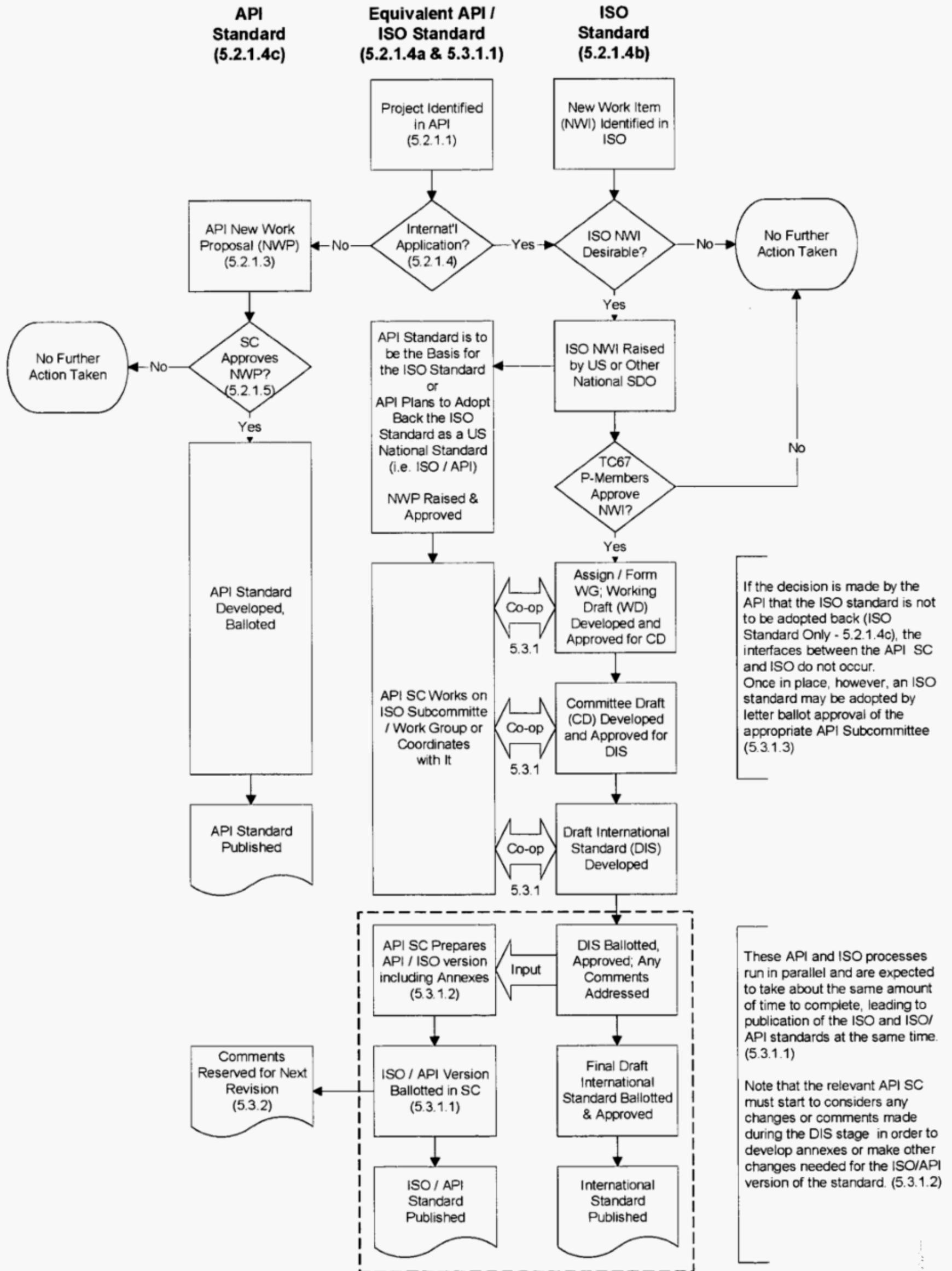
5.3.1 New Standards

The Chairs of the responsible subcommittee and committee shall take the necessary steps to assure adequate international coordination of the standards development process, including submission of API New Work Projects to the ISO New Work Item process, as appropriate. They shall coordinate with the applicable ISO subcommittee or work group, and assure appropriate follow-up.

5.3.1.1 Equivalent API and ISO Standards (ISO/API Standards)

The Chair of the responsible subcommittee or committee shall actively encourage and assure consideration of international input for standards intended to be equivalent ISO / API standards. The resulting API work item shall be submitted to ISO and the applicable API subcommittee or committee for concurrent approval as both an ISO and ISO / API standard whenever there is sufficient ISO interest. Where such ISO interest is lacking, the API standard, once approved, shall be submitted for ISO consideration. The standard submitted to ISO should be properly formatted using the ISO template and contain SI units.

Chart 1 – Approval Process



The applicable API subcommittee or committee Chair shall actively encourage US based involvement within the ISO group, and shall assure the API subcommittee reviews and considers the resulting standard for API adoption. ISO standards not based on API standards may be adopted as API standards by letter ballot approval from the appropriate API subcommittee in accordance with Section 5.5.

Once a standard has been published as an ISO Final Draft International Standard (FDIS), it will be returned by API staff to the responsible subcommittee or committee for balloting on national adoption by API as an ISO / API standard. Otherwise, the process of FDIS approval and US national adoption will be delayed. Adoption will be by letter ballot per Section 5.5 and Appendix D.

The decision on the desirability of national adoption by API, the preparation of the necessary annexes for US adoption, and a review of the standard for inclusion in the API Monogram program must begin as soon as the disposition of comments to the ISO Draft International Standard (DIS) are known. The objective is to complete national adoption, including the color-coding and legal review processes, and the review of the impact on other API standards, no later than the time the ISO document is published as an International Standard. This expected to be a maximum of five months with a target of four months from FDIS approval.

Generally, any comments developed during the national adoption ballot should be held for consideration by ISO and API for inclusion in the next revision of the ISO standard. If such comments must be addressed to achieve national adoption, or if the ISO / API standard must be revised before the ISO standard for other reasons, then such changes should be addressed in an annex to the ISO/API standard.

5.3.1.2 Technical Equivalency, Exceptions, and Formatting

Prior to API adoption and publication of a standard equivalent to one adopted by ISO, whether developed under ISO or API leadership, the responsible API subcommittee should consider whether any additions or exceptions to the ISO standard might be necessary for API requirements. Technical justification is required if an API standard is to contain differing technical requirements than that of the equivalent ISO standard. This is documented in an annex.

The API published equivalent standard may contain both US Customary units and SI units. The inclusion of US customary units and any other changes from the ISO document will be summarized in an introduction to the ISO/API standard and detailed in the annex. The annex will also contain additional API requirements, if any. The text of the ISO/API standard will be changed to add specific API requirements and to remove conflicting ISO requirements.

Reference should be made to “A Guide for API Adoption of ISO Standards” (current version) for details on the format and content of standards for national adoption.

5.3.1.3 ISO Standard Only Projects

ISO standards not based on API standards or for which there is no equivalent API standard may be adopted as ISO / API standards by letter ballot approval in the appropriate API subcommittee in accordance with Section 5.5.

5.3.2 Revisions to Equivalent ISO / API Standards.

Revisions to ISO / API standards should coincide with revisions to the ISO standard, unless justified by urgency. Revisions shall be coordinated in the same manner as new standards (see Section 5.3.1) with the responsible API subcommittee and committee coordinating with the appropriate ISO subcommittee or working group to submit proposed revisions to the ISO standard via the ISO New Work Item process..

Once revised, the ISO standard will be adopted back as an ISO / API standard with any differences noted as in 5.3.1.2, above.

5.4 Meetings

5.4.1 Annual Standardization Conference

The Executive Committee, committees and subcommittees typically meet at the Annual Standardization Conference to assess new work proposals and review all activities in accordance with Sections 5.2 and 5.10.2, and may meet at other times and locations at the call of their Chairs. Task Groups and Work Groups are encouraged to hold any necessary meetings **before** the Conference, to allow completion and inclusion of a final report or progress report in the parent subcommittee's or committee's Conference agenda. All meetings shall conform to the policies and procedures in Section 5.4.

The locations for Standardization Conferences are at the discretion of the Executive Committee. Symposia on subjects consistent with the Purpose of the Program may be held at Standardization Conferences providing they are sponsored by a committee. Papers presented at conference symposia will be made available to the general public on request to the office of the General Manager of the Upstream Segment.

5.4.2 Meeting Frequency

Meetings of each organizational unit described in Section 4 are held at the call of its Chair. Meetings should be held only when they are the most efficient and reasonable means of accomplishing a task. Conference calls, electronic mail and other such mechanisms should be used whenever practical as a means of avoiding member travel and time out of the office.

5.4.3 Meeting Locations

5.4.3.1 General

Meetings should be held at locations central for the participants, and ease and cost of transportation should be major considerations in selecting meeting sites. Meetings typically are held at API or member company offices central for the participants.

5.4.3.2 Meeting Rooms

The office of the General Manager of the API Upstream Segment will make arrangements for a meeting room whenever requested by the Chair of any committee, subcommittee, or task group.

5.4.3.3 Meeting Expense

If hotel or other public meeting rooms are necessary for a particular meeting, the office of the General Manager of the API Upstream Segment will bear the normal expenses for meeting rooms. No expense shall be incurred by any committee or subgroup or member on behalf of the API without prior approval of the constituted authority of the API.

5.4.4 Meeting Procedures

5.4.4.1 Planning and Conduct of Meetings

All meetings shall be planned and conducted in accordance with Appendix D, including the requirements for a quorum of a majority of the members of the committee.

5.4.4.2 Agendas

- a. Proposals to create or change any standard may be submitted in accordance with Section 5.2 by any individual or company or any association, society, or committee thereof. The right of any proposal to a place on the agenda for any meeting shall be determined by the Chair of the group holding the meeting in consultation with other officers of that group as appropriate. If a refusal should be challenged, the officers of the applicable committee or subcommittee and the General Manager of the API Upstream Segment, acting jointly, shall decide the matter. Proposals should be submitted in writing at least 60 days before the meeting at which it is proposed for discussion.
- b. Agendas shall be distributed in advance of the meeting to members of the unit holding the meeting, officers of the parent committee or subcommittee, and known interested parties in accordance with Appendix D. The API Upstream Segment staff prepares and distributes agendas for all Standardization Conference meetings of the Executive Committee, committees and subcommittees.

- c. Agendas for task group meetings are the responsibility of the task group Chair, or the Secretary if one is appointed. They shall be developed in consultation with API staff, and copies shall be submitted in advance of the meeting to the task group members, the Chair of the parent committee or subcommittee, and to the API Upstream Segment office if not distributed by that office.

5.4.4.3 Minutes, Attendance Records and Reports of Meetings

- a. Meeting minutes and attendance records shall be prepared in accordance with Appendix D and, as a minimum, shall be given the same distribution as the agenda.
- b. Each presiding officer, or the Secretary if one is appointed, shall be responsible for prompt preparation of accurate minutes and attendance records of each meeting. Minutes prepared by the Secretary should be approved by the Chair before issue. When requested, copies shall be submitted for presentation of a corresponding verbal report to the parent subcommittee, committee, or the Executive Committee.
- c. The API Upstream Segment staff prepares and distributes reports for all Standardization Conference meetings of the Executive Committee, committees and subcommittees based on the minutes prepared by the presiding officer or Secretary.

5.4.4.4 Voting in Meetings

Voting in meetings shall be in accordance with Appendix D. While attendance at meetings and participation in the discussions at the meetings is open to all interested parties, only officially designated members (see Section 4.4) may vote. No action involving substantive changes or additions to standards becomes final until ratified by letter ballot of the voting members of the responsible subcommittee or committee.

As many companies participating in API standardization activities have subsidiary companies, the one-company / one-vote rule (per API Policy 601 referenced in Appendix E) as it relates to consensus bodies shall be applied.

5.5 Letter Ballot

5.5.1 Procedure

Balloting shall be in accordance with Appendix D. Letter ballots shall be prepared and transmitted by the API Upstream Segment staff to the voting members of the applicable ballot authority.

5.5.2 Ballot Authority

Subcommittees as defined in Section 4.5 are the principal ballot authority for approval of proposals for new standards or for revision, withdrawal or reaffirmation of existing standards.

The parent committee may elect to ballot an item that a subcommittee is also considering (vote by exception) if there is a question whether the item being considered will meet the needs of the industry if passed. The committee may decide to take such action by a majority vote of the voting members present at a committee meeting; or, at the Chair's discretion between meetings, the Chair may poll the committee members by correspondence, telephone or electronic media. The Chair may then initiate a committee ballot, if approved by a majority of the members.

5.5.3 Resolution and Reporting of Ballot Results

Ballot results shall be resolved and reported in accordance with Appendix D. The API staff shall promptly summarize and report the initial ballot results including copies or text of all comments and attachments received to the Chair of the responsible subcommittee, or a task group designated by the Chair, for resolution of all comments. Editorial changes which do not materially change the technical or safety content of the approved ballot should be approved by the Chair of the subcommittee. Resolution decisions shall be documented, approved by the subcommittee Chair, and submitted to API staff for preparation and distribution of a report of final ballot results to all members of the parent committee, the sponsoring subcommittee and task group, all API Monogram licensees under the Specification (if applicable), and other parties who submitted comments on the ballot.

5.5.4 Re-balloting

If substantive changes to a document are proposed in order to resolve initial ballot comments, the proposed substantive changes shall be re-balloted in accordance with Appendix D.

5.5.5 Color Coding Review

Each new standard or revision related to a standard used in the monogram program or any other standard that falls under an API licensing program shall be subjected to a review by a task group appointed by the Chair of the responsible subcommittee as soon as practical after the Chair of the responsible subcommittee affirms letter ballot resolution and approval in accordance with Paragraph 5.5.3.

The completion of color coding is not a pre requisite to publication. The purpose of the color coding review shall be to ensure the text of the new standard or revision is not ambiguous, does not conflict with other applicable API documents, and that the requirements are sufficiently clear so as to be audited under the Monogram program. The color coding review shall also confirm that the text, including information text and requirements, is intelligible to manufacturers and users.

The Chair of the responsible subcommittee may solicit the help of the subcommittee responsible for quality to provide a task group member to facilitate the review. The Chair of the responsible subcommittee shall ensure that the text that is ambiguous, conflicts with other API documents, or provides requirements that are cannot be audited is revised to alleviate the problem(s) reported by the final review (“color code”) task group, if the review so indicates. If substantive changes to a

document are proposed in order to resolve final review problems, the proposed substantive changes shall be re-balloted in accordance with Appendix D for the next revision.

5.6 Appeals

An interested party may appeal any API standards action. Appendix C and D contain API's appeals procedure. Appendix D has been modified for use by the Executive Committee on Standardization to read as follows:

Any person having a material interest in an API standards action shall have the right to bring a timely appeal. Administrative procedures for conflict resolution in the standards development process, including consideration of negative ballots, must be exhausted before lodging any appeal. Appeals shall be considered by the committee or committees responsible for the issue with the right of further appeal to the API Management Committee. Committees may convene appeals boards to hear and act on appeals.

Appeals must be submitted in writing to the API General Manager of the Upstream Segment. The appeal shall include a statement identifying specifically the action or inaction objected to; the basis for the objection, including any adverse impacts on the complainant; and suggested remedial action. The appeal must be filed with API within 45 days of the date of notification of the action causing the complaint. Further, challenges to published standards must be initiated within 1 year of their distribution unless it can be demonstrated that the objection is based on grounds that have subsequently arisen. Appeals of inactions may be initiated at any time. The API director shall investigate the objections raised and respond promptly to them in writing within 45 calendar days of receipt.

If the objections cannot be resolved by the General Manager (informal resolution), they shall refer the appeal to the appropriate committee chairman for investigation of the objections raised. The committee chairman's investigation will be by means of convening a board of three to five experts on the subject of the appeal. The experts shall be selected by the committee chairman, and they shall be approved by the General Manager of the Upstream Segment in consultation with the Office of General Counsel. This board is chaired by the Committee chairman and will convene within 45 days of the General Manager's determination that an informal resolution is not feasible.

Competing suppliers or manufacturers of the process or service that is the subject of the appeal shall not participate in the appeals process, and members shall not have been directly involved in the disputed matter. The board may call upon experts familiar with the issues of the dispute. The appellant must be notified of the board's composition and given the opportunity to object to members on the board. Objections must be substantiated to be considered.

The appellant shall be given the opportunity to appear before the appeals body and present arguments in support of his objection. The appeals body shall consider whether applicable API policies and procedures were satisfied and whether the procedural and substantive actions or requirements complained of merit corrective action.

The appeals body shall issue a written decision following the hearing, within 45 calendar days. The decision shall indicate the conclusions reached, their basis, and the right of further appeal. If the appeal was on technical ground, then further appeal is limited to objections related to the procedure for handling the appeal. Notwithstanding the subject of the appeal, the standard may be progressed for publication following the normal procedure after the appeals board has reported to the General Manager, whether or not a further appeal on procedural grounds is to occur. The General Manager shall ensure that a complete record of the appeal is compiled and maintained in conformance with API Policy 804, "Files and Records." The appellant shall be permitted access to the records.

Specified time limits in this policy may be modified by the API vice president responsible for the appealed standard upon demonstration of reasonable cause.

5.7 Research

With appropriate approvals, any standardization committee or subcommittee may sponsor applied research in connection with standardization of oilfield equipment and materials. Requests for appropriations to fund a research project must originate with a committee before referral to the constituted authority of the API, and the committee subcommittee or task group resources necessary to supervise the project must be approved per Section 5.2 of this document. The responsible committee shall affirm that the results of any proposal submitted are necessary or desirable to further the Purpose of the Program. The Executive Committee is responsible for prioritizing all research proposals under its jurisdiction, and submitting same to the Upstream Committee for review and funding consideration under the normal annual budget process.

5.8 Surveys and Questionnaires

All organizational units described in Section 4 shall consult the API Upstream Segment staff, and the staff will consult the API Office of General Counsel, before initiating industry surveys or questionnaires. Surveys or questionnaires involving requests for data that may be considered confidential by potential respondents shall be requested by the appropriate committee or subcommittee Chair. The API staff shall solicit the information and shall document and disseminate the information in a manner consistent with directives promulgated by the Upstream Committee and the Board of Directors of the API. When disseminating data that may be considered confidential, the API staff shall not disclose the identity of respondents.

5.9 Requests for Information

Inquiries from anyone for any information concerning matters consistent with the purpose of the standards program shall be referred to and answered by the API staff in a manner consistent with this document.

5.10 Review of Standards, Activities and Participation

5.10.1 Standards Review

Each subcommittee shall review and take appropriate action on all standards under its jurisdiction at least once every five years in accordance with Appendix D. The API staff shall advise the responsible subcommittee one year in advance of the review period deadline.

5.10.2 Activity Review

The Executive Committee and each committee and subcommittee shall conduct an annual sunset review of its subordinate units, and specifically reaffirm or discharge each subordinate unit each year or at the end of a specific, approved assignment. Such reviews should include an assessment of the annual statistical profile of the units' performance, including numbers and types of meetings held (e.g., face-to-face, teleconference or video conference); a summary of major accomplishments; and the reasons for continuing the units. A report of each review should be submitted to the next higher organizational unit.

5.10.3 Participation Review

When requested by a committee or subcommittee Chair, API staff shall review the extent of participation by the members and shall submit the results to the Chair. Each Chair shall then advise the API staff as to the personnel changes considered necessary to (1) maintain the desired balance, and (2) eliminate non-participating personnel.

5.11 Informational Publications

With approval of its parent committee, a subcommittee may develop informational documents for publication as "Technical Reports" as defined in Section 2. Such documents are not standards as defined in Appendix D and shall not contain or imply specification requirements or recommended practices. Informational publications shall be subject to the same justification, authorization, ballot approval, and review requirements as standards.

6. PUBLICATIONS -- API STAFF RESPONSIBILITIES

6.1 Issue of Standards and Revisions

The API staff issues new standards or revisions after the Chair of the responsible subcommittee affirms letter ballot resolution and approval in accordance with Paragraph 5.5.3. Revisions shall be in the form of new editions, addendum, or errata. The API staff is responsible for ensuring that standards and revisions conform to the requirements of this document.

6.2 Distribution of Standards and Revisions

The API staff will mail copies of all new standards, and revisions to existing standards, to all members of the task group responsible for formulating the standard or revision as soon as practical after receipt from the printer. Notice of its availability should be sent to the parent subcommittee and committee. Copies of specifications will be mailed to all parties holding valid API Monogram licenses under the specification as soon as practical after receipt from the printer. Copies of all standards will be available to all other interested parties through API's Publications and Distribution Section.

6.3 Effective Date of Standards

The effective date of a standard is the date printed on the cover. The effective date shall be no later than six (6) months after the standard or revisions to the standard are available for distribution by API. A shorter period between the date of distribution and effective date may be established by ballot of the responsible subcommittee. If a standard is reaffirmed, all subsequent copies shall carry the original effective date of the particular issue and its reaffirmation dates, or a new edition may be issued.

The foreword of new or revised standards shall include the following statement:

"This Standard shall become effective on the date printed on the cover but may be used voluntarily from the date of distribution."

6.4 Standards Incorporated by Reference

Where available standards are incorporated by reference in API standards, only those aspects of the standard included by reference that are absolutely necessary to fulfill the purpose of the host API standard shall be referenced. The latest editions of reference standards should be specified unless the responsible subcommittee or committee determines a specific edition is more appropriate for the purpose of the API standard.

The following statement shall be included in the foreword of ISO based API standards, and may be included in any other API standard:

"Standards referenced herein may be replaced by other international or national standards that can be shown to meet or exceed the requirements of the referenced standard."

If the above statement is included in specifications covered by the API monogram license program, the specifications should also include a statement that manufacturers electing to use another standard in lieu of a referenced standard are responsible for documenting equivalency.

6.5 Format

ISO/API standards shall follow the ISO template format and numbering system established by the ISO Central Secretariat, Geneva, Switzerland. Differences between the ISO and ISO/API versions of the same standard will be identified per section 5.3.1.3.

6.6 Interpretations

Interpretations of the meaning of API standards shall be made by API staff in accordance with Policy 104 (Appendix C). Copies of interpretations shall be distributed at least annually to all members of the committee and subcommittee responsible for the standard(s) involved, and to all API Monogram licensees for the standard(s) if applicable.

6.7 Informational Publications

API staff issues, distributes and interprets informational publications under the same guidelines as specified above for standards. Unless otherwise specified by the authoring subcommittee, the effective date of an informational publication shall be the issue date shown on the cover.

APPENDIX A

API MISSION STATEMENT

The mission of the American Petroleum Institute (API) is to influence public policy in support of a strong, viable U.S. oil and natural gas industry essential to meet the energy needs of consumers in an efficient, environmentally responsible manner.

As the U.S. oil and natural gas industry's primary trade association, API:

- Engages in federal and state legislative and regulatory advocacy that is based on scientific research; technical, legal and economic analysis; and public issues communication;
- Provides an industry forum to develop consensus policies and collective action on issues impacting its members; and
- Works collaboratively with all industry oil and gas associations, and other organizations, to enhance industry unity and effectiveness in its advocacy.

API also provides the opportunity for standards development, technical cooperation and other activities to improve the industry's competitiveness through sponsorship of self-supporting programs.

June 1999

APPENDIX B

BOARD RESOLUTION

The original resolutions adopted by the Board of Directors of the American Petroleum Institute on Oct. 20, 1924, embodied the purpose and conditions under which such official monogram may be used.

The following restatement of the resolutions was adopted by the Board of Directors on November 14, 1977:

WHEREAS, The Board of Directors of the American Petroleum Institute has caused a review of the Institute's program for licensing the use of the API monogram and

WHEREAS, It now appears desirable to restate and clarify such licensing policy and to confirm and make explicitly clear that it is the licensee, not API, who make the representation and warranty that the equipment or material on which they have affixed the API monogram meets the applicable standards and specifications prescribed by the Institute:

NOW, THEREFORE, BE IT RESOLVED, That the purpose of the voluntary Standardization Program and the Monogram Program of the American Petroleum Institute is to establish a procedure by which purchasers of petroleum equipment and material may identify such equipment and materials as are represented and warranted by the manufacturers thereof to conform to applicable standards and specifications of the American Petroleum Institute; and be it further

RESOLVED, That the previous action under which the following monogram was adopted as the official monogram of the American Petroleum Institute is reaffirmed:



BE IT FURTHER RESOLVED, That the American Petroleum Institute's monogram and standardization programs have been beneficial to the general public as well as the petroleum industry and should be continued and the Secretary is hereby authorized to license the use of the monogram to anyone desiring to do so under such terms and conditions as may be authorized by the Board of Directors of the American Petroleum Institute, provided that the licensee shall agree that the use of the monogram by such licensee shall constitute the licensee's representation and warranty that equipment and materials bearing such monogram complies with the applicable standards and specifications of the American Petroleum Institute; and that licensee shall affix the monogram in the following manner:



XX-XXXX
(LICENSE NUMBER)

BE IT FURTHER RESOLVED, That the words "Official Publication" shall be incorporated with said monogram on all such standards and specifications that may hereafter be adopted and published by the American Petroleum Institute, as follows:

OFFICIAL PUBLICATION



REG. U.S. PATENT OFFICE

Appendix C

Section Number: 100 Policy Number: 104 Effective Date: Dec. 14, 1997

Subject: Standardization

Introduction

The purpose of this policy is to provide general guidance for API standards activities. API standards shall be adopted and interpreted only in accordance with the principles and procedures described in this policy. Any such activity undertaken by any person which does not adhere to these principles and procedures will not be an authorized act of the API and may not be presented as such.

The API is chartered to promote the interests of the American petroleum industry and to encourage the development and dissemination of petroleum technology. The API voluntary standards program is a means to achieve these purposes. The authorization for developing voluntary industry standards is derived from the Charter and the Institute's Board of Directors.

Definition of Standards

For purposes of this policy the term standard means:

A prescribed set of voluntary rules, conditions, or requirements concerned with the definition of terms; classification of components; delineation of procedures; specification of dimensions; construction criteria; materials, performance, design, or operations; measurement of quality and quantity in describing materials; products, systems, services, or practices; or descriptions of fit and measurement of size.

This definition includes all API publications that are or have been designated standards, specifications, recommended practices, bulletins, guides and manuals. The actual title is optional to the department developing them.

Principles of Standards Activities

The following principles apply in API standards activities:

- API standards shall be developed, revised or reaffirmed only when a technical or safety justification exists to do so.
- Use of API standards shall be entirely voluntary in their application. The API monogram and licensing programs shall be administered and monitored in accordance with the November 14, 1977 resolution of the Board of Directors.
- The API standards program shall consider only subjects that have broad industry application.

- API standards shall be based on performance to the maximum extent feasible. Specification standards shall not be used when performance standards are feasible, except when specification criteria will improve competition, as in the promotion of interchangeability.
- The API standards program shall consider only designs, techniques, processes and materials that have been demonstrated to be satisfactory for the service intended. Innovation is encouraged. New designs, techniques, processes and materials shall be considered for standards when reasonable proof of fitness is available.
- API standards shall not address competitive or commercial matters such as prices, warranties, or guarantee.

Participation in API Standards Activities

API standards meetings are open to all interested parties. Interested parties include consumers, manufacturers, contractors, distributors, designers, and the general public. The presiding officer shall invite expressions in writing from all present and record or summarize such expressions in the minutes.

Membership on Institute Standards Committees

Membership on API standards committees shall be governed by API Policy 601.

Announcement of Standards Activities

The standards activities listed below shall be announced publicly by appropriate staff directors.

- A. Meetings of standard committees
- B. Intent to develop, revise, reissue or withdraw standards
- C. Availability of drafts of standards
- D. Results of letter ballots

Administration of Standards Meetings

Meetings held to discuss the development of a new standard or the revision or withdrawal of an existing standard shall be scheduled only by the appropriate API department director or coordinator. The API staff shall be fully informed of all such meetings. An API staff member shall be present at all standards committee meetings to the extent feasible. Agenda shall be prepared for every standards meeting and filed in accordance with API Policy 804. Attendance shall be recorded and included in the minutes of meetings. Minutes for meetings held shall be prepared and forwarded to the Secretary in accordance with API Policy 804.

Standards Review

It is the policy to review all standards at least once every five years unless revised or withdrawn sooner by the appropriate standardization committee. If a standard has not been revised by the end of year four of the five-year period, API staff will advise the responsible standardization committee. The responsible standardization committee will then 1) revise the standard, 2) reaffirm it or 3) withdraw it.

The standardization committee may ask its parent committee for an extension of up to two years for the revision, reaffirmation, or withdrawal of a standard.

Any standard that is not acted upon (revised, reaffirmed, or withdrawn) at the end of seven years, will be withdrawn as an API standard.

Standards Approval

Standards committees shall develop standards on the basis of substantial agreement. Standards committees shall specify voting and balloting procedures, taking care to ensure that comments by interested parties are considered. The right to vote is exclusively that of the officers and members of the standards committee. API standards are reviewed for antitrust and conflict of interest concerns by the appropriate API department director or coordinator in consultation with the API Office of General Counsel before they may be considered adopted.

Effective Date of Standards

The effective date of a standard is the date printed on its cover. Sufficient time shall be allowed to distribute a standard before its effective date. If a standard is reaffirmed, all subsequent copies shall carry the original date of publication of the particular issue and its reaffirmation dates.

Interpretations

For purposes of this policy, interpretation means the answer to a question on the meaning of a standard. The answer to a question about the factual content of a standard is not an interpretation. API will consider written requests for interpretations of its standards. Full time employees of API designated by Executive Staff members shall be the only persons authorized to issue interpretations of API standards. Interpretations of API standards are the responsibility of the API department responsible for such standards. API staff shall make such interpretations in writing after consultation, if necessary, with the appropriate committee officers and members and the API Office of General Counsel, provided that no such consultation may be made with competing suppliers or manufactures of the product or services to which the standard applies or might apply. If consultation is made with committee members, the Office of the General Counsel should also be consulted. Copies of interpretations will be made available to the appropriate API committee and, upon request, to others. Departments shall publish interpretation requests and interpretations periodically.

Standardization Appeals Procedures

Any person having a material interest in an API standards action shall have the right to bring a timely appeal.

Existing committee administrative procedures for conflict resolution in the standards development process, including consideration of negative ballots, must be exhausted before lodging any appeal. Appeals shall be considered by the appropriate major committee responsible

for the issue with the right of further appeal to the API Management Committee. Committees may convene appeals boards to hear and act on appeals.

Appeals must be submitted in writing to the Director of the responsible API Department. The appeal shall include a statement identifying specifically the action or inaction objected to, the basis for the objection including any adverse impacts on the complainant, and suggested remedial action. The appeal must be filed with API within forty-five (45) days of the date of notification of the action causing the complaint. Further, challenges to published standards must be initiated within one year of their distribution, unless it can be demonstrated that the objection is based on grounds which have subsequently arisen. Appeals of inactions may be initiated at any time. The API Director shall investigate the objections raised and respond promptly to them in writing within forty-five (45) calendar days of receipt.

If the objections cannot be resolved by the Director, a hearing by the appropriate committee or its designated appeals board shall be convened. The hearing should be held within forty-five (45) calendar days of the date on which it is agreed that an informal resolution is not feasible.

Competing suppliers or manufacturers of the product, process or service which is the subject of the appeal shall not participate in the appeals process. Appeals Boards shall consist of three (3) or five (5) individuals selected by the Office of General Counsel. Board members shall not have been directly involved in the disputed matter. The Board may call upon experts familiar with the issues of the dispute. The appellant must be notified of the Board's composition and given the opportunity to object to members on the board. Objections must be substantiated to be considered.

The appellant shall be given the opportunity to appear before the appeals body and present arguments in support of his/her objection. The appeals body shall consider whether applicable API policies and procedures were satisfied and whether the procedural and substantive actions or requirements complained of merit corrective action.

The appeals body shall issue a written decision following the hearing, within forty-five (45) calendar days. The decision shall indicate the conclusions reached, their basis, and the right of further appeal. The Director shall ensure that a complete record of the appeal is compiled and maintained in conformance with API Policy 804, "Files and Records." The appellant shall be permitted access to the record.

Specified time limits in this policy may be modified by the API Vice President responsible for the appealed standard upon demonstration of reasonable cause.

Monograms

The use of the API monogram is governed by the November 14, 1977, resolution of the Board of Directors. That resolution is attached to this policy. The resolution is explicit that in using the monogram under terms and conditions authorized by the Board, it is the licensee, not API, who makes representation that the equipment or material monogrammed meets API standards. The use of the API symbol to designate performance characteristics of motor oil is governed by the November 8, 1981, authorization of the API Management Committee.

Departmental Procedures and Organization for Standards Programs

Departments shall develop procedures to implement these policies. Departmental procedures shall be approved by the appropriate vice president and by API's general counsel.

Appendix D

API Standards Procedures

FIRST EDITION--MAY 1994

Revised--JUNE 1997

Approved by ANSI--MARCH 1996

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API Standards Procedures

1.0 Scope

This document establishes uniform procedures for the conduct of API standards activities authorized under API Policy 104, Standardization. All API standards activities shall be conducted in accordance with these procedures unless otherwise approved by the appropriate vice president and the API Office of General Counsel. In addition to these procedures, standards committees shall develop written procedures covering individual committee organization, scope, and committee process. These supplemental procedures shall be approved by the appropriate vice president and the API Office of General Counsel in accordance with API Policy 104.

2.0 Standardization Authority

The authority to develop standards has been authorized by the API Board of Directors and rests with the General Committees of the American Petroleum Institute. This authority may be delegated by the General Committees to subordinate committees.

3.0 Standards

Standard is a broad term covering API documents that have been developed under these procedures. API standards shall include the following statement in their foreword:

This document was produced under API standardization procedures that ensure appropriate notification and participation in the developmental process and is designated as an API standard. Questions concerning the interpretation of the content of this standard or comments and questions concerning the procedures under which this standard was developed should be directed in writing to [insert appropriate API department].

4.0 Definitions

For the purposes of these procedures, the following definitions apply.

4.1 Standards Action

A standards action is defined as a substantive action taken or decision reached by an API committee or API staff relating to a standard or the manner in which such action was taken or decision was reached.

4.2 Standards Committee

A standards committee is a committee established by the API Board of Directors, an API General Committee, or an authorized subunit of the Board or a General Committee with responsibility for developing and approving API standards for a particular category or categories of equipment, materials, or practices in accordance with API Policy 104 and these procedures. A standards committee may be responsible for an entire standards program addressing the unique needs of a major petroleum industry interest (for example, petroleum measurement) or sector (for example, refining), or standards programs may be assigned to intermediate committees with delegated authority to form, guide, and coordinate standards committees as needed to assure conformance with API Policy 104, these procedures, and program objectives.

4.3 Editorial Changes

Editorial changes are changes that correct errors or inconsistencies in a manuscript.

4.4 Substantive Changes

Substantive changes are changes that affect the meaning or intent of a standard.

5.0 Designation of API Standards

API standards bear an alpha-numeric designation assigned by API staff (for example, API 1104, API 5A2). In titling, the following terms may be used:

- a. Specifications are documents published to facilitate communications between purchasers and manufacturers.
- b. Recommended Practices are documents that communicate proven practices used in the petroleum industry.

- c. Standards are documents that combine elements of both specifications and recommended practices.

Other terms (such as bulletin, guide, publication) are not used to title API standards.

6.0 Draft Standards

A draft standard is a document that has been developed under these procedures and is distributed for additional comment. Most draft standards are not published; however, with the approval of the appropriate committee, draft standards may be published for a specified period of time to obtain more widespread circulation to interested parties. A draft standard may be published as long as it is identified as such on its cover and includes an express disclaimer approved by the API Office of General Counsel.

7.0 Procedures

7.1 Participation in API Standards Activities

API develops industry standards on the basis of consensus. Consensus is established when substantial agreement has been reached. Substantial agreement means more than a simple majority but not necessarily unanimity. Consensus requires that all views and objections be considered and that an effort be made to resolve them.

Participation on standards committees is open to parties (persons and organizations) that have an interest in the subject of a standard. API seeks broad input to its standardization activities, including the attendance of interested parties at meetings and review and resolution of comments received.

7.2 Notification of Standards Activities

The standards activities listed below shall be announced to known interested parties by appropriate API staff directors or designated members of their staffs. Such announcements may be in the form of notices, or copies of committee notices, to known interested parties or announcements in suitable media appropriate for the known affected interests [for example, petroleum industry trade journals, ANSI Standards Action or the Federal Register (through the National Institute of Standards and Technology)].

- a. Meetings of standards committees.
- b. Intent to develop, revise, reissue, or withdraw standards.
- c. Availability of drafts of standards.
- d. Letter ballot approval of new, revised, or reissued standards or approval of withdrawal of standards.

Twice a year, API staff shall publish a list of standards activities (both new standards under development and existing standards under revision) in the Federal Register.

Activity related to API standards that are intended for submittal and/or processing through the American National Standards Institute (ANSI) shall be announced in Standards Action, as required under ANSI procedures.

7.3 Project Justification

Before undertaking to develop or revise a standard, the appropriate committee shall review the proposed activity and approve or disapprove its initiation. The committee should evaluate the need for the proposed activity, the time frame for completion, and the amount and type of resources required. Actual work on the drafting or revision of a standard shall not begin until the project is approved. A sample project justification form is provided in the appendix.

7.3.1 Need

The factors described in 7.3.1.1 through 7.3.1.6 may be considered.

7.3.1.1 Industry Practices

To the extent possible, API standards reflect current industry practices and encourage best practical environmental and safety performance throughout industry. The impact of new or emerging technologies should be considered.

7.3.1.2 Regulatory Impact

API standards should be developed in anticipation of their potential incorporation by reference into regulations.

7.3.1.3 Effect of Not Initiating the Standards Activity

The effect of not initiating the standards activity may be characterized in terms of regulatory impact or cost to industry or by other appropriate means.

7.3.1.4 Other Standards

The impact of other organizations' standards on the proposed standard or the potential overlap of other organizations' standards with the proposed standard should be considered.

7.3.1.5 Document Demand

API standards should meet broad industry needs. Potential demand for a new standard or for a proposed revision may be evaluated based on distribution data. API staff can provide the sales history of existing standards for review. For new standards, the sales history of related standards should be reviewed.

7.3.1.6 ANSI/ISO Candidate Standard

The value to industry of submitting the standard to the American National Standards Institute for processing as an American National Standard should be evaluated. Unless API staff is directed otherwise by the standards committee, each API standard will be submitted to ANSI for adoption.

The value to industry of submitting the standard to the International Organization for Standardization (ISO) for potential adoption as an international standard should be evaluated.

7.3.2 Standard Development Plan

When a standards project is presented to the appropriate committee for consideration, the project should be accompanied by a proposed time line that includes a target initiation date for work on the standard to begin and a target balloting date for the standard.

Committee resources (in the form of member meeting days), API staff resources, and relevant direct expenses to complete the activity should be estimated and included in the justification process.

7.3.3 Priority Ordering

The activity should be assigned a priority (among other committee projects) that reflects its relative importance to industry. If other projects will be curtailed when the proposed activity is initiated, this information should be considered.

7.4 Membership on Standards Committees

Membership on standards committees is governed by API Policy 601.

7.5 Balloting

7.5.1 Voting During Meetings

A majority of the members of the committee shall constitute a quorum for conducting business at a meeting. If a quorum is not present, actions may be taken subject to confirmation by letter ballot. The right to vote in any meeting is exclusively that of the respective officers and members of the committee holding the meeting. In the absence of a member, his duly appointed alternate or designated representative may exercise the member's right to vote. The presiding officer shall invite expressions from all present and record or summarize such expressions in the meeting report. No actions involving substantive changes or additions to standards become final until ratified by letter ballot of the committee. A majority of members or their alternates/designated representatives in attendance shall govern at meetings.

7.5.2 Voting by Letter Ballot

Actions involving the formulation of a new standard or revisions to an existing standard, voted affirmatively in meetings of the committee, are subject to ratification by letter ballot of the membership of the committee. Urgency and other special considerations may dictate that the normal letter ballot procedure be abridged and action accomplished via a special letter ballot. A special letter ballot is subject to the same basic requirements imposed on letter ballots, except such ballot may be initiated by the committee chairman without being voted affirmatively in meetings.

7.5.3 Ballots

A new standard or the revision, withdrawal or reaffirmation of an existing standard must be approved by ballot of a standards committee.

A reasonable period of time shall be set for balloting. Such period shall be established by the standards committee chairman in consultation with API staff and may be extended.

Ballots shall be prepared and distributed by API staff to members of the standards committee who are eligible to vote and their alternates (if any). Information copies of ballot drafts shall be distributed to those who have expressed interest (a fee to cover the cost of reproduction may be assessed), and internal API staff review may be initiated at this time.

7.5.4 Ballot Format

Every ballot shall concisely state the proposed action being balloted. All ballots shall provide four types of votes: affirmative, affirmative with comments, negative with documentation, and abstention.

All ballots shall provide places for the name of the submitter, the company affiliation, and the date. All ballots shall include a return date and a return address.

7.5.5 Individual Ballot Qualification

Only one ballot is allowed for each company voting member or the voting member's alternate. "Company" refers to a parent company and its wholly owned subsidiary or affiliates. If ballots are received from the member who is eligible to vote and the alternate of the same company, the member's vote shall prevail. If ballots are received from alternates representing the same company, the earliest received ballot shall prevail.

Each ballot must identify the member who is eligible to vote or the alternate to the member casting the ballot, show the company affiliation, be dated, and be returned by the ballot expiration date.

Each comment should be easily understood, should be concise, should clearly indicate the part of the document to which it pertains, and if necessary, should include specific alternative wording to resolve the comment.

Each negative vote shall be accompanied by documentation that includes the following, or the vote will be considered an abstention:

- a. Specific paragraph, section, or part the negative ballot pertains to.
- b. Specific substantive reason(s) for the negative vote.
- c. *Proposed wording or action to resolve the negative vote.*

7.5.6 Ballot Approval

For a proposed ballot action to be considered approved, all comments must be considered (see 7.5.7) and the following conditions shall be satisfied:

- a. At least 50 percent of the members who are eligible to vote shall have voted affirmative.
- b. At least two-thirds of the combined valid affirmative and negative votes shall be affirmative.

7.5.7 Resolution of Comments

All comments shall be considered and resolved in accordance with this subsection before a ballot is considered to have been approved by the committee. The chairman of the appropriate committee, in conjunction with the committee members or a designated subgroup, when appropriate, is responsible for the consideration and resolution of ballot comments pertaining to technical, safety, or environmental assertions and assertions of ambiguity, inaccuracy, or omission. API staff is responsible for the consideration and resolution of ballot comments pertaining to API policies and procedures.

Comments shall be resolved in one of the following ways:

- a. Comments with affirmative ballots are persuasive and editorial. The proposed editorial changes are incorporated into the document.
- b. Comments with affirmative ballots are persuasive and substantive. The proposed substantive changes are reballoted for approval by the appropriate committee prior to incorporation into the document.
- c. Comments with affirmative ballots are not technically persuasive. Such comments are not considered further.

- d. Comments with negative ballots are persuasive and substantive. The proposed substantive changes are reballoted for approval by the appropriate committee prior to incorporation into the document.
- e. Comments with negative ballots are withdrawn by the commentor after consultation with the chairman or the designated subgroup. The negative vote is changed to either an abstention or an affirmative vote as specified by the voter.
- f. Comments with negative ballots are found to be technically not persuasive or are found to be unrelated to the item being balloted. Such comments are not considered further.

Consideration given to negative ballots, including an explanation of resolution decisions, shall be documented in meeting notes, minutes, or other records and submitted to API.

To afford all members an opportunity to respond, reaffirm or change their vote, the individual submitting comments and all committee members and alternates shall be promptly informed of the resolution of comments that formed the basis of negative ballots by official API correspondence, including an explanation for the resolution decision.

7.5.8 Reballoting

If substantive changes are made to a document as a result of ballot resolution (either affirmative or negative), the proposed substantive changes must be reballoted to the appropriate committee to afford the committee members the opportunity for review and comment. The entire document may be reballoted, or only those items that were substantively changed during ballot resolution may be reballoted. Reballoting procedures are the same as balloting procedures, except that a shorter ballot period may be designated than that used for the previous ballot.

7.6 Interpretation

An interpretation is the answer to a question on the meaning of a standard. The answer to a question about the factual content of a standard is not an interpretation. API will consider written requests for interpretations of its standards. API staff members designated by API executive staff shall be the only persons authorized to issue interpretations of API standards. Interpretations of API standards are the responsibility of the API department responsible for the standards.

API staff shall make interpretations in writing after consultation, if necessary, with the appropriate committee officers and members and the API Office of General Counsel, provided that no such consultation may be made with competing suppliers or manufacturers of the product or services to which the standard applies or might apply. If consultation is made with committee members, the Office of General Counsel should also be consulted. Copies of interpretations will be made available to the appropriate API committee and, upon request, to others. Departments shall publish interpretation requests and interpretations periodically.

7.7 Appeals Procedures

Any person having a material interest in an API standards action shall have the right to bring a timely appeal. Administrative procedures for conflict resolution in the standards development process, including consideration of negative ballots, must be exhausted before lodging any appeal. Appeals shall be considered by the committee or committees responsible for the issue with the right of further appeal to the API Management Committee. Committees may convene appeals boards to hear and act on appeals.

Appeals must be submitted in writing to the director of the responsible API department. The appeal shall include a statement identifying specifically the action or inaction objected to; the basis for the objection, including any adverse impacts on the complainant; and suggested remedial action. The appeal must be filed with API within 45 days of the date of notification of the action causing the complaint. Further, challenges to published standards must be initiated within 1 year of their distribution unless it can be demonstrated that the objection is based on grounds that have subsequently arisen. Appeals of inactions may be initiated at any time. The API director shall investigate the objections raised and respond promptly to them in writing within 45 calendar days of receipt.

If the objections cannot be resolved by the director, a hearing by the appropriate committee or its designated appeals board shall be convened. The hearing should be held within 45 calendar days of the date on which it is agreed that an informal resolution is not feasible.

Competing suppliers or manufacturers of the process or service that is the subject of the appeal shall not participate in the appeals process. An appeals board shall consist of three or five individuals selected by the director in consultation with the committee chairman and the Office of General Counsel. Board members shall not have been directly involved in the disputed matter. The board may call upon experts familiar with the issues of the dispute. The

appellant must be notified of the board's composition and given the opportunity to object to members on the board. Objections must be substantiated to be considered.

The appellant shall be given the opportunity to appear before the appeals body and present arguments in support of his objection. The appeals body shall consider whether applicable API policies and procedures were satisfied and whether the procedural and substantive actions or requirements complained of merit corrective action.

The appeals body shall issue a written decision following the hearing, within 45 calendar days. The decision shall indicate the conclusions reached, their basis, and the right of further appeal. The director shall ensure that a complete record of the appeal is compiled and maintained in conformance with API Policy 804, "Files and Records." The appellant shall be permitted access to the records.

Specified time limits in this policy may be modified by the API vice president responsible for the appealed standard upon demonstration of reasonable cause.

7.8 Standards Review

All standards shall be reviewed when major technological changes affect their currency or at least once every 5 years unless revised or withdrawn sooner by the appropriate standards committee. If a standard has not been revised by the end of year four of the 5-year period, API staff will advise the responsible standards committee, who will then a) revise the standard, b) reaffirm it, or c) withdraw it. The standards committee may ask its parent committee for an extension of up to 2 years for the revision, reaffirmation, or withdrawal of a standard. Any standard that is not acted upon (revised, reaffirmed, or withdrawn) at the end of 7 years will be withdrawn as an API standard.

A review of a draft standard shall be performed by the standards committee no later than 2 years after publication of the draft standard with the options of extending the comment period for 2 more years, conversion to a standard, or withdrawal.

7.9 Standards Meeting Procedures

Committees dealing with standards activities shall meet as needed to conduct their work.

Notices of meetings accompanied by an agenda shall be prepared and distributed to appropriate committees, subcommittees, task or work groups, and known interested parties. With the exception of those portions of meetings dealing with policy and/or budget issues, standards meetings are open to all interested parties.

Minutes shall be prepared by the committee, subcommittee, or task or work group secretary. Minutes of each meeting contain, at a minimum, the name of the committee, subcommittee, task group, or work group; date(s) of the meeting; a list of members attending and visitors present; the time the meeting opened and its location; approval of previous minutes, if appropriate; a synopsis of each subject discussed and action items; and the time the meeting adjourned.

All records will conform to API's records retention policy (API Policy 804).

7.10 Liaison

API standards committees that develop standards in subject areas for which other national or international organizations develop related standards of substantial interest to the petroleum industry shall maintain committee and/or API staff liaison with such organizations to avoid unnecessary duplication of efforts. API shall pursue active participation or leadership roles in such organizations when such action is determined by the applicable API General Committee to be in the best interests of the industry.

8.0 Format

8.1 Tone

API standards are used worldwide by people with diverse technical and non-technical backgrounds. Consequently, the use of technical idioms and colloquialisms (as opposed to generally accepted technical terms) should be avoided, and the meaning of any unusual terms should be defined (see 8.2.2.4). All words and phrases should be used in accordance with their accepted definitions, and generally accepted rules of grammar and usage should be followed.

8.2 Contents

8.2.1 Front Matter

8.2.1.1 Title Page

A document developed under these procedures should include a title page that contains the following information:

- a. The document's title.
- b. The document's subtitle, if any.
- c. The originating unit's name (normally an API department).
- d. The document's number.
- e. The edition and date.

8.2.1.2 Table of Contents

The document shall include a table of contents, and it should contain the following information in the following order:

- a. Each section head.
- b. Under each section head, a complete list of the first-order subheads.
- c. A list of all appendixes.
- d. *Under the heading "Figures," a list of all figures, including figures in appendixes (optional).*
- e. *Under the heading "Tables," a list of all tables, including tables in appendixes (optional).*

8.2.1.3 Foreword

A foreword shall be included in the front matter of the document. If the document is designated as a standard, the statement provided in Section 3 shall be included in the foreword. If the document is designated as a draft standard, the statement provided in Section 6 shall be included. The foreword should also include as many of the following as are appropriate:

- a. *An indication of the committee that prepared the document.*
- b. *Information regarding the approval of the document.*
- c. *An indication of any other organization that has contributed to the preparation of the document.*
- d. *A statement that the document cancels and replaces other documents in whole or in part.*
- e. *A statement of significant technical changes from the previous edition of the document or a description of how changes from the previous edition are identified.*
- f. *The relationship of the document to other documents.*
- g. *A statement indicating which appendixes to the document contain requirements and which provide additional information only.*

The foreword of each API standard shall include appropriate policy statements developed in consultation with the API Office of General Counsel. API staff is responsible for ensuring that appropriate statements are included. Depending on the content of a standard, safety and/or health information may need to be included in the foreword or in the text of the standard. The committee and task force members responsible for the document should make API staff aware of any potentially hazardous materials or practices discussed in the standard. API staff will provide for review by appropriate API legal and health affairs staff to ensure that appropriate warning language is included in the standard.

8.2.2 Introductory Elements

8.2.2.1 Introduction

The introduction is an optional element that is used to give information or commentary about the content of the document and about the reasons prompting its preparation.

8.2.2.2 Scope

The scope shall appear at the beginning of the document. The scope shall specifically define the subject of the document and the aspects covered in the document.

8.2.2.3 Referenced Publications

If the document contains references to other publications, a "Referenced Publications" list shall be included. This list should include only publications to which reference is made in the text in such a way as to make them

indispensable for the application of the document. References to publications are normally found in text, but references may also be found in figure captions, notes, tables, figures, and appendixes.

The referenced publication list should not include the following:

- a. Documents that are not publicly available.
- b. Documents to which reference is made for information only.
- c. Documents that have merely served as references in the preparation of the document.

Such documents can be listed in an appendix entitled "Bibliography."

8.2.2.4 Definition of Terms

Definitions necessary for understanding certain terms used in the document should be provided. The definitions shall be introduced by the following:

For the purposes of this standard the following definitions apply.

Any term that is not self-explanatory or commonly known and that may be interpreted differently in different contexts shall be clarified by defining the relevant concept. Common dictionary or current technical terms shall be included only if they are used with a specific meaning in the relevant context. Definitions should be as brief as possible to convey the appropriate meaning. Definitions should not contain operational information or requirements. Such information or requirements are best provided in the body of the text.

8.2.3 Technical Information

All introductory elements should be provided at the beginning of the document. All technical information (for example, requirements, recommended practices, test methods, and specifications) should be provided in subsequent sections.

8.2.4 Appendixes

Appendixes follow the sections that provide the technical information of the document. Appendixes should be designated with capital letters (starting with "A") in the order in which they are called out in text. If an appendix includes requirements, this fact shall be stated in the document's foreword and indicated by the appendix's call out in text. If an appendix provides additional information only, this also shall be stated in the foreword and indicated by the appendix's call out in text.

8.2.5 Notes in the Text

Notes in the text of a document may be used only for giving information that is essential to the understanding of the document. They shall not contain requirements. Notes shall be placed after the section, subsection, or paragraph to which they refer.

8.3 Framework

These procedures constitute an example of the preferred numbering system that should be used in API standards. Sections, subsections, and appendixes should be numbered as shown in Figure 1.

8.4 Figures and Tables

Figures and tables should be numbered with arabic numerals (starting with "1") in the order in which they are called out in text. Figures and tables are numbered separately. The first figure called out in text should be designated "Figure 1," the second should be designated "Figure 2," and so on. The first table called out in text should be designated "Table 1," the second should be designated "Table 2," and so on.

For large documents that make extensive use of figures and tables related to specific sections of the text, an acceptable and sometimes preferred numbering system includes the section number with the figure or table number. For example, Figure 9-17 would be the seventeenth figure in Section 9.

APPENDIX--EXAMPLE PROJECT JUSTIFICATION FORM
(Informative)

Note to preparer: API Standardization Procedures provide guidance on justification of standards projects. In addition, API staff serves as a resource for certain data elements, such as document sales.

Title _____ Ne
w standard _____ Revision (insert current edition/date) _____

Sales history _____

What is the current business need that developing or revising this document will address?
What is the intended scope of this document? Be specific.
Can another standards-writing body, perhaps with API support or participation, satisfy this need?
Are there existing regulations in the area of the scope of this document? Once prepared, would it be acceptable or desirable to seek the document's adoption into regulations?
What is the effect of <u>not</u> initiating this activity?

<p>Are there any existing standards (either API or another standards organization body) with a similar scope?</p>
<p>API standards are normally submitted to the American National Standards Institute for adoption as American National Standards. Is there any reason such adoption should not be sought for this standard?</p>
<p>Is this standard a potential candidate for adoption as an international standard through ISO?</p>
<p>If the project goes forward, what is the priority of this project compared with other standards within the committee's purview or projects other than standardization? Should this project be done in lieu of other committee work already under way?</p>
<p>Under what time frame should this project be conducted. Please include a recommended project initiation date and a target date for balloting the standard for adoption as an API standard.</p>
<p>What committee resources will be required to complete this standard? Please include the suggested size of the work group undertaking the work and the number of meetings required to accomplish the group's task. Will any unusual resources be required?</p>

Name of Submitter: _____

Submitted on Behalf of: _____

(API Committee Name)

		Section Number	Subsection Number	
Front Matter:	Title			
	Scope			
	Foreword			
	Contents			
	Health Warning			
Introductory Elements:	Introduction	0		
	Scope		1	
	Referenced Pubs.	2		
	Definition of Terms		3	
Technical Information:		4	4.1	4.1.1
				4.2
				4.3
Appendixes	Appendix A	A.1	A.1.1	A.1.1.1

Figure 1 -- Example of Numbering of Sections, Subsections, and Appendixes

APPENDIX E

OTHER API POLICIES REFERENCED IN POLICY 104

Purpose: This appendix summarizes relevant contents of two internal API policies which are referenced in API Policy 104, Standardization.

API Policy 601, Committees and Committee Membership. Policy 104 and the API Standards Procedures include statements that membership on API standards committees is governed by API Policy 601. That policy is implemented for API Upstream standards committees by API S1, however, relevant provisions of Policy 601 are summarized below for information.

Policy 601 defines three types of API committees: (1) The Board of Directors and its Board Committees; (2) General Committees; and, (3) Subordinate Units. ThreeTwo provisions are particularly relevant to standardization:

- -- "Subordinate units are created by general committees to carry out specific work programs."
- "An API corporate member company may have only one representative on any subordinate unit, except in case of ex officio members." *See paragraph below that allows for non-API member company participation on Standardization Committees.*
- "Standardization subordinate units memberships may include representatives of non-API member companies to satisfy the legal and operational needs, to achieve industry consensus in standards development, and to meet needs for special expertise or skills."

API Policy 804, Files and Records. Policy 104 includes statements that API filing of agendas and minutes of standards meetings, and records of appeals, is in accordance with Policy 804. Policy 804 states that "Unless otherwise specified in the policy or exempted in accordance with the policy, business records of the American Petroleum Institute shall not be retained for longer than five (5) years." It specifically addresses standardization records as follows:

<u>Standardization Records</u>	<u>Minimum Retention Period</u>
Documentation of the origin, development and completion of API's technical standards, including basic data correlation, equations or other technical material necessary to allow the documentation of the standard's development.	Permanent
Standardization minutes, ballot's results or general correspondence.	5 Years

US Technical Advisory Group to ISO/TC 67

Operating Procedures 8 June 1996

US Technical Advisory Group to ISO/TC 67
Operating Procedures
8 June 1996

Foreword

Participation in international standards activities of interest to members of the American National Standards Institute (ANSI) requires membership in two international nontreaty standardization organizations, namely the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). ANSI's membership in these organizations provides US interests with the opportunity to participate in the work of the ISO and IEC toward the development on international standards. ANSI provides administrative support for overall US ISO and IEC membership together with management leadership.

As the US member body of ISO, ANSI is responsible for participation in those technical areas of work where US interests have indicated support. Each participation is implemented by the selection/establishment of US technical advisory groups (TAGs) for ISO technical committees or subcommittees.

To assure the positions presented to ISO are representative of US interests, a mechanism must exist for the development and coordination of such positions. These procedures provide for such a mechanism.

ANSI normally looks to the body which develops national standards in a particular standards area to determine the US position in a similar international standardization activity. Such bodies are designated by ANSI as TAGs for specific ISO activities. API has been accredited by ANSI as TAG Administrator to develop US positions for activities in ISO/TC 67.

1 Scope

The scope of the US TAG is that area of work of ISO/TC 67 which is to develop standards on the materials, equipment and offshore structures used in drilling, production, refining and the transport by pipelines of petroleum and natural gas. Excluded: Aspects of offshore structures subject to IMO requirements which are assigned to ISO/TC 8.

2 Functions and Responsibilities

The functions and responsibilities of the TAG are:

2.1 Recommend registration of ANSI as a P or O member of an ISO subcommittee or recommend a change in ANSI membership status on an ISO technical committee or subcommittee,

2.2 Initiate and approve US proposals for new work items for consideration by an ISO technical committee or subcommittee,

2.3 Initiate and approve US working drafts for submittal to an ISO technical committee, subcommittee (and where appropriate, working groups) for consideration as committee drafts,

2.4 Determine the US position on an ISO draft international standard, draft technical report, committee drafts, ISO questionnaires, draft report of meetings, etc.,

2.5 Provide adequate US representation to ISO technical committee or subcommittee meetings, designate heads of delegations and members of delegations, and ensure compliance with the ANSI "Guide for US Delegates to IEC/ISO Meetings", (when present, the chair of the US TAG will head the delegation at ISO/TC 67 meetings,

2.6 Determine US positions on agenda items of ISO technical committee or subcommittee meetings and advise the US delegation of any flexibility it may have on these positions,

2.7 Nominate US technical experts to serve on ISO working groups,

2.8 Provide assistance to US secretariats of ISO technical committees or subcommittees, upon request, including resolving comments on draft international standards, draft technical reports, and committee drafts,

2.9 Identify and establish close liaison with other US technical advisory groups in related fields, or identify ISO or IEC activities that may overlap the TAG's scope,

2.10 Recommend to ANSI the acceptance of secretariats for ISO technical committees or subcommittees,

2.11 Recommend that ANSI invite ISO technical committees or subcommittees to meet in the United States, and

2.12 Recommend to ANSI US candidates for the chair of ISO technical committees or subcommittees and US convenors of ISO working groups.

3 TAG Administrator

The TAG Administrator for the US TAG has been assigned to API. The TAG Administrator shall accept the responsibilities described below:

3.1 Organize the US technical advisory group and apply to ANSI for TAG accreditation,

3.2 Submit the US technical advisory group membership list to ANSI on an annual basis for review by ANSI,

3.3 Determine that the members of the technical advisory group participate actively and take appropriate action for inactive participants (See 5.8 and 5.9),

3.4 Provide for administrative services, including arrangements for meetings, timely preparation and distribution of documents related to the work of the US technical advisory group, and maintenance of appropriate records, including minutes and results of letter ballots.

3.5 Transmit US proposals and US positions, as developed and approved by the US technical advisory group, to ANSI,

3.6 Establish a procedure to hear appeals of actions or inactions of the US technical advisory group,

3.7 Comply with the requirements associated with ANSI oversight and supervision of activities of the technical advisory group and its administration, and

3.8 Ensure compliance with applicable ANSI and ISO procedures.

4 Officers

There shall be a chair and other officers if required. The chair shall be the chair of the API E&P Executive Committee on Standardization of Oilfield Equipment and Materials (ECS) and shall vote on TAG matters. The chair of the API Upstream Committee appoints the Executive Committee chair. Officers serve until a successor is selected and is prepared to serve. The TAG administrator shall appoint the secretary, the TAG chair shall appoint other officers. Officers appointed by the chair shall vote on TAG matters, the secretary shall not vote.

5 Membership

Membership shall be open to all US national persons (organizations, companies, government agencies, individuals, etc.) who indicate that they are directly and materially affected by the activities of the TAG, after being informed concerning TAG working procedures and scope of activities. The chair of the TAG shall appoint all members of the TAG. Term limits of API ECS members on the TAG is defined in API S1. Other member term limits is based on participation as determined by the TAG chair.

5.1 Application

A request for membership shall be addressed to the TAG chair, shall indicate the applicant's direct and material interest in the TAG's work and willingness to participate actively, and, if the applicant is a representative of an organization, company, or government agency, may identify an alternate, if desired.

5.2 Recommendation

In recommending appropriate action on applications for membership, The TAG chair shall consider:

1. The appropriateness of the involvement of each interest in the work of the TAG,
2. The potential for dominance by a single interest, and
3. The extent of interest expressed by the applicant, and the applicant's willingness to participate actively.

The TAG chair may consider reasonable limits on TAG size.

5.3 Diverse Interests

If representatives from distinct divisions of an organization can demonstrate independent interests and authority to make independent decisions in the areas of the activity of the TAG, each may apply for membership.

5.4 Combined Interests

When appropriate, the TAG chair may recommend that the applicant seek representation through an organization that is already represented by a member who represents the same or similar interests.

5.5 Observers

Individuals and representatives of organizations having an interest in the TAG's work may request listing as observers, i.e. Interested Parties Mailing List (IPML) to receive TAG mailings. Observers shall be advised of the TAG activities, may attend meetings, and may submit comments for consideration, but shall not vote.

5.6 Representation of Interests

All directly and materially affected US national persons (organizations, companies, government agencies, individuals, etc.) shall have the opportunity for fair and equitable participation without dominance by any single interest.

Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation. The requirement implicit in the phrase "without dominance by a single interest" normally will be satisfied if a reasonable balance among interests can be achieved. Unless it is claimed by a directly and materially affected person that a single interest dominated the standards activity, to the exclusion of fair and equitable consideration of other viewpoints, no test for dominance is required.

5.7 Membership Roster

The TAG administrator shall maintain a membership roster for the technical advisory group and annually submit it to ANSI for review (see 3.2).

5.8 Membership Obligations

Members are expected to participate actively by fulfilling attendance, voting, correspondence, and other obligations.

5.9 Review of Membership

The TAG administrator shall review the membership list annually with respect to the criteria in Section 5. Where a member is found in default of the obligations, the TAG administrator shall direct the matter to the TAG for appropriate action, which may include termination of membership.

6 Meetings

Meetings of the TAG and of the US delegates to international meetings should be scheduled to respond to international activities. TAG meetings shall be held, as determined by the chair/TAG administrator or by petition of a majority of the members.

Meetings of the TAG shall be open to all members and others having direct and material interest. Notice of meetings shall be given by the administrator to reach directly and materially affected interests as is feasibly possible. The notice shall describe the purpose of the meeting and shall identify a readily available source for further information. An agenda shall be available and shall be distributed in advance of the meeting to members and to others expressing interest.

7 Voting

The TAG develops a US position on ISO issues by voting and commenting.

7.1 Vote

Each member shall vote one of the following positions:

1. Affirmative,
2. Affirmative with comment,
3. Negative with reasons, or (the reasons for a negative vote shall be given and if possible should include specific wording or actions which would resolve the objection)
4. Abstain with reason.

7.2 Vote of Alternate

An alternate's vote is counted only if the principal representative fails to vote.

7.3 Voting Period

The voting period for letter ballots shall be established to allow for timely response to international time limits. An extension may be granted at the option of the chair or administrator when warranted.

7.4 Authorization of Letter Ballots

A letter ballot may be authorized by:

1. Majority vote of those present at a TAG meeting,
2. The chair,
3. The TAG administrator, or
4. Petition of five members of the TAG or a majority of the TAG, whichever is less.

7.5 Actions Requiring Approval by Majority

The following actions require a letter ballot or an equivalent formal recorded vote with approval by at least a majority of the TAG membership

1. Formation of a subgroup, including its procedures, scope, and duties and
2. Disbandment of a subgroup.

7.6 Actions Requiring Approval by Two-Thirds of Those Voting

The following actions must be approved by at least two-thirds of those voting by letter ballot, excluding abstentions, or if at a meeting, by two-thirds of those present, excluding abstentions, provided that a majority of the TAG is present. If a majority is not present, the vote shall be confirmed by letter ballot.

1. Adoption of TAG procedures, categories of interests, or revisions thereof,
2. Approval of recommendation to change the TAG scope or organization,
3. Approval of US position on draft international standards, and
4. Approval of recommendation to terminate the TAG.

7.7 Consideration of Views and Objections on Letter Ballots

The administrator of the TAG shall forward the views and objections received to the chair of the TAG, or designee. The chair, or designee, shall determine whether the expressed views and objections shall be considered by telephone, correspondence, or at a meeting.

Prompt consideration shall be given to the expressed views and objections of all participants including those commenting on the draft international standard (DIS) listing in ANSI's STANDARDS ACTION. A concerted effort to resolve all expressed objections shall be made, and each objector shall be advised of the disposition of the objection and the reasons therefor.

Substantive changes required to resolve objections, and unresolved objections, shall be reported to the TAG members to afford all members an opportunity to respond, to reaffirm, or to change their position within appropriate time limits.

7.8 Report of Final Ballot

The final result of the voting shall be reported to the TAG.

7.9 Submittal of US Position

Upon completion of the procedures for voting, consideration of views and objections, and appeals, the US position shall be submitted to ANSI by the TAG administrator.

7.10 Information Submitted

The information supplied to ANSI shall include:

1. Title and designation of the document,
2. Indication of the type of action requested (that is, approval of a new draft international standard or reaffirmation, revision, or withdrawal of an existing draft international standard, questionnaire, etc.),
3. Status of any appeal action related to approval of the proposed US position,
4. A summary of the voting and TAG responses, and
5. Identification of all unresolved views and objections, names of the objector(s), and a report of attempts toward resolution.

8 Termination of TAG

A proposal to terminate the TAG may be made by directly and materially affected interests. The proposal shall be submitted in writing to ANSI and to the TAG administrator and shall include the reasons why the TAG should be terminated. Action shall be taken by the TAG in accordance with 7.6.

9 Communication

External communication such as inquiries relating to the TAG, should be directed to the TAG administrator (API), and members should so inform individuals who raise such questions. Correspondence should clearly show that it concerns TAG matters. All replies to inquiries shall be made through the TAG administrator.

The following information shall be forwarded to all TAG members by the TAG administrator:

1. TAG roster (annually or when revised)
2. Ballot results, both at the TAG level and ISO level,
3. Resolutions from ISO/TC 67 meetings and the annual TC 67 Secretariat report,
4. Notice when an ISO/TC 67 standard is published,
5. Rosters of ISO/TC 67 subcommittee and working groups (biannually), and
6. Report of all ISO meetings represented and attended by US members.

US representatives at committee, subcommittee and working group meetings and corresponding/liaison members to ISO/TC 67 groups have the responsibility of alerting the TAG of potential problems, issues or other information that may influence the US position and ultimate vote on ISO/TC 67 matters.

10 Appeals

Directly and materially affected US national persons who believe they have been or will be adversely affected by an action of the TAG or its administrator shall have the right to appeal. See the attached appeals procedure that has been duplicated from API Policy 104.

11 Parliamentary Procedures

On questions of parliamentary procedures not covered in these procedures, ROBERT'S RULES OF ORDER (latest edition) may be used to expedite due process in meetings.

Detailed Internal Procedures
US TAG to ISO/TC 67
3 June 1997

Foreword

The following detailed procedures describe how the US will address ISO issues concerning API E&P. The organization through which committees address ISO issues is the US TAG. A process map is included to assist E&P committee members in performing their function. API's Drilling and Production Operations, Pipeline and Refining standards committees have their own set of procedures to address ISO issues falling within the scope of their activities. All procedures shall be consistent with the US TAG Operating Procedures and "ANSI Procedures for US Participation in the International Standards Activities of the ISO".

These Detailed Internal Procedures are under the jurisdiction of the US TAG to ISO/TC 67 and must be approved by letter ballot of the TAG prior to their implementation.

Functions and Responsibilities

See Section 2 of the Operating Procedures.

Officers

The TAG chair may appoint and delegate authority/responsibility to a TAG coordinator to assist in performing the duties of the TAG. When delegated on behalf of the chair, the TAG coordinator has the same authority as the TAG chair.

Membership

The TAG membership consists of the following:

- The TAG chair
- API E&P Committee 1 chair
- API E&P Committee 2 chair
- API E&P Committee 3 chair
- API E&P Committee 4 chair
- TAG coordinator if appointed
- Representative from the API Executive Committee on Drilling and Production Operations
- Representative from API Refining
- Representative from API Pipeline
- Representative from PESA
- Representative from IADC
- Representative from AWHEM

- Representative from the MMS
- Other representatives as needed to ensure adequate industry representation
- TAG members may name an alternate to the TAG

E&P Voting Procedure (See Section 7 of the TAG Operating Procedures)

All votes will be returned to the TAG Secretary and the results of the vote will be validated by the TAG chair or coordinator.

ISO New Work Items (NWI)

The TAG, the appropriate API E&P Committee and the appropriate API E&P Subcommittee chair will letter ballot the US position on all ISO NWI's. The Committee is responsible for identifying a US representative if required on the NWI response form in consultation with the subcommittee chair and the TAG.

ISO Committee Drafts (CD) and Draft International Standards (DIS)

- The TAG and appropriate API E&P subcommittee will comment or letter ballot the US position on all CDs and DISs, CDs may be circulated for comment by the ISO subcommittee in lieu of a formal ballot. In such cases the TAG chair or coordinator will determine if the US positions determined by ballot or circulation for comment.
- The groups determining the US position will be requested to determine if the draft under consideration is suitable as an international standard.

ISO Final Draft International Standards (FDIS)

The TAG chair or coordinator in consultation with the appropriate subcommittee chair shall determine the need for a TAG ballot.

- If no vote is required the TAG chair or coordinator shall forward the US position to the TAG administrator
- If a vote is required the procedures for DIS ballot will be followed.

Exceptions

For cases where there is no obvious API E&P committee or subcommittee to comment on or ballot the ISO NWI or draft, the TAG chair or coordinator will determine the API E&P group to receive the ballot.

Meetings

There will be one regularly scheduled meeting per year immediately prior or after the annual Standardization Conference. Other full or partial meetings will be held as required.

Information Flow

When CRE, Pipeline or Drilling and Production Operations develops a US position on an ISO issue, that position will be copied to the TAG chair, TAG coordinator and the TAG Secretary.

**API Document Distribution
for ISO/TC 67**

Revised: August 27, 1996

NEW WORK ITEMS

All NWT's are circulated by the ISO/TC 67 Secretariat.

1. NWT received by the Secretariat and circulated to all P members for ballot
2. Copy circulated to US TAG Secretary
3. Copy circulated to API Refining or Pipeline if appropriate
4. Copy circulated within US by E&P, Refining, or Pipeline for US vote using the appropriate internal procedures.
5. US vote tabulated and ballot results (US vote) forwarded by the TAG Secretary to the TC 67 Secretariat with copy to TAG chair/coordinator, and to ANSI
6. All National Body ballots are tabulated by the TC 67 Secretariat and results distributed.

COMMITTEE DRAFTS

Committee drafts may be circulated by the TC 67 Secretariat or by subcommittee secretariats for either comment or ballot.

1. Circulated by the TC 67 or subcommittee secretariat to all TC 67 P members
2. ANSI forwards copy to the US TAG secretary
3. Copy forwarded to API Refining or Pipeline if appropriate
4. CD circulated within US by E&P, Refining or Pipeline for US position (vote or comment) using the appropriate internal procedures
5. US position determined, by vote or comments, and forwarded by the TAG Secretary to ANSI with copy to the TC 67 Secretariat and US TAG chair/coordinator: Forward to TC 67/SC 4 Secretariat with copy to ANSI if it is an SC4 draft
6. Originator of CD will compile results and determine next step in process

DRAFT INTERNATIONAL STANDARDS AND FINAL DRAFT INTERNATIONAL STANDARDS

All DIS's and FDIS's are circulated for voting by the ISO Central Secretariat

1. Draft is circulated to all ISO member countries
2. ANSI circulates draft to US TAG Secretary
3. Copy forwarded to API Refining or Pipeline if appropriate
4. Copy circulated for voting within US by E&P, Refining, or Pipeline for US vote using appropriate internal procedures
5. US votes and comments are tabulated and the US vote is forwarded by the TAG Secretary to ANSI with a copy to the TC 67 Secretariat and the US TAG chair/coordinator
6. ANSI forwards US vote to ISO Central Secretariat
7. ISO Central Secretariat tabulates ISO vote

NOMINATION OF US EXPERTS TO WORKING GROUPS

For new working groups, nomination of experts are submitted with the return of the NWI ballot.

For existing working groups:

1. P members appoint experts
2. US expert(s) is identified
3. For E&P, Refining and Pipeline, a nomination letter is forwarded from the TAG Secretary to ANSI with a copy to the working group convenor, SC secretary (where appropriate) and TC 67 Secretariat