PLAINTIFF'S EXHIBIT

CAP-862

MEETING SUMMARY

NSF Joint Committee on Plastics

(Thermoset)

National Sanitation Foundation
2355 West Stadium Boulevard
Ann Arbor, Michigan

October 15, 1965

The meeting was called to order at 9:30 A.M. by Ralph Pickard, Acting Chairman. Mr. Charles Farish, Executive Director of the Foundation welcomed the new members of the committee from industry and expressed the Foundation's thanks for their attendance and assistance in the development of the proposed NSF Standard for Thermoset Plastics.

Mr. Tom Gable, of the Foundation, reviewed for the committee the background and development of the Standard to date and expressed hope that the Committee would finalize the Standard at this meeting.

Mr. Farish presented to the Committee, a letter received from Mr. E. D. Edmisten of the Fibercast Company. Mr. Edmisten expressed objection to the inclusion of physical and performance requirements in the Standard believing that this was adequately provided for through individual company controls and testing. He indicated that the basic Standard should relate only to the toxicological and organoleptic aspects of the plastics.

The Committee after careful and deliberate discussion, reaffirmed their previous opinion that physical and/or performance requirements, where applicable, were a necessary, and in fact, essential part of the Standard. The Committee did, however, subsequently delete the last sentence of Item 4.03 and sub Items 4.031, 4.032, 4.033, 4.034, 4.035, 4.036, 4.037, and 4.038--all relating to specifically required tests. Thus leaving the decision as to the tests to be required when not specified in an accepted Standard or specification, to the judgement of the NSF Joint Committee on Plastics.

The Committee then reviewed item by item the Proposed NSF Standard relating to Thermoset Plastic Pipe, Fittings, Valves, Tanks, Appurtenances, Joining Materials, and Thermoset Plastic Coatings. The changes, amendments and additions thereto are to be reflected in the redraft of the Standard now under preparation by the Foundation Staff.

The Committee recommended that all exposure procedures for thermoset plastic products intended for potable water application, be identical to those now used, or recommended for use, for thermoplastic products intended for potable water uses.

Following the review of the Standard, the Committee unanimously recommended that the NSF Standard for Thermoset Plastic Pipe, Fittings, Valves, Tanks and Thermoset Plastic Coatings for Use in Potable Water Supply Systems be adopted as amended on February 1, 1966. Said adoption being contingent to the fact that no major discrepancies are reported within 30 days after the Standard, as revised, is submitted to the NSF Joint Committee on Plastics.

The Committee also acted to adopt the following ASTM specifications and test methods under the provisions of the Standard:

ASTM	D 1694 - 59 T	Threads for Reinforced Thermosetting Plastic Pipe
ASTM	D 2105 - 62 T	Longitudinal Tensile Properties of Reinforced Thermosetting Plastic Pipe and Tube
ASTM	D 2143 - 63 T	Cyclic Pressure Strength of Reinforced, Thermosetting Plastic Pipe
ASTM	D 2153 - 63 T	Calculating Stress in Plastic Pipe Under Internal Pressure
ASTM	D 2310 - 64 T	Reinforced Thermosetting Plastic Pipe

The Committee further recommended the following sample preparation and exposure procedure for joining and bonding materials:

1. The joining or bonding material is to be exposed (applied) on the surface of pipe in the following ratio:
   a. One (1) fitting per one (1) foot of pipe.
   b. Overrun inside of the pipe to be established at 1/4 of the fitting socket depth.
   c. The numbers of fittings on which the exposure is based shall be as established on the exposure ratio setforth in A Study of Plastic Pipe for Potable Water Supplies.

2. The joining or bonding material shall be applied to an appropriate length of pipe as determined above and then cured per the manufacturer's instructions. Following curing the coated surface shall be flushed under running water for 5 minutes.

3. Extraction of the cured coated surface shall be carried out following established procedures. (100°F. for 72 hours.)

CAPCO JEN 0020570

4. Limits of acceptability to be the same as for pipe and fittings intended for potable water systems.

CAPCO JEN 0020571

ATTENDANCE LIST

NATIONAL SANITATION FOUNDATION

Joint Committee on Plastics

(Thermoset)

National Sanitation Foundation
2355 West Stadium Boulevard
Ann Arbor, Michigan

October 14, 1965

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CAPCO JEN 0020572

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CAPCO JEN 0020573

MEETING SUMMARY

NSF JOINT COMMITTEE ON PLASTICS

(Thermoplastics)

National Sanitation Foundation
2355 W. Stadium Boulevard
Ann Arbor, Michigan 48104

October 14, 1965

The meeting was called to order at 9:30 A.M. by Ralph Pickard, Acting Chairman. Following self introductions, Mr. Charles A. Farish, Executive Director of the Foundation, welcomed the committee members. He expressed the appreciation of the Foundation for the contribution that each member made to the program in terms of effort and time. He also acknowledged that only through such cooperative action between industry, public health and user groups can the Foundation continue its activities.

Mr. Pickard then directed the groups'attention to the agenda items. The significant decisions and actions of the day's discussion are reported as follows.

The committee formally adopted, under the provisions of NSF Standard No. 14 relating to Thermoplastic Materials, Pipe, Fittings and Appurtenances, the following ASTM and Commercial Standards:

Potable Water Pipe

PE Pipe	ABS Pipe	PVC Pipe
CS 255	ASTM D 1527	CS 207
CS 197	ASTM D 2282	CS 256
ASTM D 2104	CS 218	ASTM D 1785
ASTM D 2239	CS 254	ASTM D 2241 aT

Drain, Waste and Vent Pipe, Fittings and Joining Materials

ASTM D 2135
CS 270
CS 272

The Committee also established as basic policies the following provisions:

When a departure in dimension and tolerances is requested in a product manufactured from a material covered by an existing ASTM, ASA, AWWA Specification or Commercial Standard; the Testing Laboratory may extend approval upon receipt of satisfactory evidence from the Plastic Pipe Institute that an appropriate change is under development and the product has satisfactorily completed testing against the most applicable requirements. Provided, however, that the manufacturer may, if refused consideration within a reasonable time by the Plastic Pipe Institute for the requested change, appeal to the NSF Joint Committee on Plastics.

When a change in pressure rating or temperature rating of a product manufactured from a material covered by an existing ASA, ASTM, AWWA Specification or Commercial Standard, is requested; the Testing Laboratory may approve same, provided a hydrostatic design stress has been properly assigned for said temperature and the product has satisfactorily completed testing against the appropriate requirements of the applicable Standards.

The subject of toxicological evaluation of joining materials intended for use in potable water systems was carefully reviewed and the following principles established as regards exposure method:

1. The joining material to be exposed (applied) on the surface of pipe in the following ratio:
   a) One (1) fitting per one (1) foot of pipe
   b) Over run in side of the pipe to be established at 1/4 of the fitting socket depth
   c) The number of fittings on which the exposed area is based, shall be established on the exposures ratio set forth in the publication entitled "A Study of Plastic Pipe for Potable Water Supplies".

CAPCO JEN 0020575

2. The joining materials shall be applied to an appropriate length of pipe as determined above and then allowed to air dry at 40° F. for 15 minutes. Following air drying, the coated surface shall be flushed under running water for 5 minutes.

3. Extraction of the cured coated surface shall be carried out following established procedures. (100° F. for 72 hours)

4. Limits of acceptability to be the same as for pipe and fittings intended for potable water systems.

The Foundation advised the Joint Committee that NSF Standard No. 14 relating to Thermoplastic Materials, Pipe, Fittings and Appurtenances will be available in printed form in the immediate future. Copies will be distributed to all Seal of Approval participants. Persons requiring additional copies or others desiring copies may obtain them directly from the Foundation at a cost of $1.00 each.

The Foundation also announced that the 1966 Contracts will be considerably reduced in context due to the advent of NSF Standard No. 14.

CAPCO JEN 0020576

ATTENDANCE LIST

NATIONAL SANITATION FOUNDATION

JOINT COMMITTEE ON PLASTICS

(THERMOPLASTICS)

National Sanitation Foundation
2355 W. Stadium Boulevard
Ann Arbor, Michigan

October 14, 1965

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CAPCO JEN 0020579