MINUTES
Alternate Waste Sizing Task Group - Meeting #2
Monday, December 20, 2021 from 11:00AM – 12:30PM (PT)
https://iapmo-org.zoom.us/j/82837415538
Meeting ID: 828 3741 5538

Members Present: Todd Kuchta (Chair)
James Kemper
John Lansing

IAPMO Staff Present: Taylor Duran
Dan Cole
Enrique Gonzalez

I. Call to Order. The Chair, Todd Kuchta, called the meeting to order on Monday, December 20, 2021 at 11:02 AM (PT).

II. Roll Call and Self-Introductions. Taylor Duran welcomed the Task Group, took roll, and asked members to state their representation.


IV. Conflict of Interest. See below for the IAPMO Conflict of Interest Policy. Taylor Duran reviewed the IAPMO Conflict of Interest Policy.

V. Review and approval of the Agenda. The Chair, Todd Kuchta, asked for approval of the agenda. The motion was made and seconded to approve the agenda. The motion passed.

VI. Review and approval of the November 15, 2021 Meeting Minutes. The Chair, Todd Kuchta, asked for approval of the November 15, 2021 Meeting Minutes. The motion was made and seconded to approve the minutes. The motion passed.

VII. Scope of the Task Group. Taylor Duran reviewed the Task Group scope as follows:
The scope of this task group is to develop provisions for alternate sizing of waste side piping as was achieved with the alternate water supply sizing provisions previously published within WE-Stand. The recommendations provided by the task group will be forwarded to the WE-Stand Technical Committee for consideration in the development of the 2023 edition of the WE-Stand.
VIII. Goals for the meeting.

A. Review submitted action items.

The Task Group reviewed and discussed the submitted action items.
- John Lansing presented a comparison for sanitary drainage technologies implemented in various countries.

B. Discuss issues with using the WDC for sanitary peak demand estimates.

i. Review “Drainage Peak Demand – Statement of the Problem,” by Dan Cole

Dan Cole discussed the issues associated with using the Water Demand Calculator (WDC) to predict peak demand flow in drainage systems.
- The WDC is not suitable for predicting flow rates in a non-pressurized wastewater collection system.
- Using a method of probabilities would only predict the concurrence of fixtures discharging at the same time into the drainage system.
- The method of probabilities used in the WDC cannot predict the following:
  - Surge flows when horizontal branches combine;
  - Probability of overlapping fixture discharges; and
  - Simultaneous flows from various horizontal branches into a drainage stack.

ii. Review and update areas of focus.

After this discussion and review of submitted action items, the Task Group agreed to focus on the following goals:
- Demonstrate how current sizing methods for drainage systems result in oversizing.
- Determine a correction factor to implement and generate an empirical formula for sizing. In support of this goal, the following is to be completed:
  - Develop a comparison with outflow based on supply data;
  - Change the number of fixture units; and
  - Provide new allowances for fixture units.

C. Assign action items.

The Task Group agreed to the following action items:
- Todd Kuchta is to reach out to April Trafton for peak demand flow data.
- John Lansing & Todd Kuchta are to further develop the spreadsheet for comparison of sanitary drainage technologies to provide calculations for flow rates rather than the number of apartments.
- Compare results with other methods used in the spreadsheet to determine which method is most favorable and determine an equivalent fixture unit adjustment.

The due date for submission of action items is January 20, 2022.
D. Address additional questions and concerns. The Task Group discussed possible limits to the work being completed. Where limits are established, additional research and data collection may be required from outside sources.

IX. Future meetings. The next meeting will be held during the week of January 24, 2022. Taylor Duran will send out a doodle poll for the next meeting.

X. Other business. None.

XI. Adjourned. The meeting was adjourned at 12:31PM (PT).