

IPSDC



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2021 GROUP A PROPOSED CHANGES TO THE I-CODES

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Virtual Committee Action Hearings

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2021 GROUP A – PROPOSED CHANGES TO THE INTERNATIONAL PLUMBING CODE

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TENTATIVE ORDER OF DISCUSSION 2021 PROPOSED CHANGES TO THE INTERNATIONAL PLUMBING CODE

The following is the tentative order in which the proposed changes to the code will be discussed at the public hearings. Proposed changes which impact the same subject have been grouped to permit consideration in consecutive changes.

Proposed change numbers that are indented are those which are being heard out of numerical order. Indentation does not necessarily indicate that one change is related to another. Proposed changes may be grouped for purposes of discussion at the hearing at the discretion of the chair. Note that some P code change proposals may not be included on this list, as they are being heard by another committee.

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P132-21
P133-21 Part I
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 G1-21 Part IV
 PC15-21
P147-21 Part I

PSD1-21

IPSDC: 1101.2, ISO (New), ANSI/CAN/IAPMO/ISO 30500-2019 (New), IAPMO (New), NP (New)

Proponents: Edward R. Osann, Natural Resources Defense Council, representing Natural Resources Defense Council (eosann@nrdc.org); CJ Lagan, representing LIXIL (cj.lagan@lixil.com); albert rubin, Self, representing self (rubin@ncsu.edu)

2021 International Private Sewage Disposal Code

Revise as follows:

1101.2 Residential wastewater treatment systems. The regulations for materials, design, construction and performance shall comply with NSF 40 or with IAPMO/ISO 30500.

Add new standard(s) as follows:

ISO

International Organization for
Standardization
Chemin de Blandonnet 8
Geneva Switzerland CP 401 - 1214

ANSI/CAN/IAPMO/ISO 30500-2019 Non-sewered sanitation systems - Prefabricated integrated treatment units - General safety and performance requirements for design and testing.

IAPMO

IAPMO Group
4755 E. Philadelphia Street
Ontario CA 91761

ANSI/CAN/IAPMO/ISO 30500-2019 Non-sewered sanitation systems - Prefabricated integrated treatment units - General safety and performance requirements for design and testing.

Add new text as follows:

NP

New Promulgator

Reason Statement: As stated in the user note at the beginning of Chapter 11, septic tanks are not the only method for treatment of sewage from a residence. Section 1101.2 allows for factory-built wastewater treatment facilities, and specifies a single required standard -- NSF 40. This proposal would allow builders another factory-built equipment option -- non-sewered sanitation systems (NSSSs) meeting the requirements of ANSI/CAN/IAPMO/ISO 30500.

In 2011, the Bill & Melinda Gates Foundation launched the "Reinvent the Toilet Challenge" to bring new technology to bear to achieve sustainable sanitation solutions. To facilitate commercialization of hi-tech "Reinvented Toilets" and their acceptance by state and national regulatory bodies, an ISO standard was adopted in 2018 to establish the key performance attributes of NSSSs. Standard 30500, *Non-sewered sanitation systems - Prefabricated integrated treatment units - General safety and performance requirements for design and testing*, sets performance requirements for solid and liquid outputs, odor, noise, air emissions, materials, safety, marking, and ergonomics, together with relevant test procedures for measuring the attainment of these requirements. This ISO standard was adopted in identical form as a U.S. and Canadian national standard in 2019, designated as ANSI/CAN/IAPMO/ISO 30500:2019.

Criteria for the functioning of the unit for capturing and fully treating human waste are established by the ISO standard and do not need to be repeated in IPSDC language. Among initial devices, three broad pathways for treatment technology have emerged -- electro-chemical, biological, and combustion -- and in some cases, combinations of these in the same device. Manufacturers have been involved in these efforts, and LIXIL (owner of the American Standard brand) and other companies are working to develop compliant systems for both domestic and international installations. It is the general preference of manufacturers to design and market systems that are compliant with published codes and standards, rather than one-off compliance reviews by individual jurisdictions.

Designed for operation without a sewer connection and, in many cases, without a dedicated water supply, NSSSs are anticipated to meet critical public health needs in areas with limited water and wastewater infrastructure, water supply constraints, and/or unfavorable soils for traditional on-site disposal methods. In the U.S., over 20% of the population relies on an on-site wastewater system. And even today, a portion of our population does not have access to fully functioning sanitation, largely due to lack of affordable infrastructure or to challenging site conditions.

With "Reinvented Toilets" meeting the 30500 standard now on the cusp of commercialization, the arrival of such toilets at job sites across the country can reasonably be expected by the time this code update is published and adopted by states and localities, e.g., 2025. Clear code language

will accelerate the availability of safe sanitation for people who lack it today. While much is still unknown about the cost, maintenance, and reliability of NSSs, or even the business model for their installation and servicing, forward-looking communities and jurisdictions with acute sanitation needs will want to be prepared for the safe installation and use of this promising new technology as it enters the market.

Where an onsite sewage disposal challenge calls for a factory-built solution, this proposal provides an additional option for builders and homeowners to select if they choose.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal authorizes, but does not require, installation of a non-sewered sanitation device (NSSD), as defined. Builders remain free to install less expensive sanitation devices if they so choose. NSSDs may allow construction on sites that might otherwise be unbuildable due to lack of sewer infrastructure or site conditions unsuitable for conventional on-site systems.

PSD1-21