Manufactured Housing Association for Regulatory Reform

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VIA FEDERAL EXPRESS AND ELECTRONIC SUBMISSION

Regulations Division
Office of General Counsel
U.S. Department of Housing and Urban Development
Room 10276
451 7th Street, S.W.
Washington, D.C. 20410-0500

Re: Interpretative Bulletin for Model Manufactured Home Installation Standards-Foundation Requirements in Freezing Temperature Areas Under 24 C.F.R. 3285.312(b) – Docket Number FR-6023 – N -- 01

Dear Sir or Madam:

The following comments are submitted on behalf of the Manufactured Housing Association for Regulatory Reform (MHARR). MHARR is a national trade association representing the views and interests of producers of manufactured housing regulated by the U.S. Department of Housing and Urban Development (HUD) pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5401, et seq.) as amended by the Manufactured Housing Improvement Act of 2000 (2000 reform law). MHARR was founded in 1985. Its members include independent manufactured housing producers from all regions of the United States.

I. INTRODUCTION

On June 21, 2017, the HUD Office of Manufactured Housing Programs (Program/OMHP) published, in the Federal Register, a proposed "Interpretative Bulletin for Model Home Installation Standards Foundation Requirements in Freezing Temperature Areas under 24 C.F.R. 3285.312(b)."[1] The proposed Interpretative Bulletin (IB), designated I-1-17 and issued pursuant to the purported authority of Genger Charles, HUD General Deputy Assistant Secretary for Housing,[2]

[1] See, 82 Federal Register, No. 118 at p. 28279, et seq.

[2] Genger Charles is an appointee of former President Barack Obama, who, at present, remains at HUD notwithstanding the transition to the administration of President Donald J. Trump on January 20, 2017. HUD has failed to respond to an inquiry by MHARR contained in June 29, 2017 correspondence to HUD Secretary Benjamin Carson asking that

maintains that its purpose "is to provide guidance for designing and installing manufactured home foundations in areas subject to freezing temperatures with seasonal ground freezing, in accordance with the [HUD] Model Manufactured Home Installation Standards wherever soil conditions are susceptible to frost heave."[3]

As is demonstrated below, however, the proposed IB is: (1) a de facto Obama Administration "midnight regulation" that should have been (and should remain) suspended under the Trump Administration's regulatory "freeze" order of January 20, 2017; (2) represents a blatant abuse of the manufactured housing program's regulatory authority – both substantively and procedurally; (3) rests on a false and deceitful premise; (4) would substantively and unlawfully change existing HUD standards without basis or justification; (5) has never been properly evaluated for its cost impact in violation of applicable law; and (6) would needlessly impose additional regulatory burdens on the American people and increase regulatory compliance costs ultimately paid by lower and moderate-income manufactured home-buyers, in direct violation of Executive Order 13777 and the express regulatory policies of President Trump.

Moreover, and even more fundamentally, the proposed IB fails the most basic test for an Interpretive Bulletin under applicable HUD regulations, in that it fails to "clarify"[4] anything under HUD's existing manufactured housing installation standards for states without state law installation standards and programs but, instead, renders the existing HUD standard ambiguous, vague, imprecise and uncertain in ways that will needlessly increase regulatory compliance costs for consumers, manufacturers, community owners, installers and other industry members, while creating an unnecessary and indefensible liability trap for design professionals. As a result, the proposed IB should be withdrawn in toto.

II. PROCEDURAL HISTORY AND BACKGROUND

The proposed "frost-free" foundation IB derives from and is based upon a 2016 report by HUD's manufactured housing program installation contractor, SEBA Professional Services, L.L.C. (SEBA), entitled "Manufactured Home Foundations in Freezing Climates – An Assessment of Design and Installation Practices for Manufactured Homes in Climates with Seasonally Frozen Ground."[5] (SEBA Report). The SEBA Report, in turn, appears to be substantially – if not

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HUD disclose, among other things, "whether the proposed IB was reviewed and approved by a Trump Administration official or designee appointed after Noon on January 20, 2017," as required by a regulatory "freeze" order issued by the White House Chief of Staff on January 20, 2017 and, if so, "which officials(s) or designee(s) reviewed and approved the proposed IB." See, Attachment 1, hereto.

[3] See, 82 Federal Register, No. 118, supra, at p. 28279.

[4] The preamble to the proposed IB states that it was "developed for the purpose of clarifying requirements ... for the manufactured housing industry when designing or setting foundations for manufactured homes in locations subject to freezing temperatures with seasonal ground freezing." (Emphasis added). Id. at p. 28280. See also, related discussion at pp. 10-13, infra.

[5] See, Attachment 2, hereto. The preamble to HUD's IB specifically states that the 2016 SEBA report "provides both a reference and technical basis for the guidance and recommendations included" in the IB. See, 82 Federal Register, No. 118 at p. 28281, col.2. See also, related discussion at pp. 11-13, infra.

exclusively – based on the opinions and conclusions of one individual, Mr. Jay H. Crandell, P.E. (Crandell), the principal of ARES Consulting, Inc. (ARES).[6]

MHARR, from the outset, has consistently and strenuously opposed the HUD program's creation and subsequent manipulation of both the SEBA Report and resulting proposed IB in an effort to illegitimately alter an existing federal installation standard and effectively divest states with HUD-approved state-law installation programs of their primary jurisdiction and authority over manufactured housing installation as provided by federal law.[7] In October 20, 2016 correspondence to administrator of the federal manufactured housing program,[8] MHARR stated:

> "[T]he SEBA Report ... would materially and significantly alter 24 C.F.R. 3285.312(b)(2) and (b)(3) in ways that extend well beyond a mere "interpretation" of that standard for purposes of enforcement. Specifically, the construction of those sections set forth in the report – based on the assertions and apparent conclusions of just one individual -- would effectively eliminate the disjunctive "or" in sections 3285.312(b)(2)(i) and 3285.312(b)(3)(i) which currently, and since the time of final adoption of Part 3285, nine years ago, in October 2007, has allowed HUD Code manufacturers to elect between monolithic slab systems and insulated foundations in "freezing climates" designed by a registered professional engineer or registered architect in accordance with either "acceptable engineering practice to prevent the effects of frost heave," or Structural Engineering Institute/American Society of Civil Engineers (SEI/ASCE) standard 32-01 (Design and Construction of Frost-

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[6] See, Manufactured Housing Consensus Committee (MHCC), October 25-27, 2016 meeting minutes, Appendix C at p. 2. See also: (1) Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016, at p. 4: "Jay Crandell said he ... provided the technical research used to support the recommendations contained in the SEBA report;" (2) Draft Minutes, MHCC Meeting, December 12, 2016 at p.8: "Jay Crandell, in answer to a question regarding the clarity of the SEBA Report, said it was clear to him because he wrote it...." (Emphasis added). The 2016 SEBA Report, however, does not contain any type of transparency disclosures regarding either Mr. Crandell or ARES, including, but not limited to: (1) whether the underlying report by Mr. Crandell was produced pursuant to a paid subcontract with SEBA, a paid contract with HUD, or on some other basis; (2) the amounts that were (and are being) paid to Mr. Crandell and/or ARES by SEBA and/or HUD for that report and related activity in support of the proposed IB; or (3) any information related to potential or actual conflicts of interest, including, but not limited to, other (past or present) clients of Mr. Crandell and/or ARES, past or present business associations of Mr. Crandell and/or ARES, and/or past or present contracts with HUD or parties associated with the HUD manufactured program, or other agencies with regulatory authority over manufactured housing. Such information is relevant, germane and material given Crandell's past contractual/financial relationships with, among others, HUD's manufactured housing "monitoring" contractor, the Institute for Building Technology and Safety (IBTS) (See, "An Assessment of Damage to Manufactured Homes Caused by Hurricane Charley," March 31, 2005 at p. ii, identifying "Jay Crandell, P.E." as a "subcontractor to IBTS"); the NAHB Research Center, Inc., the research arm of the national association representing competitors of manufactured housing producers (see, e.g., "Design Guide for Frost-Protected Shallow Foundations," June 1994, at p. iii, "The NAHB Research Center staff responsible for this document are Jay H. Crandell, P.E.;" "Review of Structural Materials and Methods for Home Building in the United States: 1900-2000 at p. ii. MHARR, accordingly, sought such information through an October 28, 2016 Freedom of Information Act (FOIA) request (see, Attachment 3, hereto). Ten months later, however, HUD has failed to respond to this request in any form -- claiming that it was not received by the Department. MHARR, however, by correspondence dated August 4, 2017, provided documentary proof to HUD of delivery of its October 28, 2016 FOIA request on November 1, 2016, and has demanded that HUD comply with all applicable FOIA production deadlines based on that delivery date. (See Attachment 4, hereto).

[7] See, 42 U.S.C. 5404.

[8] See, Attachment 5, hereto.

Protected Shallow Foundations). The SEBA Report accomplishes this by creating an apparently mandatory functional equivalence between "acceptable engineering practice" and the prescriptive requirements of SEI/ASCE 32-01that effectively eliminates any discretion or professional judgment on the part of the "registered professional engineer or registered architect" referenced in sections 3285.312(b)(2) and (3). ***

"[T]he SEBA Report, [however], fails to provide any evidence showing the alleged insufficiency of the current standard or current practice under that standard and whether its unilateral changes are "reasonable" for any given region. Nine years after the promulgation of the final installation standards rule, the SEBA Report fails to cite any evidence of either systemic failures resulting from the 3285.312(b) standards as originally stated and enforced, or an objective justification of any sort, showing the need for such material and significant alterations. [Further,] the SEBA Report fails to provide any evidence showing the cost of any such change, which would be substantial given the Report's apparent mandate for, among other things, a site-specific soil test "to determine frost susceptibility" in each instance, site-specific groundwater tests, and other related preparatory work and determinations.

"[M]ore significantly ... the "recommendations" and "guidance" of the SEBA Report appear to be a unilateral power-grab by HUD to supplant the primacy of state authority over installation in states with approved installation programs. In stating "recommendations" for "Local Regulatory Officials and Inspectors,"[9]the SEBA Report -- like HUD's April 11, 2016 "Interim Guidance" – does not distinguish between officials in HUD-approved and default states, and appears to impose affirmative mandates (either de jure or de facto) on state and/or local officials acting on the basis of approved state-law installation standards under color of state law. As MHARR stated in its April 14, 2016 communication to HUD, however, "while the Part 3285 standards, pursuant to 42 U.S.C. 5404, are model standards that provide a baseline for state standards to provide 'protection that equals or exceeds' the model federal provisions, the law provides no mechanism or basis for the imposition of unilateral HUD interpretations of the model federal standards on state officials enforcing state standards under color and authority of state law." Nor does that statute provide any mechanism or basis for HUD to impose a specific federal standard, modification of a specific federal standard, or interpretation of a specific federal standard on a state program that, in the aggregate, has been approved as providing a degree of protection that equals or exceeds the model federal program. Put differently, the applicability, interpretation and enforcement of state manufactured housing installation standards, following their adoption and approval by HUD, are a matter within the sole authority and discretion of state officials and not subject to unilateral dictates by HUD or by HUD contractors."[10]

[9] See, SEBA Report at p. 7, "Recommendations for Local Regulatory Officials and Inspectors."

[10] Id. at pp. 3-5.

(Emphasis in original). (Footnotes omitted).

The SEBA Report was subsequently presented to the Regulatory Enforcement Subcommittee of the statutory Manufactured Housing Consensus Committee (MHCC) at a meeting on November 28, 2016.[11] MHCC members, representing all manufactured housing program stakeholder categories delineated by the Manufactured Housing Improvement Act of 2000, posed pointed inquiries to HUD regarding the basis for the SEBA report. Among other things, members asked whether there have been "consumer complaints or problems in the field"[12] regarding manufactured housing foundations and "frost heave." No such information was offered or provided by HUD, while state officials serving on the MHCC and members of the public attending the meeting stated that they were "unaware of any issues that would prompt a change in regulation."[13] HUD was also asked whether it (or its contractor) had conducted "a cost analysis to see how [the changes mandated by the SEBA report would] affect the installation of the home" as is specifically required by law.[14] In response, SEBA stated that "a cost analysis had not been done because there is no change to the regulation." (Emphasis added).[15]This assertion, denying a "change to the regulation" in either the SEBA Report or the resulting HUD proposed IB, as is demonstrated below, is patently false, yet HUD, to date, has failed to undertake or provide – either to the MHCC, program stakeholders, or the public – the cost-impact information for the proposed IB plainly required by federal law.

Not surprisingly, given the failure of HUD, SEBA and SEBA's contractor (Crandell) to provide this crucial, statutorily-required information to the MHCC, the Subcommittee rejected – by a 2-6-0 margin, a proposed motion that would have recommended that HUD "use the SEBA Report, 'Manufactured Home Foundations in Freezing Climates' including appendices, as the basis for an Interpretative Bulletin" on this matter.[16] The MHCC Regulatory and Enforcement Subcommittee, accordingly, could not and did not achieve a consensus, as defined by the 2000 reform law, in support of the mandates and rationale of the SEBA Report, or in support of using that Report as the basis for an IB on "frost-free" foundations. To the contrary, a subsequent motion, specifically omitting any reference to the SEBA Report as the "basis" for any subsequent IB and highlighting the questions, concerns and objections that the Subcommittee had raised regarding the justification, cost and impact of the standards changes mandated by the SEBA Report, called on HUD to "draft an interpretative bulletin before the December 12 MHCC teleconference taking

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[11] The MHCC, established by the Manufactured Housing Improvement Act of 2000, has express statutory authority to review, consider and submit recommendations to the HUD Secretary concerning proposed Interpretive Bulletins. See, 42 U.S.C. 5403(b)(3)(A). The same provision requires that if the "Secretary rejects any significant comment provided by the consensus committee ... the Secretary shall provide a written explanation of the reasons for the rejection to the consensus committee." No such written explanation was provided to the consensus committee in this case, in violation of 42 U.S.C. 5403(b)(3)(B).

[12] See, Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016, at p.2.

[13] Id.

[14] See, 42 U.S.C. 5403(e)(4): "The consensus committee, in recommending standards, regulations and interpretations, and the Secretary, in establishing standards or regulations or issuing interpretative bulletins ... shall *** (4) consider the probable effect ... on the cost of the manufactured home to the public." (Emphasis added).

[15] See, Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016, at p. 6. See also, Id. at p. 2 where the HUD program administrator stated to the MHCC Subcommittee that the mandates of the SEBA report are "an interpretation of a regulation and there is not anything new." See, further discussion at pp. 12-14, infra.

[16] See, Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016, at p. 3.

into consideration the comments from the November 28 MHCC Regulatory Subcommittee teleconference."[17] (Emphasis added)

A HUD-proposed "frost-free" IB was subsequently presented to the full MHCC on December 12, 2016. That proposed 25-page IB, however -- provided to MHCC members and program stakeholders less than two full business days prior to the scheduled meeting date -- expressly and deliberately ignored the outcome of the two resolutions addressed by the MHCC Regulatory and Enforcement Subcommittee at its November 28, 2016 meeting. Indeed, that proposed IB, consistent with an expanding pattern of the HUD program ignoring significant recommendations of the MHCC under its present administrator – an Obama Administration holdover, installed on a career basis instead of a non-career appointee as provided by the 2000 reform law – provided no indication whatsoever that HUD had considered, let alone addressed, the concerns raised by the Regulatory and Enforcement Subcommittee, which overlapped with the specific objections previously asserted by MHARR. Rather, the only evidence in the proposed IB submitted to the MHCC is that HUD did just the opposite – by ignoring the Subcommittee's rejection of the SEBA Report as the basis for any resulting IB.[18]

Again, therefore, not surprisingly, the full MHCC voted unanimously to submit recommendations to HUD on the proposed IB, calling on the Department to, among other things: (1) "ensure additional costs are not incurred due to the IB;" (2) "remove" references to "specific engineering language in the IB;" (3) "ensure [that the] IB doesn't exceed reasonable acceptable engineering practice as required in [24 C.F.R.] 3285.312(b)(2);" and (4) "remove reference[s] to the SEBA Report from the IB."[19] As HUD itself acknowledges in the preamble to its proposed IB published on June 21, 2016, the effect of the MHCC's comments regarding the proposed IB, was to recommend that HUD "delete the statement regarding the SEI/ASCE 32-01 Standard generally providing the bases for acceptable engineering practice" as that term is utilized in the existing HUD regulations concerning "frost-free" foundations.[20]HUD's preamble states, however, that it did "not agree with or accept" that MHCC recommendation, with no further explanation or rationale, thus violating at least two express provisions of the 2000 reform law (i.e., mandatory determination and consideration of cost-impact and mandatory explanation of rejections of MHCC recommendations) while siding – summarily – with its paid contractors, rather than the unanimous judgment of a cross-section of all stakeholders in the federal manufactured housing program, including consumers, state officials, industry members and others.

The entire record of this proceeding to date, accordingly, is one of the HUD manufactured housing program and its administrator: (1) ignoring and dismissing key recommendations of the MHCC; (2) acting without cost evidence or evidence of objective justification in violation of the Manufactured Housing Improvement Act of 2000; (3) ignoring and dismissing serious concerns and objections raised by all federal manufactured housing program stakeholders, including consumers, industry members and state officials; (4) seeking to curtail or eliminate legitimate state authority and/or state participation in the HUD manufactured housing program; (5) granting

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[17] Id. at p. 6.

[18] MHARR reiterated and expanded its objections to the proposed IB – and to the SEBA Report as the supposed basis for that IB – in written comments submitted to the MHCC on December 9, 2016. See, Attachment 6, hereto.

[19] See, Draft Minutes, MHCC Meeting, December 12, 2016, at p. 8.

[20] I.e., 24 C.F.R. 3285.312(b)(2), (3).

powers and authority to HUD contractors in excess of authorizing law; (6) seeking to create make-work activity for revenue-driven HUD contractors; (7) acting in violation of multiple Trump Administration Executive Orders (EOs); and (8) seeking to impose needless but extremely costly new regulations on lower and moderate-income Americans in direct violation of Trump Administration policy.

As is explained in detail below, HUD's proposed IB is a relic of the past Administration which would impose unnecessary regulatory costs with absolutely no basis in fact whatsoever and will disproportionately harm both the lower and moderate-income American families who rely on affordable manufactured housing the most, as well as the multitude of small businesses which comprise the core of the American manufactured housing industry. That proposal, accordingly, should be withdrawn.

I. COMMENTS

1. HUD's Proposed IB Should Be Suspended In Accordance With President Trump's Regulatory Freeze Order

The Trump Administration, upon assuming office on January 20, 2017, immediately issued a "Memorandum for the Heads of Executive Departments and Agencies," (Memorandum)[21] directing that action on all pending "regulations" and ""regulatory action" be suspended "in order to ensure that ... President [Trump's] appointees or designees have the opportunity to review any new or pending regulations." The Memorandum, accordingly, states, in relevant part: "Subject to any exceptions the Director or Acting Director of the Office of Management and Budget ... allows for emergency situations or other urgent circumstances relating to health, safety, financial or national security matters, or otherwise, send no regulation to the Office of the Federal Register ... until a department or agency head appointed or designated by the President after noon on January 20, 2017, reviews and approves the regulation." (Emphasis added). While the HUD proposed IB is not itself a "regulation," per se,[22] the January 20, 2017 Trump Administration Memorandum makes it abundantly and unequivocally clear that it applies to – and requires the suspension of activity on – such a proposed "interpretation" of an existing standard. The Memorandum thus states:

> "As used in this memorandum, 'regulation' has the meaning given to 'regulatory action' in section 3(e) of Executive Order 12866, and also includes any 'guidance document' as defined in section 3(g) thereof.... That is, the requirements of this memorandum apply to 'any substantive action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation

[21] See, Attachment 7, hereto.

[22] It should be noted, though, that federal manufactured housing law requires that proposed Interpretive Bulletins, following MHCC review, be published in the Federal Register for notice and comment pursuant to and in accordance with provisions of the Administrative Procedure Act (APA) applicable to agency rulemaking. (See, 42 U.S.C. 5403(b)(3)(C): "Following compliance with subparagraphs (A) and (B), the Secretary shall – (i) cause the proposed ... interpretative bulletin and the consensus committee's written comments, along with the Secretary's response thereto, to be published in the Federal Register; and (ii) provide an opportunity for public comment in accordance with section 553 of title 5, United States Code."

> of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking,' and also covers any agency statement of general applicability and future effect 'that sets forth a policy on a statutory, regulatory, or technical issue or an interpretation of a statutory or regulatory issue.'"

(Emphasis added).

Based, therefore, on the plain text of this Memorandum, the proposed IB, entailing an "interpretation" of a "regulatory issue" (i.e., the purported meaning and requirements of the HUD manufactured housing installation standards for federally-administered installation states), should have been and should remain suspended, unless it was "reviewed and approved" by the "department or agency head" at HUD, "appointed or designated by ... President [Trump] after noon on January 20, 2017" (i.e., HUD Secretary, Dr. Benjamin Carson).

There is no evidence, however, that the IB was either reviewed or approved by the HUD Secretary appointed by the current Administration, or is anything other than Obama Administration "midnight regulation" orchestrated by Obama Administration holdovers at HUD, including the current HUD manufactured housing program Administrator. By correspondence to Secretary Carson dated June 29, 2017, MHARR specifically asked that HUD disclose, among other things: "(1) whether the proposed IB was reviewed and approved by a Trump Administration official or designee appointed after Noon on January 20, 2017, as required by the [Trump Administration] regulatory freeze order; [and] (2) if so, which official(s) or designee(s) reviewed and approved the proposed IB...." HUD, to date, has failed to respond to this inquiry. In the absence of a reply to this inquiry from HUD and evidence to support compliance with the January 20, 2017 Trump Administration Memorandum, and insofar as the IB was issued under the name of Ms. Genger Charles, an Obama Administration appointee still at HUD at the time the proposed IB was issued, MHARR asserts and maintains that the publication of the proposed IB violates that Memorandum, that the IB – as issued in violation of the January 20, 2017 Memorandum -- must be withdrawn, and that any further action related to the proposed IB must be suspended pending full review by Secretary Carson or his specific designee as required by the January 20, 2017 Memorandum.[23]

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[23] The contemptuous and dismissive treatment -- by the HUD manufactured housing program and program administrator -- of a closely-related November 15, 2016 congressional request to federal agencies, following the election of President Trump, to defer finalizing any pending regulatory actions, is illustrated by November 18, 2016 MHARR correspondence to HUD (see, Attachment 8, hereto) and the program administrator's December 7, 2016 response thereto (see, Attachment 9, hereto). MHARR's correspondence states, in relevant part: "Congress, in a letter dated November 15, 2016, called on the Secretaries, Administrators and Directors of all federal agencies to defer 'finalizing pending rules or regulations in the [Obama] Administration's last days,' noting that rushed regulations could entail 'unintended consequences' that could 'harm consumers and businesses.' The congressional communication further noted that 'such forbearance is necessary to afford the recently elected administration and Congress the opportunity to review and give direction concerning pending rulemakings....'" The December 7, 2016 response of the program administrator, however, totally disregards and essentially mocks these legitimate concerns, stating: "The OMHP [Office of Manufactured Housing Programs] notes your reference to recent communications from Congress concerning finalizing pending rules or regulations. It is important to note that this proposed interpretative bulletin has yet to be 'finalized' even within the broadest definition of that term in a regulatory context. The OMHP is committed to continuing to execute its program obligations consistent with the 2000 Amendments to the Act." The administrator's response thus rejects Congress' clear warning against taking steps to finalize pending

2. The Proposed IB Violates Federal Law and HUD's Own Regulations

Existing HUD federal installation regulations addressing "frost-free" manufactured housing foundations, adopted in 2007 and implemented in 2008,[24] are clear and unequivocal. Under those regulations, design professionals (i.e., "registered professional engineers" or "registered architects"), consistent with the disjunctive term "or" set forth in the regulations, may elect between foundation designs which comply with the requirements of a prescriptive reference standard -- Structural Engineering Institute (SEI)/American Society of Civil Engineers standard 32-01 (SEI/ASCE 32-01) -- or "acceptable engineering practice" as determined by the licensed design professional responsible for preparing that specific design. The existing regulations at 24 C.F.R. 3285.312(b)(2), (3) thus provide, in relevant part:

> "(2) *Monolithic slab systems*... The monolithic slab system must be designed by a registered professional engineer or registered architect: (i) In accordance with acceptable engineering practice to prevent the effects of frost heave; or (ii) In accordance with SEI/ASCE 32-01 (incorporated by reference, see 3285.4).
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> (3) *Insulated foundations*. An insulated foundation is permitted above the frost-line when all relevant site-specific conditions ... are considered, and the foundation is designed by a registered professional engineer or registered architect: (i) In accordance with acceptable engineering practice to prevent the effects of frost heave; or (ii) In accordance with SEI/ASCE 32-01 ...."

(Emphasis added).

The existing HUD installation standards for federally-administered states thus allow state-licensed design professionals in the field to develop manufactured housing foundation designs for use in freezing climates based either on the SEI/ASCE 32-01 reference standard or their own professional judgment – i.e., "acceptable engineering practice" -- relying on education, experience and knowledge of relevant conditions.[25]The standard, moreover, as is, provides for full accountability for manufactured housing foundations in freezing climates either through compliance with the reference standard or "acceptable engineering practice" as determined and enforced through the professional licensing, professional responsibility and/or potential civil liability of the state-licensed professional responsible for that design. By providing such design

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regulatory actions (such as its proposed IB) and instead concocts a baseless "red herring" argument over the meaning of the word "finalized." Given this contrived, dismissive response to a clear request by Congress, it is not surprising that the program and program administrator would proceed with the proposed IB in violation of the January 20, 2017 Trump Administration Memorandum.

[24] See, 72 Federal Register, No. 202, October 19, 2007 at p. 59338, et seq.

[25] The HUD Manufactured Housing Construction and Safety Standards (24 C.F.R. 3280.1, et seq.) specifically *define* a "Registered Engineer or Architect" to be "a person licensed to practice engineering or architecture in a state and subject to all laws and limitations imposed by the state's Board of Engineering and Architectural Examiners and who is engaged in the professional practice of rendering service or creative work requiring education, training and experience in engineering sciences and the application of special knowledge of the mathematical, physical and engineering sciences in such professional or creative work...." See, 24 C.F.R. 3280.2. (Emphasis added). From this definition, it is evident that proper qualifications are already required by section 3285.312(b)(2) and (3) for the development of designs in full accordance with "acceptable engineering practice," and that those qualifications already ensure proper accountability and responsibility for the development of compliant and safe designs.

flexibility, the current standards are consistent with the mandate of federal manufactured housing law for the "establishment ... to the extent possible, [of] performance-based federal" standards for manufactured housing.[26] (Emphasis added). Such performance and outcome-based standards, which allow maximum flexibility for cost-saving technical and design innovation, combined with uniform standards, uniform federal/state enforcement and robust federal preemption, are directly responsible for the unparalleled affordability of manufactured housing,[27] one of the fundamental purposes of federal manufactured housing regulation, as directed by Congress in the 2000 reform law.[28]

For nearly a decade, these unambiguous regulations have ensured safe and cost–effective manufactured housing foundation designs for use in "freezing climates,"[29] with no evidence of a pattern of systemic or consistent failures presented by either HUD, SEBA, or SEBA's contractor. To the contrary, state participants in the MHCC meetings addressing this matter and commenters in this proceeding, have stressed the absence of any such evidence.[30]The HUD proposed IB, therefore – at a minimum – is an alleged "solution" in search of a problem. More significantly, though, its attempted promulgation violates multiple provisions of federal manufactured housing law and HUD's own manufactured housing Procedural and Enforcement Regulations (24 C.F.R. 3282).

At its core, the proposed IB would effectively eliminate the clear and definitive disjunctive "or" in sections 3285.312(b)(2) and (3), which allows design professionals to rely either on the SEI/ASCE 32-01 reference standard or "acceptable engineering practice." The IB does this -- in an ultimately vague and ambiguous way -- by generally equating "acceptable engineering practice" with compliance with the SEI/ASCE 32-01 reference standard. The IB thus states, among other things:

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[26] See, 42 U.S.C. 5401 (b)(3).

[27] See, U.S Department of Housing and Urban Development, Office of Policy Development and Research, "Is Manufactured Housing a Good Alternative for Low-Income Families? Evidence from the American Housing Survey," December 2004 at p. 6: "[T]he cost of manufactured housing, even for recent movers, is much lower than other alternatives, including renting."

[28] See, 42 U.S.C. 5401(b)(2): "The purposes of this title are – (2) to facilitate the availability of affordable manufactured homes and to increase homeownership for all Americans."

[29] "Freezing climates," not the variants utilized by HUD in its proposed IB, is the regulatory predicate set forth in 24 C.F.R. 3285.312(b) for the applicability of subsequent provisions, including 3285.312(b)(2) and (3).

[30] See, e.g., Draft Minutes, MHCC Meeting, December 12, 2016: MHCC member and Colorado State Administrative Agency (SAA) director "Rick Hanger said he was trying to understand what problems we are trying to solve. In Colorado, there are about 30,000 installations and there has been no feedback from HUD about any concerns regarding the installation practices." Id. at p. 5. MHCC member and North Carolina SAA Joseph Sadler stated that "in North Carolina ... most foundations are on piers that go below the frost line, and he has not seen any issues with frost heave." Id. at p. 3. See, e.g., Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016: MHCC member and Arizona SAA director Debra Blake stated "she is unaware of any issues that would prompt a change in regulation." See also, August 14, 2017 comments filed in the instant docket by Wisconsin Housing Alliance Executive Director Amy Bliss: "Just recently, I requested a list of all installation related home failures over the past several years from our State Administrative Agency. The answer came back that there were zero."

- "HUD did not agree with or accept the MHCC recommendation to delete the statement regarding the SEI/ASCE 32-01 standard *generally* providing the bases for acceptable engineering practice;"[31]

- "*In general,* the basis and design principals for acceptable engineering practice *should* be consistent with the provisions of the ASCE standard;"[32]

- "One of the reviewed FFF [frost free foundation] designs demonstrated an appropriate application of the HUD Code *and* ASCE 32 standard's technical requirement for frost protection of foundations. Thus it is possible to develop a compliant FFF design in accordance with acceptable engineering practice *or* ASCE 32;"[33]and

- "[M]ost of the reviewed alternative foundation designs including FFF designs were found to be not in conformance with the HUD Code *and* the ASCE 32 reference standard for frost-protection of shallow foundations;"[34]

(Emphasis added).

Similarly, the SEBA Report which, according to the proposed IB, "provides both a reference and technical basis for the guidance" contained in the IB,[35] broadly equates "acceptable engineering practice" with compliance with SEI/ASCE 32-01 and effectively conflates those terms, contrary to the clear and unequivocal disjunctive election provided by the existing regulation. That Report states, in relevant part:

- "For manufacturers, this includes ensuring designs comply fully with 24 Code of Federal Regulations (CFR) 3285, Model Manufactured Home Installation Standards (HUD Code) *and* applicable provisions of SEI/ASCE 32-01 (ASCE 32);"[36]

- "Thus a need exists to clarify requirements and provide guidance for proper and compliant application of FFF designs as an alternative to a conventional (frost depth) footing or a conventional FPSF [Frost Protected Shallow Foundation] design using insulation to protect against ground freezing *per the ASCE 32 standard*;"[37]
- "Manufacturers should require that design professionals ... develop foundation frost-protected installation methods that comply with applicable provisions of the HUD Code *and* ASCE 32;"[38]

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[31] See, 82 Federal Register, No. 118, supra at p. 28280, col. 3.
[32] Id. at pp. 28281-28282.
[33] Id. at p. 28281, col. 2.
[34] Id. at p. 28281, col. 3.
[35] Id. at p. 28282, col. 2.
[36] See, Attachment 2, hereto at p. 2.
[37] Id. at p. 4.
[38] Id. at p. 5.

- "Foundation frost-protection methods used for installation designs must comply with the HUD Code *and* the ASCE 32 standard;"[39] *and, most importantly*

- "The above items define important design considerations in ASCE 32 and also establish a standard of care that other alternative methods *must meet*...."[40]

(Emphasis added).

From these statements, set forth in the IB itself and in the SEBA Report, as the "reference and technical basis" for the IB:

(1) It is evident that the IB (notwithstanding the contrary self-serving assertions of the program administrator and program installation contractor),[41] rather than enunciating an "interpretation" of the existing standards, in fact changes their substance and meaning by replacing the current disjunctive "or" with a functional equivalence between the term "acceptable engineering practice" and SEI/ASCE 32-01, even to the point of pronouncing that the design "considerations" contained in SEI/ASCE 32-01 establish the relevant standard of care for designs professional preparing manufactured housing foundation designs of the type authorized by 24 C.F.R. 3285.312(b)(2) and (3). As such, the IB represents an abuse of the statutory and regulatory processes for the promulgation of interpretative bulletins and should be withdrawn.

In relevant part, section 3282.113 of HUD's manufactured housing Procedural and Enforcement Regulations authorizes the Secretary to "issue interpretative bulletins interpreting the standards under the authority of section 3280.9 of this chapter or interpreting the provisions of this part." To the extent that the proposed IB fails to "interpret" the existing standard but, instead, substantively modifies that standard, it violates the authority provided by this section.

(2) The IB, by conflating the regulatory term "acceptable engineering practice" with SEI/ASCE 32-01 -- *in particular*, stating that SEI/ASCE 32-01 "generally provid[es] the bases for acceptable engineering practice" -- violates the fundamental regulatory predicate for an IB, in that, rather than "clarifying" the meaning and requirements of 24 C.F.R. 3285.312(b)(2) and (3) – which were already clear to begin with – the proposed IB instead renders the current disjunctive election vague, ambiguous, indefinite and uncertain, while federal law provides for the imposition of civil and potentially criminal penalties on any regulated party that happens to guess incorrectly what this purported "guidance" is actually supposed to mean or require.

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[39] Id. at p. 6.

[40] Id. at p. 19.

[41] See, e.g., Draft Minutes, MHCC Regulatory Subcommittee Meeting, November 28, 2016: "DFO Danner said this is an interpretation of a regulation and there is not anything new;" "Michael Henretty said a cost analysis has not been done because there is no change to the regulation." Id. at p. 2, 6.

In relevant part, 24 C.F.R. 3280.9 (referenced in section 3282.113) states that: "Interpretative Bulletins may be issued for the following purposes: (a) to clarify the meaning of the standard; and (2) to assist in the enforcement of the standard." (Emphasis added). To the extent that the proposed IB fails in any way to "clarify" the relevant standard-- the essential and fundamental predicate of this provision -- instead rendering the clear disjunctive election of the current standard vague and ambiguous, the IB violates the express terms and purpose of 24 C.F.R. 3280.9 and should be withdrawn.

It should be noted, moreover, that HUD, in fact, lacks the legal authority to issue an Interpretive Bulletin with regard to any federal installation standard promulgated under 24 C.F.R. 3285. Section 604 of the Manufactured Housing Improvement Act of 2000 states that "the Secretary may issue interpretative bulletins to clarify the meaning of any Federal manufactured home construction and safety standard [24 C.F.R. 3280] or Procedural and Enforcement Regulation [24 C.F.R. 3282]." Insofar as HUD chose to codify its federal installation standards as a separate Part 3285, outside of the Part 3280 Federal Manufactured Home Construction and Safety Standards, federal law provides no basis or authority for the promulgation of any such IB purporting to construe a Part 3285 standard. Accordingly, this entire proceeding is ultra vires based on this ground alone.

(3) The IB, by "generally" equating "acceptable engineering practice" with compliance with SEI/ASCE 32-01 and simultaneously stating in the SEBA Report that "design considerations in ASCE 32 ... establish a standard of care that other alternative methods must meet," not only renders definitive disjunctive election of the current standard vague and ambiguous, but creates a de facto liability trap for design professionals which will effectively ensure that manufactured housing foundation designs developed by those professionals will not deviate from the significantly more costly prescriptive mandates of the SEI/ASCE 32-01 standard.

By equating the regulatory term "acceptable engineering practice" with SEI/ASCE 32-01, and asserting that SEI/ASCE 32-01 establishes the "standard of care" for "other alternative [foundation] methods" – i.e., designs based on "acceptable engineering practice," and setting forth that equivalence in a regulatory statement carrying the force of law, any design professional deviating from SEI/ASCE 32-01 (or approving of such a deviation, including the employer of any such person) would inevitably face a claim of negligence per se in any litigation arising from the alleged failure of any such design. "Negligence per se" is defined as: "negligence due to the violation of a law meant to protect the public, such as a speed limit or building code. Unlike ordinary negligence, a plaintiff alleging negligence per se need not prove that a reasonable person should have acted differently -- the conduct is automatically considered negligent, and the focus of the suit will be over whether it

> proximately caused damage to the plaintiff."[42](Emphasis added). The ultimate predictable result of the proposed IB, therefore, will be to shift all manufactured home "frost-free" foundation designs and installation practices to those mandated by SEI/ASCE 32-01, thereby substantially increasing regulatory compliance costs for both industry members and consumers, ignoring relevant objections from the MHCC and program stakeholders, and promulgating a de facto amendment to the relevant standards based on a false predicate.

Beyond these issues, and as noted above, herein, the HUD program has offered no specific evidence of manufactured home foundation failures as a result of frost heave as an objective basis and showing of need for this de facto regulation, nor has HUD, SEBA or SEBA's contractor provided any information indicating, analyzing or demonstrating the cost and cost-effectiveness of this de facto regulation, in violation of the specific requirements of the Manufactured Housing Improvement Act of 2000.[43]

Furthermore, as MHARR has previously asserted, the proposed IB is part of a HUD program power grab – in violation of the Manufactured Housing Improvement Act of 2000 – to dictate installation standards in all 50 states.

Specifically, the installation provisions of the 2000 reform law, together with mandatory dispute resolution mechanisms, were adopted to close significant gaps in the original National Manufactured Housing Construction and Safety Standards Act of 1974, as construed by HUD. Although the manufactured housing industry has always supported sound consumer protection and the safe and proper installation of manufactured homes (which had been at the root of the overwhelming majority of consumer complaints prior to the 2000 law), HUD determined, early-on that it would not address the installation of manufactured homes under the 1974 law, because the law did not include express authorization for such standards. Recognizing, however, that proper installation is crucial: (1) to the proper performance of a manufactured home; (2) to the value of that home to its owner and consumer finance providers; and (3) to public and government acceptance of manufactured homes as legitimate "housing," rather than "trailers," the industry and consumers worked for nearly 12 years, together with other stakeholders, to develop the installation provisions ultimately included in the 2000 reform law.

The result was a statutory structure, based on the 1994 recommendations of the National Commission on Manufactured Housing, which authorized any state that wished to do so (i.e., a "complying" state), to establish (or continue) a state-law installation program and state-law installation standards, so long as those requirements provided protection that met or exceeded the "protection" provided by baseline federal standards to be developed by the MHCC. HUD, by contrast, was authorized to regulate installation only in non-complying (i.e., "default") states that failed to adopt a state-law installation program within five years of enactment of the 2000 law.

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[42] See, Cornell University Law School on-line legal dictionary.

[43] See, 42 U.S.C. 5403(e)(4) and (5): "[T]he Secretary, in ... issuing interpretations under this section, shall -- *** (4) consider the probable effect of such standard on the cost of the manufactured home to the public; and (5) consider the extent to which any such standard will contribute to carrying out the purposes of this title."

This structure was consistent with the nearly-universal view of program stakeholders that varying soils and other installation-related conditions in different geographical areas made states the best and most appropriate party to regulate the siting of manufactured homes. The 2000 reform law, consequently, allows states to take the lead role in the regulation of installation, with HUD assuming that duty only in default states that fail to adopt and implement a conforming state-law program.

What the 2000 reform law does not do, however -- again recognizing, as it does, the unique competence and ability of the states and state authorities to determine proper installation systems and techniques within their own borders – is authorize or direct HUD to substitute its judgment for that of state authorities regarding the specific details and elements of any given state installation standard. Put differently, the 2000 law allows HUD to determine whether a state-law installation program and state-law installation standards as an integrated "whole" provide consumers with a level of protection equal-to-or-greater-than the HUD standards, but does not provide back-door authority for HUD to micro-manage state-law programs and/or standards or over-ride state judgments regarding the need for -- or content of -- any specific installation requirement or standard.

Nevertheless, at the October 26, 2016 MHCC meeting, the HUD program administrator, under direct questioning by MHARR as to what exactly the SEBA Report constituted and whether the unilateral changes to the 3285.312(b) "Footings" standard contained in that Report would be applicable in all states, stated that the mandates contained in the SEBA Report, effectively changing the 3285.312(b) federal standard – and now incorporated within the HUD proposed IB, would be applied to – and required to be enforced – in all states, including current HUD-approved states with state-law installation standards and programs.

This action, if permitted to go forward by the Trump Administration, would establish a destructive precedent – in violation of the 2000 reform law and the federal-state partnership created by the original National Manufactured Housing Construction and Safety Standards Act of 1974 – that would empower HUD dictate the specific content and specific requirements of state-law installation standards and programs, thereby over-riding state law and decisions made by state authorities acting under state law, by the simple expedient of unilaterally changing its "interpretation" of the federal "model" installation standards. HUD would thus have the power to unilaterally impose new and additional mandates on the states that ultimately would either bankrupt state programs or force state programs out of the installation regulation structure through financial and budget pressures that state governments would simply be unwilling to accept. And for every state that drops a state-law installation program, more power, authority, and revenue would be diverted to unaccountable HUD program contractors.

This HUD attack on the primacy of state-based installation regulation, would – if allowed to go forward – not only undermine the federal-state partnership mandated by Congress, but would impose high-cost, prescriptive, one-size-fits all installation mandates with no showing of need, necessity or cost-effectiveness, in violation of the 2000 reform law. Given such destructive and predictable consequences – particularly in the absence of any showing of objective need for the proposed IB -- there is no legitimate basis for the proposed IB's promulgation and it should be withdrawn.

3. HUD's Proposed IB Violates EO 13777 and Should be Withdrawn

On February 24, 2017, President Trump issued Executive Order (EO) 13777 ("Enforcing the Regulatory Reform Agenda"). In relevant part, EO 13777 provides:

> "Section 1. Policy. It is the policy of the United States to alleviate unnecessary regulatory burdens placed on the American people.
>
> ***
>
> Section 3 Regulatory Reform Task Forces *** (d) Each Regulatory Reform Task Force shall evaluate existing regulations ... and make recommendations to the agency head regarding their repeal replacement or modification, consistent with applicable law. At a minimum, each Regulatory Reform Task Force shall attempt to identify regulations that: (i) eliminate jobs or inhibit job creation; (ii) are outdated, unnecessary or ineffective; (iii) impose burdens that exceed benefits; [or] (iv) create a serious inconsistency, or otherwise interfere with regulatory reform initiatives and policies.

(Emphasis added).

In June 7, 2017 written comments submitted to HUD pursuant to a May 15, 2017 HUD "Notice and Request for Comment" concerning the implementation of EO 13777 by and within the Department, MHARR called, among other things, called for the proposed IB (I-1-17) to be "terminated pursuant to EO 13777." In relevant part, MHARR stated that "HUD's intentional distortion and misapplication of the installation mandate of the 2000 reform law – seeking to undermine, restrict and ultimately abolish the legitimate role and authority of the states as established by Congress, will result in significant harm for the industry and consumers, and impose needless and excessive regulatory compliance costs."[44] In order to "alleviate unnecessary regulatory burdens" that would be "placed on the American people" under the proposed IB, with no evidence of need or justification whatsoever, the proposed IB, again, for this sufficient and necessary reason, should be withdrawn in its entirety.

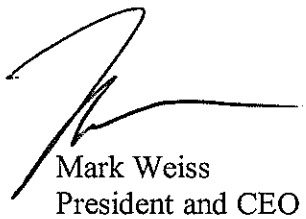
II. CONCLUSION

For the reasons set forth above, MHARR strenuously opposes the HUD proposed IB as a blatant abuse of the manufactured housing program's regulatory authority and the specific procedures of the 2000 reform law relating to the development and use of Interpretive Bulletins. The proposed IB, with its needless imposition of substantial additional costs on smaller industry businesses and lower and moderate-income manufactured homebuyers, constitutes a direct violation of the express terms and policies enunciated in President Trump's Executive Orders concerning government-wide regulatory reform and the imposition of unnecessary regulatory costs on American consumers and American businesses. Furthermore, the proposed IB is part of a pattern of unnecessary and unnecessarily costly regulatory expansion and intensification during

[44] See, Attachment 10, hereto at pp. 16-17.

the nearly four-year tenure of the current program administrator, which has consistently imposed baseless new regulatory burdens on lower and moderate-income manufactured housing consumers and smaller industry businesses, while benefiting only HUD program contractors and industry competitors. Accordingly, and as explained herein, the proposed IB should be withdrawn in toto.

Sincerely,



Mark Weiss
President and CEO

cc: Hon. Benjamin Carson
Hon. Paul Compton, Esq.
Hon. Tim Scott
Hon. Sean Duffy
Hon. Mick Mulvaney (OMB)
Ms. Neomi Rao (OMB/OIRA)
HUD Code Industry Members

Manufactured Housing Association for Regulatory Reform

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June 29, 2017

VIA FEDERAL EXPRESS

Hon. Dr. Benjamin Carson
Secretary
U.S. Department of Housing and Urban Development
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: HUD Manufactured Housing Program -- Proposed Interpretive Bulletin I-1-17

Dear Secretary Carson:

In an order issued on January 20, 2017, White House Chief of Staff Reince Priebus directed the heads of all federal agencies to "send no regulation" to the Federal Register for publication "until a department or agency head appointed or designated by the President after noon on January 20, 2017 reviews and approves the regulation." By its express terms, this regulatory "freeze" directive applies not only to proposed and final agency rules, but also to "any agency statement" that constitutes "an interpretation of a statutory or regulatory issue." (Emphasis added).

On June 21, 2017, the HUD manufactured housing program published a proposed "Interpretive Bulletin" (IB) in the Federal Register (copy attached), concerning requirements for the use of "frost-free" and "frost-protected" foundations in "freezing climates" under section 3285.312(b) of HUD's federal manufactured home installation standards for states without a HUD-approved state-law installation program. This "Interpretive Bulletin" -- which is expressly subject to notice and comment rulemaking procedures under the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended by the Manufactured Housing Improvement Act of 2000 and is clearly covered by the Administration's order of January 20, 2017 -- was issued over the signature of HUD "General Deputy Assistant Secretary for Housing, Genger Charles," who, our research indicates, has held that position since 2016 and is, apparently, an Obama Administration holdover, still serving at HUD (as is the current Administrator of the HUD manufactured housing program, Ms. Pamela Danner).

The proposed IB, as published, is fatally-flawed and unacceptable to the industry on multiple grounds, including, but not limited to the following:

1. It constitutes a flagrant abuse of the "Interpretive Bulletin" process, in that it substantively and significantly alters, changes and amends the existing standard (24 C.F.R. 3285.312(b)), which it purports to "interpret;"

2. It rejects key substantive recommendations of the Manufactured Housing Consensus Committee (MHCC) a committee of HUD manufactured housing program stakeholders established by Congress as a central reform of the Manufactured Housing Improvement Act of 2000; and

3. The program (through the program Administrator) has stated its intent to impose this major substantive change to an existing standard -- by fiat – on states with state-law installation standards and programs that have already been approved as compliant by HUD. This position – that HUD can impose installation requirements on states with existing state-law manufactured housing installation standards by the simple expedient of changing the program's "interpretation" of parallel federal installation standards -- has never been previously asserted by HUD in the 17 years since the enactment of the 2000 reform law, and would crucially undermine the role and authority of those compliant states in violation of the 2000 reform law.

In short, the proposed IB represents a major substantive change to the HUD installation standards, that: (1) has not been shown to be justified or warranted; (2) will significantly and needlessly increase costs borne by consumers; and (3) will substantively alter, damage, and ultimately undermine the fundamental relationship between HUD and the states, with no indication whatsoever that this major action has ever been reviewed or approved by a Trump Administration official or appropriate designee, as required by the regulatory "freeze" order of January 20, 2017.

Accordingly, we ask that HUD disclose: (1) whether the proposed IB was reviewed and approved by a Trump Administration official or designee appointed after Noon on January 20, 2017, as required by the regulatory "freeze" order; (2) if, so which official(s) or designee(s) reviewed and approved the proposed IB; and (3) whether any such official(s) or appointee(s) was aware of the issues identified in paragraphs (1) - (3), above.

Absent such (informed) approval, in accordance with President Trump's order of January 20, 2017, we ask that HUD withdraw the proposed IB in toto, until the responsible appointee or designee can be fully informed by MHARR (and other affected stakeholders) on the dire implications of this proposal for consumers, the states, and the industry, and any resulting proposed IB can be reviewed and approved in full accordance with the President's order of January 20, 2017.

Sincerely,

Mark Weiss
President and CEO

SEBA Professional Services, LLC
Management Consultants and
Financial Advisors

Manufactured Home Foundations in Freezing Climates

An Assessment of Design and Installation Practices For Manufactured Homes in Climates with Seasonally Frozen Ground

Prepared by: SEBA Professional Services, LLC

For

The U.S. Department of Housing and Urban Development,
Office of Manufactured Housing Programs
Under Contract #DUI00H-14 -C-04

Table of Contents

EXECUTIVE SUMMARY

The primary purpose of this report is to provide guidance on the installation of "frost-protected shallow foundations" (FPSF) and "frost-free foundations" (FFF) for new manufactured homes in frost-susceptible climates. There are important issues with current frost-protected foundation designs that must be considered and addressed when installing a new manufactured home within any state where soil is susceptible to frost heave. The detailed findings on reviewed designs are provided in the Engineering Assessment Report located in Appendix A.

The primary requirements for consideration in any frost-protected foundation, include:

- clarity of technical requirements,
- definite criteria for determining soil frost susceptibility and soil moisture sub-surface drainage conditions, and
- guidance on water table depth to determine if the site is suitably well drained.

Additionally, it is necessary to provide guidance on appropriate site-specific adjustments of details such as depth of non-frost-susceptible soil, fill layers and the layout of sub-surface drainage. Clarification and accuracy of roles during the site testing and installation process also plays an important part in ensuring that frost-protected foundation designs are acceptable. Most reviewed designs failed one or more of these requirements.

Per these requirements, each organization involved in the process of foundation design, approval, and installation has responsibilities that must be met. These responsibilities are described in more detail later in the report.

- For manufacturers, this includes ensuring designs comply fully with 24 Code of Federal Regulations (CFR) 3285, Model Manufactured Home Installation Standards (HUD Code) and applicable provisions of SEI/ASCE 32-01 (ASCE 32). Installation instructions that rely exclusively on surface drainage must be terminated or immediately revised and all instructions should inform installers that prior to beginning the installation, a site-specific soil test is required to determine soil frost susceptibility.

- Retailers must provide consumers with a copy of the consumer disclosure and verify that the installations are performed only by licensed installers. Additionally, retailers must notify HUD of any new manufactured home sales within or into a HUD-administered state.

- Design professionals and Design Approval Primary Inspection Agencies (DAPIAs) must comply with all aspects of the HUD Code as provided in 24 CFR 3285 as well as the ACSE 32 standard. Designs that rely on surface drainage exclusively or do not specify the means of assessing frost susceptibility of soils and their sub-surface drainage characteristics must be disapproved. Additionally, design and installation responsibilities may not be delegated to local regulatory authorities.

- Installers, if installing a new home on a site that has conditions not covered in the manufacturer's installation instructions or the engineered foundation plan, should bring the site conditions to the engineer of record or any licensed architect or engineer. Once the plan is updated to address site conditions and sealed, it should be sent to the manufacturer and its DAPIA for approval as well as the Local Authority Having Jurisdiction (LAHJ). Installers should not use any design that has them take on the responsibility of assessing frost susceptibility and sub-surface drainage conditions without proper soil analysis.

- Regulatory officials and inspectors should categorically reject installation plans that require them to take on any aspect of design responsibility. If a site is claimed to have soil that is not frost susceptible or soil that is well-drained, evidence must be provided. Installation plans should be available on-site during inspections. If these plans are not available, the home cannot pass inspection. In areas where no set local frost depth is determined, the depths corresponding with the Air Freezing Index (Figure 1) should be used. Installation rules in both states and local municipalities should be compared to the ASCE 32 standard and HUD Code to ensure conformity.

INTRODUCTION

Engineered Foundations Designs (EFD) including frost-protected shallow foundations (FPSF) and "frost-free foundation" (FFF) variant as implemented for some manufactured housing installations, have great appeal and potential in freezing climates as a cost-effective means of installing manufactured homes on seasonally-frozen ground. Understandably, their use has been promoted and increased in recent years as a means for reducing manufactured housing installation costs when compared to using conventional or proprietary foundation support systems in freezing climates. However, some key factors important to their long-term and consistent success require special considerations that are often neglected, particularly for FFF designs and installations. These factors include appropriately engineered installation details, site investigation practices, and verification procedures to ensure that important design conditions are actually being achieved in practice.

PURPOSE

Given the concern described above, this report was developed for the purpose of clarifying requirements and providing practical guidance for the manufactured housing industry when designing or setting foundations for a manufactured home in locations with freezing climates with seasonal ground freezing. This guidance is intended for first-time installations, not replacement installs when current foundations exist on site.

FINDINGS

In support of this report's purpose, a selection of representative FFF designs in current use were reviewed for consistency with the HUD code, the SEI/ASCE 32-01 (ASCE 32) standard titled *Design and*

Construction of Frost Protected Shallow Foundations, and generally accepted engineering practice. These reviews and additional technical information (including terminology and technical references) are included in an engineering assessment report located in Appendix A. Thus, Appendix A provides the technical basis for the guidance and recommendations included herein. FPSF designs were also reviewed, however, fewer issues were identified than were found with the FFF variants.

A summary of key findings from the engineering assessment in Appendix A is as follows:

- One reviewed FFF design demonstrated an appropriate application of the HUD code and ASCE 32 standard's technical requirements for frost protection of foundations. Thus, it is possible to develop a compliant FFF design.
- All other reviewed FFF designs contained a number of flaws or non-conformances, including:
    - A lack of clarity of technical requirements in manufacturer installation instructions, details, and notes
    - Missing or vague criteria for identification and measurement of soil frost susceptibility
    - Missing or vague guidance for determining soil moisture, sub-surface drainage conditions, and water table depth in relation to determining if the site is "well drained" and suitable for an FFF installation.
    - Missing guidance to direct appropriate site specific adjustments of important installation details (e.g., depth of non-frost-susceptible soil or fill layers and lay-out of sub-surface drainage when required).
- All of the FFF installation designs reviewed showed a pattern of confused roles and responsibilities, often assigning design decisions and site engineering evaluations to local regulatory officials who are typically neither qualified nor trained in foundation engineering or soil mechanics and engineering. Furthermore, they are not charged for such responsibilities because it may pose a conflict of interest (i.e., enforcers making design and construction decisions or judgments on matters they will be enforcing) and a potential conflict with state engineering practice laws (i.e., conducting engineering or design activities for which they are not licensed). Consequently, this practice can lead to an incorrect selection of the proper foundation and drainage system for the site.

Consequently, most of the reviewed FFF designs were found to be not in conformance with the HUD Code and the ASCE 32 reference standard for frost-protection of shallow foundations. In addition, one state's installation rules were reviewed and provisions related to FFF design and installations were found to be similarly non-compliant. Thus, a need exists to clarify requirements and provide guidance for proper and compliant applications of FFF designs as an alternative to a conventional (frost depth) footing or a conventional FPSF design using insulation to protect against ground freezing per the ASCE 32 standard.

RECOMMENDATIONS

Recommendations to resolve the problems with FFF designs all relate to technical and procedural conformance issues identified in the previous section. These issues necessarily involve designers, DAPIAs, manufacturers, installers, and regulatory authorities. The most important factor in reducing problems is a properly designed installation instruction giving appropriate direction and details for

installers to implement and regulatory officials to verify and inspect. Because this over-arching concern is applicable to all methods of installation related to foundation frost-protection, specific recommendations and guidance for various design and installation options are provided in the next section.

Recommendations for Manufacturers

Manufacturers should require that design professionals who submit plans to them for approval, as required by 24 CFR Part 3285.2 (c) (1) (ii), develop foundation frost-protection installation methods that comply with applicable provisions of the HUD Code and ASCE 32. To ensure consistent and effective conformance, options with detailed guidance for compliant designs are provided in the next section and should be followed. These directions should also be incorporated into their Manufacturer Installation Instruction manual as required by 24 CFR Part 3285.2 (c)(2).

- Current FFF installation instructions that rely exclusively on surface drainage as a means of foundation frost-protection should be terminated or immediately revised in accordance with the previous recommendation.

- Manufacturer installation instructions for FFF designs need to indicate that, prior to commencement of installation, a site-specific soil test is required in order to determine if the site soil is non-frost-susceptible and that the soil is "well-drained" with a water table depth consistently and sufficiently below the frost line. Specific requirements are presented in the installation practices section of this paper.

- Manufacturer installation instructions should indicate that a ground water assessment needs to be done prior to commencement of installation. If there appears to be a situation where the ground water is within 2 feet of the bottom of the foundation then an engineered design must be used.

- Manufacturer's installation instructions need to identify what steps need to be taken to confirm that the site is non-frost-susceptible. If a soil test is not done to prove that the soil is non-frost susceptible, then the site must be assumed to be frost susceptible and must be developed accordingly, as such tests must be done prior to commencement of installation.

To facilitate installations in locations subject to freezing, manufacturer instructions should have at least one example of an acceptable foundation system for frost and non-frost susceptible soil conditions for use in freezing climate locations. These designs must have a design professional's seal, and if not previously part of the manufacturer's instructions, be approved by the manufacturer and its Design Approval Primary Inspection Agency (DAPIA). These plans can be a supplement to the manual and should also be available as an electronic PDF.

It is recommended that manufacturers make an updated copy of their manufactures installation instructions with the supplements available in electronic format as part of the sale process. This will

greatly decrease mistakes made in installing the foundations before the owners and installers have a copy of the manufactures instruction manual.

Retailers-and Park Owners

Retailers and park owners operating as retailers must provide buyers with a copy of the required consumer disclosure which indicates that new manufactured homes must be installed by licensed installers and must verify and employ only installers that have the proper licenses and training to install manufactured homes within the state of each home's installation.

It is also recommended that an electronic copy of the manufacturer's instruction manual and foundation details be available at the time of the sale to purchasers to evaluate any foundation options before the home is delivered and before installation begins.

In HUD Administered Installation States, retailers and park owners acting as retailers must notify HUD of the certification and location of each home installation (HUD 306 form) and each installation must be inspected by a qualified inspector (see 24 CFR § 3286.511(a)) and the acceptability of the inspection verified on a HUD approved inspection form (HUD 309 form).

Recommendations for Design Professionals and DAPIAs

Foundation frost-protection methods used for installation designs must comply with the HUD Code and the ASCE 32 standard. To ensure consistent and effective conformance, options with detailed guidance for development of compliant designs and for DAPIA review and approval are provided in the next section, Conformance Options for New Designs and Future Installation Practices.

FFF installation designs that rely exclusively on surface drainage as a means of foundation frost-protection are not acceptable. Any existing installation designs of this type should be removed for use and revised by the engineer of record and DAPIA approval withdrawn.

FFF installation designs that do not specify appropriate means of assessing the frost-susceptibility of soils and their sub-surface drainage characteristics on a site-specific basis need to be removed from use and DAPIA approval withdrawn.

FFF installation designs that assign design responsibilities to local regulatory authorities, such as assessing site drainage, water table depth, or soil frost-susceptibility are also not acceptable and need to be disapproved.

Recommendations for Installers

When installing a new home on a site that has conditions not covered in the manufacturer's instruction manual provided by the manufacturer, or the engineered foundation plan, the special site conditions should be brought to the attention of the engineer of record. If there is no engineer of record, a licensed engineer or licensed architect should be retained to evaluate the conditions and then design a plan to

install the home. Once this plan is finalized and sealed, it must be sent to the manufacturer and its DAPIA for approval per 24 CFR Part 3285.2(c)(1)(ii). The plan should also be submitted to the Local Authority Having Jurisdiction (LAHJ) for approval if applicable. Refer to the next section for guidance on compliant installation instructions and installation practices.

Manufactured homes must not be installed using FFF installation plans that rely exclusively on surface drainage as a means of frost protection.

Installers should never initiate a FFF installation where the instructions requires them to take on design responsibility of assessing soil frost-susceptibility and sub-surface drainage conditions without proper soil testing and analysis. Instead, installers should verify that appropriate soil testing and site assessment for use of a FFF design has been completed prior to initiating an installation. Refer to the next section for guidance.

Prior to installation of an engineered system that is not included in the manufacturer's installation instructions, installers need to verify that the installation plan is stamped by an engineer of record as well as approved by the manufacturer and its DAPIA. A LAHJ may require that the plans be reviewed and sealed by an engineer or architect that is licensed in the state where the installation is occurring.

Recommendations for Local Regulatory Officials and Inspectors

Regulatory officials and inspectors should reject installation plans that require them to execute a design responsibility such as assessing the subsurface drainage, water table depth, or frost-susceptibility of soils on a given site. Freezing-climate installation plans that rely exclusively on surface drainage as a means of frost protection should not be approved by local regulatory officials.

Where a site is claimed to have non-frost-susceptible soils or soils that are "well-drained" as a basis for setting foundation pads or footings above the design frost depth, evidence should be required including soils tests and site sub-surface drainage and groundwater investigation by a qualified laboratory or professional. Single site soil samples can be taken by a HUD Licensed Manufactured Home Installer in HUD administered states with the soil tests done by an accredited lab.

Regulatory officials should assure that the approved installation plans and the manufacturer installation instructions are on site and available during inspections. If approved installation plans are not available and on site during inspections, the home cannot pass inspection.

Local regulatory officials should consider permitting design frost depths to be determined in accordance with Option #1 in the next section. In areas where no set local frost depth is determined, the frost depths from the Air Freezing index (see Figure 1 and Table 1) should be used.

State and local installation rules should be reviewed and corrected as necessary to ensure conformity with the ASCE 32 standard and the HUD code 24 CFR, Part 3285.312(b).

OPTIONS FOR NEW DESIGNS AND FUTURE INSTALLATION PRACTICES

OPTION #1: Checklist for Conventional Footings in Freezing Climates
HUD Code, 24 CFR Part 3285.312(b)(1)

- Obtain the local-design frost depth for footings from one of the following:
  - The local authority having jurisdiction (LAHJ),
  - Use Table 1 with the site's Air-Freezing Index (AFI) from Figure 1[1], or
  - Consult with a registered professional engineer, registered architect, or registered geologist.

- When using Table 1 and Figure 1 to determine frost depth for footings, the depth of interior pier footings complying with footnote (b) of Table 1 may be taken as one-half the depth required in Table 1 with approval of the LAHJ.

- Based on the required frost depth for footings, dig the footing to the frost depth.

- Check the soil bearing at depth of the footing with a torque probe, pocket penetrometer or other suitable testing device.

- Based on the tested soil bearing value, properly size the footing according to the manufacturer's installation instructions or use Table to 24 CFR Part 3285.312 in the HUD Code.

- Place footing pads and construct piers or supports at locations specified in accordance with the manufacturer's installation instructions.

- Backfill as needed and grade the site as required for drainage:
  - Crown the finish grade at the centerline of the foundation
  - Slope grade a minimum of ½-inch per foot for a minimum distance of 10 feet away from the home perimeter.

[1] A list of AFI values for various states and counties can be found in the 2015 International Residential Code (IRC), Table R403.3(2), published by the International Code Council, Inc., and used as the model building code for most states.

TABLE 1. DESIGN FROST DEPTH FOR FOOTINGS[a]

AIR-FREEZING INDEX [See Figure 4]	MINIMUM DEPTH[b] (inches)
≤ 50	3
250	9
350	12
500	16
1000	24
1500	32
2000	40
2500	45
3000	52
3500	57
4000	62
4250	65

a. These design frost depths are intended to be used for protection of building foundations against frost heave and are not applicable to site or street utilities or other non-building applications.

b. These design frost depths for footings shall be permitted to be halved for footings interior to the building perimeter and located within an enclosed space. Where skirting is used to enclose the space, the skirting shall be insulated to a minimum R-5 (1000 to

2500 AFI) or R-10 (>2500 AFI) and vents shall be capable of automatically closing at outdoor temperatures below 40 deg F (which necessitates use of a ground vapor barrier).

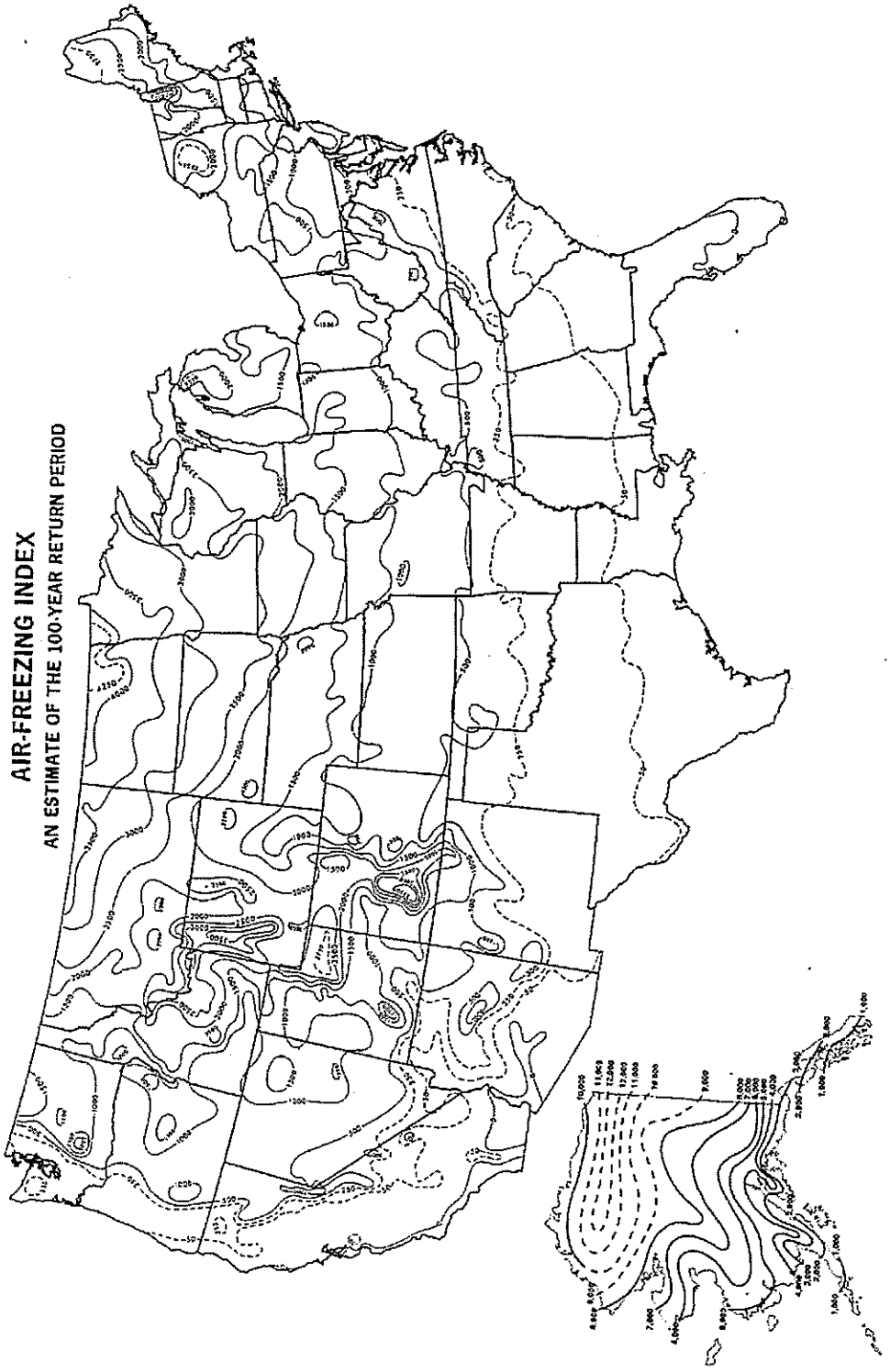

Figure 1. U.S. Air Freezing Index Map (based on Steurer, 1989 and Steurer and Crandell, 1995)

OPTION #2: Checklist for Monolithic Slab Systems in Freezing Climates ("Frost Free Footing")
HUD Code, 24CFR Part 3285.312(b)(2)

Pre-Installation Preparations:

- Before initiating installation, verify that the installation instructions are designed (sealed) by a registered professional engineer or registered architect, approved by the manufacturer and its DAPIA. The LAHJ can require that the plans also be reviewed and sealed by an engineer or architect in the state where the installation is to occur.

- Verify that the LAHJ has accepted and approved the foundation and installation plan and all applicable permits are obtained. An approved installation design needs to comply with one of the following conformance options for the proposed installation design as permitted in the HUD Code:

    - Complies with SEI/ASCE 32 standard by use of non-frost-susceptible fills or existing soils (adequately tested and verified as such as defined in SEI/ASCE 32) and that such fills or soils extend to the local frost depth with provision for adequate surface drainage and, in addition, subgrade drainage where underlying soils are poorly drained and/or the water table is within two feet of the design frost depth.

    - Complies with accepted engineering practice to prevent the effects of frost heave in a manner equivalent to the SEI/ASCE 32 standard. Equivalent alternative accepted engineering practices include: (1) the specification of an alternative criteria for testing the frost susceptibility of soils (e.g., different fines content allowances based on substantiating data), and (2) different frost depth determination based on thermal modeling of the climatic, soil, and foundation conditions.

      NOTE: Reliance solely on surface drainage to prevent frost heave without verification of non-frost-susceptible fill materials or existing non-frost susceptible soils to frost depth does not comply with the SEI/ASCE 32 standard or HUD Code's allowance for "acceptable engineering practice to prevent the effects of frost heave."

- For designs that rely on well-drained sites and use of existing soils to frost depth that are non-frost susceptible, verify the following before initiating installation:

    - The non-frost-susceptible condition of existing soils above the frost depth (and below the base of the proposed slab) have been tested in accordance with ASTM D442 and determined to have a fines mass content of less than 6% passing a #200 sieve for the specific installation site or the development as a whole. A soils report should be provided by the engineer or soil lab of record for verification.

- Alternatively, conduct or contract such testing as follows:
  - Obtain a minimum of two soil samples per installation site (one at each end of the foundation area) and from any borrow materials on site used as fill. A materials report from a quarry may be used when material is supplied from a licensed quarry.
  - When conducting borings for soil samples, take a minimum of one pint (plastic bag full) of soil from depths of one foot and at the locally prescribed frost depth or as determined from Table 1, Design Frost Depth for Footings. Continue each boring to two feet below the locally-prescribed frost depth (as measured from the proposed finish grade) to determine if the water table is present.
  - Deliver or send the soil samples to a soils lab for particle size testing per ASTM D442.
  - If the soils lab report indicates greater than 6% fines by mass passing a #200 sieve then the soil at the site is frost susceptible and either footing to frost depth or one of the alternative foundation options (see Appendix C) for frost susceptible soil conditions must be used.
- The water table condition of the site has been assessed by the engineer of record and documentation provided of the water table being at least two feet below the local frost depth. Alternatively, make this determination using soil borings as described above.
- If the water table is higher than two feet below the local frost depth, a network of drainage pipes sloped to drain to daylight must be placed at the base of non-frost-susceptible fill (e.g., clean gravel or crush rock) placed to a depth equal to the local frost depth.
- Alternatively, a site specific foundation design can be prepared and sealed by a professional engineer or registered architect and approved the manufacturer and it's DAPIA.
- Save documentation of all of the above and provide to the LAHJ for verification.

- For designs that rely on well-drained sites and use of fill materials to frost depth that are non-frost susceptible, verify the following before initiating installation:
  - The slab base and foundation fill materials are specified by the engineer of record as non-frost susceptible such as clean gravel or crushed rock or other suitable material with no more than 6% fines by mass passing a #200 sieve per ASTM D442 test method. Order subgrade materials accordingly and in an amount required to fill from the frost depth to the slab base for the entire extent of the slab plus any over dig.

- The water table condition of the site has been assessed by the engineer of record and documentation provided of the water table being at least two feet below the local frost depth. Alternatively, make this determination using soil borings as described above.
    - If the water table is higher than two feet below the local frost depth, a network of drainage pipe sloped to drain to daylight must be placed at the base of non-frost-susceptible fill (e.g., clean gravel or crush rock) placed to a depth equal to the local frost depth.
- Save documentation of all of the above and provide to the LAHJ for verification.

Installation Phase:

- Excavate slab area to frost depth or only to the bottom of the slab's non-frost-susceptible base layer if existing soils have been determined to be non-frost susceptible down to frost depth during the pre-installation preparation phase (see above).

- Place foundation drains sloped to drain to daylight at the bottom of the non-frost-susceptible base or fill material layer.

- Place the non-frost-susceptible fill and base materials, compacting as required by the manufacturer's installation instructions and the engineer of record. Do not initiate fill placement where compaction requirements and methods are not specified. Obtain compaction requirements, as needed, from the engineer of record. The minimum requirement is 90% compaction per 24 CFR Part 3285.201 although an engineer or LAHJ may require a higher number based on the fill material used.

- Construct the reinforced monolithic slab in accordance with the manufacturer's installation instructions or according to the manufacturer and DAPIA approved plans.

- Backfill as needed and grade the site as required for drainage:
  - Slope grade a minimum of ½-inch per foot for a minimum distance of 10 feet away from the home perimeter.

NOTE: The above procedures also apply to designs where a monolithic slab is not used and pier footing pads are placed directly on non-frost-susceptible fill materials (e.g., clean gravel or crushed rock).

OPTION #3: Checklist for Insulated Foundations (Frost-Protected Shallow Foundation)
HUD Code, 24 CFR Part 3285.312(b)(3)

Pre-Installation Preparations:

- Before initiating installation, verify that the installation instructions are designed (sealed) by a registered professional engineer or registered architect, approved by the manufacturer and its DAPIA. A LAHJ may also require the plans to be reviewed and sealed by a licensed engineer or architect in the state where the installation is to occur.

- Also, verify that the plans have approved the installation design as complying with one of the following basis for the proposed installation design as permitted in the HUD Code:

  - Complies with SEI/ASCE 32 standard by use of properly-specified insulation materials and sized in accordance with the local climate and located around the perimeter of the foundation (including insulated skirting with vents capable of closing at temperatures below 40 degrees) or the entire foundation pad is

insulated where there is no skirting or the skirting is un-insulated or the skirting has non-closing vents. Non-frost-susceptible base materials are used at a minimum thickness required by SEI/ASCE 32, and insulation materials are protected against damage in accordance with SEI/ASCE 32.

- Complies with accepted engineering practice to prevent the effects of frost heave in a manner equivalent to the insulation provisions in the SEI/ASCE 32 standard. Equivalent alternative accepted engineering practices include: (1) the specification of an alternative insulation amounts based on dynamic thermal modeling of the climatic, soil, and foundation conditions specific to the site, and (2) alternative insulation materials or types with data substantiating long-term R-values in below-grade applications.

- NOTE: Designs which place insulation materials in a discontinuous fashion, such that exposed slab edges or other types of thermal bridging occurs, do not meet the requirements of the SEI/ASCE 32 standard or the HUD Code provisions that allow the use of "acceptable engineering practice to prevent the effects of frost heave."

- Order foundation insulation materials as specified in the installation instruction and verify the correct type is received. Commonly accepted insulation materials include Extruded Polystyrene (XPS) and Expanded Polystyrene (EPS) of various "types" in accordance with ASTM C578.

- Insulation material conformance with the specified type should be verified by product labels or a certification from the insulation manufacturer. Materials commonly stocked in supply stores may not be the correct "type" even though it may be the correct "kind" (e.g., XPS or EPS).

NOTE: There is no need to determine the frost susceptibility of underlying soils to frost depth in the insulated foundation design approach when the provisions of SEI/ASCE 32 are satisfied.

Installation Phase:

- Excavate the foundation area to the correct shallow foundation depth as indicated in the manufacturer's installation instructions or by the engineer of record (generally the foundation depth need not exceed 12" to 16" below finish grade).

- Place specified non-frost-susceptible base material and provide drainage pipes around the perimeter, at a minimum of 4 inches (within the base material layer) as required by the installation instructions. Pipes need to be day-lighted or have a mechanical means of draining the water (see detail in Appendix C).

- Sequence the foundation slab or pad construction and insulation placement in accordance with the design approach indicated on the manufacturer's installation instructions. Where sub-slab insulation is required this will need to be placed before slab construction. Perimeter insulation may be placed after slab construction (see detail in Appendix C).

- After construction of the slab and supports and placement of the home, construct the insulated skirting with automatically closing vents as required by the manufacturer's installation instructions. Where the foundation slab is entirely insulated with horizontal below ground insulation (the design does not rely on perimeter insulation only), no skirting is required. (See detail in Appendix C).

- Place wing insulation (extending outward horizontally underground from the perimeter of the foundation) as required by the installation instructions. Depending on the design approach and climate severity, wing insulation may or may not be required.

- Provide protection of any exposed exterior insulation or within 10 inches of the finish grade surface. (see detail in Appendix C)

- Backfill as needed and grade the site as required for drainage:
    - Slope grade a minimum of ½-inch per foot for a minimum distance of 10 feet away from the home perimeter.

CONCLUSION

A detailed review of several systems outlined in the report below indicate that many FFF designs and practices are not conforming to the requirements outlined in 24 CFR part 3285.312 and SEI/ASCE 32.01. This non-conformance is largely due to lack of consistency in design approaches, insufficient or nonexistent instructions in Manufacturers Installation Instructions related to FFF designs, the lack of understanding of best practices for installation site analysis and foundation installation, and an overreliance on localities that often do not possess officials with specialized knowledge of FFF designs and requirements. These shortcomings can be improved by establishing consistent, well-documented best practices and supplemental guidelines for the use of FFF designs.

APPENDIX A – ENGINEERING ASSESSMENT REPORT

Foundation Design for Manufactured Homes in Freezing Climates

An Assessment of Design and Installation Practices For Manufactured Homes in Climates with Seasonally Frozen Ground

FINAL REPORT

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INTRODUCTION

Foundation systems that do not require standard footings to below the frost line have great appeal and potential in colder climates as a cost-effective means of installing manufactured homes on seasonally-frozen ground. Understandably, their use has been promoted and increased in recent years as a means for manufactured housing installation using conventional or proprietary foundation support systems in colder-climates. However, key factors important to their long-term success require special consideration. These factors include appropriately engineered installation details, site investigation practices, and verification procedures to ensure that important design conditions are actually being achieved in practice.

For the purpose of this report, frost-free foundations (FFF) are distinguished in practice from a frost-protected shallow foundation (FPSF) even though both methods are based on the same design and construction standard, ASCE 32-01, *Design and Construction of Frost-Protected Shallow Foundations* (ASCE 32). The FFF relies exclusively on the presence of non-frost-susceptible subgrade materials (soil or fill) on a well-drained site. The FPSF relies exclusively on the use of foundation and below-ground insulation to protect the soil under the foundation (assumed frost-susceptible) from freezing, although a nominal amount of drainage is still required as a matter of good practice to provide a suitable environment for acceptable below-grade insulation materials and to also satisfy building code or HUD code requirements for foundation and site surface drainage.

Theoretically, frost protection can be achieved by removing any one of the three conditions required to support the occurrence of frost heave: (1) moist ground or a moisture source at depth below ground, (2) freezing temperatures within the ground, and (3) presence of fine-grained, frost-susceptible soils or fill materials. However, this should not be taken to imply that by simply removing any one of these factors an equally reliable design is achieved or that there are not important differences in execution to ensure an equivalent and consistent performance outcome. In short, differences in the proper execution of the different methods of frost protection affect the level of reliability achieved in practice.

For example, using the FPSF method, attention must be paid to proper specification and installation of foundation insulation in accordance with ASCE 32-01. Similarly, using the FFF method, care must be

taken to properly specify and confirm the non-frost-susceptibility of foundation sub-grade soils or fill materials. In both cases, but for different purposes and reasons or consequences, adequate drainage is required. In particular, the ASCE 32 standard requires in Section 4.2 that FFF designs, which rely primarily on subgrade non-frost-susceptibility rather than protection against freezing temperatures, must address the following criteria:

(1) "placed on a layer of well-drained undisturbed ground or fill material",
(2) the ground or fill material "is not susceptible to frost", and
(3) the non-frost-susceptible ground or fill layer must extend to the "design frost depth".

The proper execution of the above criteria require a proper understanding of:

1) The meaning of "well-drained" and how to confirm and provide this characteristic
2) The meaning of "not susceptible to frost" and how to confirm the presence of or provide this characteristic in relation to site soils or fill materials
3) The meaning of "design frost depth" and, again, how to confirm or characterize it for a given site.

The above items define important design considerations in ASCE 32 and also establish a standard of care that other alternative methods must meet with at least an equivalent level of performance and reliability. These same design concepts and principles apply to FFF designs as currently used in the manufactured housing industry. Thus, this report has involved the review of a number of contemporary FFF designs and installation practices. Consequently, a number of inconsistencies and problems have been identified in the execution of the above concepts for conformance with the HUD Code and, specifically, its reference to the ASCE 32-01 standard. To assist in resolving these problems, this report examines the meaning and intentions of the above terms and criteria. Finally, recommendations are made where considered necessary and meaningful to ensure the proper and cost-effective execution of FFF designs for installation of manufactured housing units in cold climates with seasonal ground freezing.

IMPORTANT TERMS AND THEIR MEANING

Well-drained

The term "well-drained" in reference to FFF designs is not defined in the ASCE 32-01 standard. Therefore, its application in regard to frost-heave mitigation or prevention must rely on accepted engineering practice. Well-drained encompasses both surface drainage and sub-surface moisture conditions of a soil which are affected by site topography and also local climate among other factors such as sub-surface water flows. Merely, assessing site surface drainage without assessing ground water conditions at depth or vice-versa is inadequate. In addition, assessing these conditions at a point in time (without considering climate factors and soil moisture conditions that vary seasonally and over longer periods of time) also can lead to an inadequate or incomplete assessment. The term "well-drained" must also align with the intended application. For example, a common agricultural definition of a "well-drained soil" is as follows (http://agebb.missouri.edu/agforest/archives/v10n2/gh14.htm):

> "Well-drained soil is that which allows water to percolate through it reasonably quickly and not pool...
>
> Deep, loamy soil and sloping sites tend to be well drained. Soil high in clay content, depressions, or sites with high water tables, underlying rock or 'hard pans' (a layer of soil impervious to water) tend to not be well drained. A test that is often recommended is to dig a hole 12 by 12 inches square and about 12 to 18 inches deep. Fill it with water and let it drain. Then do it again, but this time clock how long it takes to drain. In well-drained soil the water level will go down at a rate of about 1 inch an hour. A faster rate, such as in sandy soil, may signal potentially dry site conditions; a slower rate is a caution that you either need to provide drainage ..."

However, the above definition is inadequate and incomplete for an engineering application related to protection of building foundations from frost heave risk. For example, should the soil infiltration rate be measured at the design frost depth? Can an installer reliably conduct a soil boring to identify the water table (or absence thereof) when the water table may vary seasonally or annually? At what infiltration rate should use of subsoil drainage be triggered to prevent accumulation of water in non-frost-susceptible soil or fill layers placed above the frost line. Clearly, more information is needed to properly differentiate between "well-drained conditions" and those that are not so "well-drained" from the perspective of mitigating risk of frost heave or thaw-weakening of soils supporting building foundations. Furthermore, the "well-drained" criteria may need to be more stringent for conditions where existing soils are marginally frost susceptible (or worse) as oppose to conditions where a clearly non-frost-susceptible fill material is used to frost depth (e.g., less than 6% by mass passing a #200 sieve as determined by site samples or certification from the quarry/supplier). The vulnerability of a building foundation to and consequences of foundation differential movement due to a given level of frost-heave or thaw weakening hazard should also be considered, although common practice is aimed at minimizing the hazard to avoid uncertain long-term damage and serviceability problems.

Where soils are potentially frost-susceptible (and must be used for bearing within the frost depth or "active freezing zone" layer of the soil because there are no alternatives such as use of a deeper foundation or non-frost-susceptible fill material), the following description represents an accepted engineering practice for creating a "well-drained" condition intended to protect against excessive frost heave (e.g., control it, but not necessarily eliminate it):

> "...it is imperative to provide the best drainage possible. In more moderate regions where frost does not penetrate as deeply, this may include the careful installation of underdrains to allow water...to escape. Barriers to restrict capillary moisture flow...from below [the frost depth] may also be considered. These may be layers of course grained material or geotextile layers. The purpose is to break the capillary action of fine grained soil...so that moisture [below the frost depth] cannot "wick" to the freezing front...." (McFadden and Bennett, 1991, pp.340-342).

For natural soils, the above practice requires a means of establishing the absence of a water table in close proximity to the design frost depth and that the soil materials within the frost depth are adequately drained, using sub-drainage or ensuring the ability for infiltration below the frost depth. The accepted foundation engineering practice for protection against frost-heave does not merely rely on surface drainage when structures are supported on the "active freezing zone" of a frost-susceptible soil or fill.

Non-Frost-Susceptible

In reference to soil or fill materials, the phrase "not susceptible to frost" or "non-frost-susceptible" is usually taken to mean the soil is granular (e.g., coarse grained) and lacks a sufficient amount of fines (e.g., very fine sand, silt, and clay) to support development of ice lenses in the soil which results in varying degrees of frost heave or thaw-weakening potential depending on a number of factors. Very clayey soils, however, can suppress frost heave potential due to the inability of tightly held soil moisture to migrate by capillary action to the freezing front in the soil to form ice lenses. But, these soils are still considered frost susceptible from the standpoint of thaw-weakening effects.

While varying degrees of sophistication are available to assess the frost-susceptibility of soil (Chamberlain, 1981), methods commonly used rely on an assessment of the grain size distribution of the soil. The most simple of these methods provides a limit on the percentage of a soil mass below a certain particle size, although the percentage may vary from 3% to more than 10% (Chamberlain, 1981). In the ASCE 32 standard (Section 4.2), a non-frost-susceptible soil is defined as follows:

> "Undisturbed granular soils or fill material with less than 6% of mass passing a #200 (0.074 mm) mesh sieve in accordance with ASTM D442."

Other approved materials also are permitted, but with the understanding that the approval is based on geotechnical evidence and analysis as is generally required for alternative means and methods of design and construction. For example, foundation applications that are more sensitive to differential soil movement (due to heave or thaw-weakening) may require a more stringent criteria whereas those that are less sensitive may justify use of a less stringent criteria. But, in both cases, a criteria is applied based on engineering analysis and evidence. The above "6% by mass" criteria is considered appropriate for general foundation applications and is the referenced basis for judging frost-susceptibility of soils in the HUD Code for manufactured housing foundations.

Finally, the ASCE 32 standard requires that "Classification of frost susceptibility of soil shall be determined by a soils or geotechnical engineer, unless otherwise approved." Again, it is clear that, while alternatives are permitted, there is a requirement for evidence that a given soil or fill material on a given site is not susceptible to frost. For example, a contractor or technician may sample materials, have them assessed by a soils lab per ASTM D442 as required by ASCE 32. The soils lab report serves as a basis for approval (i.e., evidence consistent with the requirements and intent of ASCE 32 when an FFF design is pursued). Also, a qualified geotechnical engineer may determine that use of a different method to assess soil frost susceptibility is more favorable (and at least equivalent), again based on evidence.

Design Frost Depth

The term "design frost depth" refers to a depth into ground that frost is expected to reach under a given severity of winter freezing conditions and other factors (such as soil type and ground cover or lack thereof). Generally, design frost depths have been established in an ad-hoc fashion from locality to locality. Consequently, requirements may vary based on different perspectives or experiences that are not always consistent with the physics of frost penetration into ground. For example, some localities in warmer climates may require greater frost depths than those in colder climates. In general, there is no

consistent consideration of the soil type or ground cover. But, experience represented in local building codes is the common source relied upon in the building industry for locally-prescribed frost depths.

To address variation in local design frost depth requirements (where they are available) and provide a more uniform and risk-consistent basis for design frost depth determinations, an alternative procedure for determining the local design frost depth is provided later in the recommendations section of this report. The approach has been prepared as a proposal for future consideration by the ASCE 32 committee. It is based on research and modeling conducted by the NOAA Northeast Climate Data Center (Cornell University) for the U.S. Department of Housing and Urban Development (HUD, 2001). The following chart (Figure 1) provides the basis of the procedure and demonstrates its relationship to variations in locally prescribed (presumptive) frost depths and modeled frost depths. The design frost depths determined by the modeled approach (noted in Figure 1 as "2yr Bare x Safety Factor 2") are calibrated to agree with local design frost depths used in more severe climates where experience with frost damage and freezing conditions are more consequential and experience may be considered more robust. It is notable that in warmer climate zones there is a clear tendency for locally-defined frost depths to overstate actual design frost depths which signals a lack of risk-consistency in locally-defined frost depths. Thus, use of risk-consistent frost depths will tend to economize foundation construction in moderately cold climates with seasonal ground freezing.

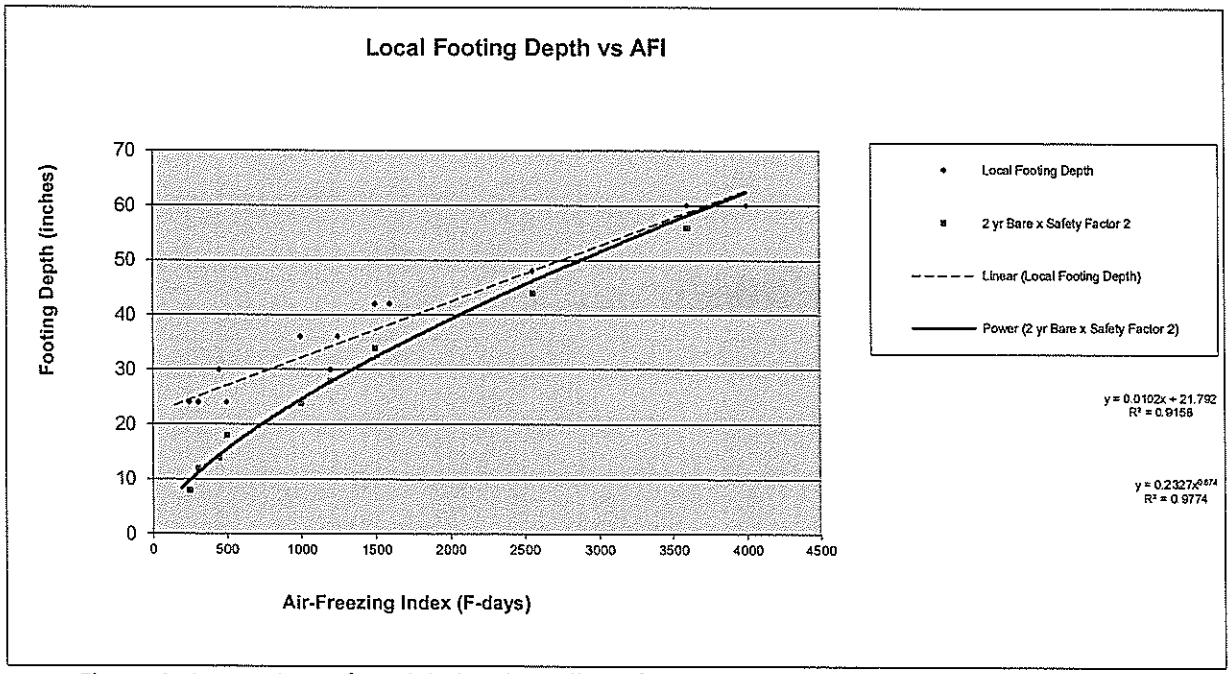

Figure 1. Comparison of Modeled and Locally-Defined Frost Depths for Building Foundations

REVIEW OF EXISTING FFF DESIGNS & DATA

As mentioned, several FFF designs currently used in several US states were provided for review and assessment. From those designs, four representative examples were selected for assessment in this report.

Example #1: FFF Design A (crushed stone pad on subgrade)

Figure 2 illustrates this FFF design as implemented by a DAPIA-approved engineered detail included in the manufacturer's installation manual.

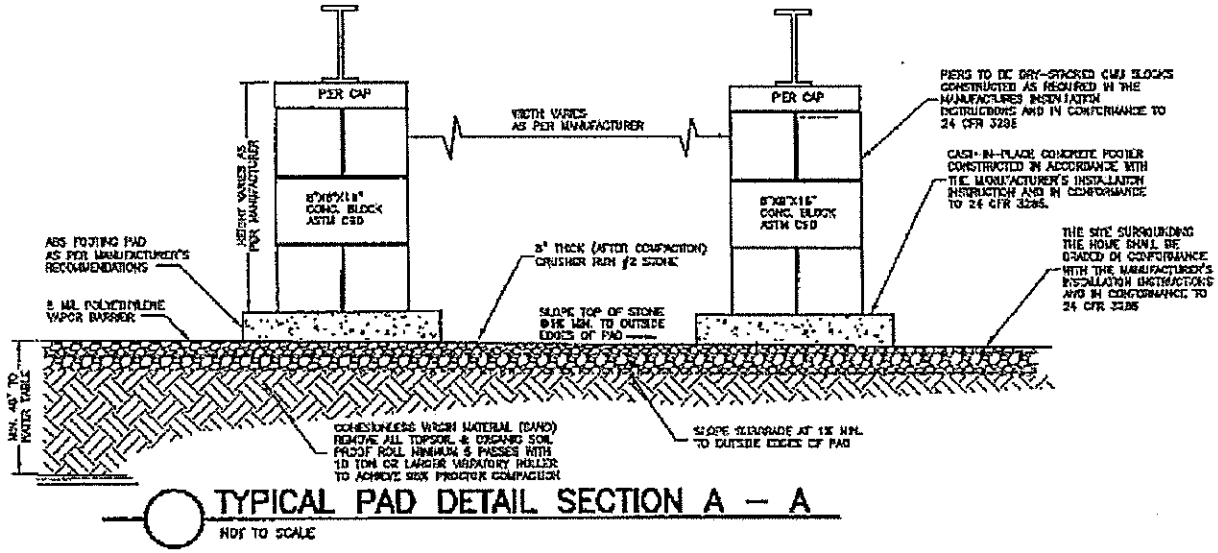

Figure 2. Installation detail for Example#1 (FFF using crushed stone pad on subgrade)

This design represents a reasonable application of the FFF technical requirements in accordance with Section 4.2 of the ASCE 32 standard. For example, it appropriately defines non-frost-susceptible material and requires it to be well-drained and to extend below the required frost depth. However, it places the burden on the local authorities for determining frost-susceptibility for each site application of the design, while at the same time requiring engineering verification (see "DESIGN NOTES" below). The reverse process is more appropriate (i.e., the engineer determines and the authority verifies). This may cause some unintended confusion as to roles and responsibilities which may be entirely missed by installers and those responsible for enforcement. Local authorities have an inspection and verification role, not a construction management or design decision-making role. To do otherwise creates a conflict of interest due to a lack of appropriate separation of roles and responsibilities.

Thus, it may be unlikely that the design is being implemented and enforced consistently in conformance with the technical requirements otherwise reasonably indicated on the installation documents (unless the engineer of record is actually contracted to visit each site or development to conduct the required determinations). Further, the requirement for testing is found in notes within the manufacturer

installation instructions as being at the discretion of the local code official, when the ASCE 32 standard clearly requires testing or an equivalent means of determination. Such judgments should originate with and be the responsibility of the design professional not a local authority or installers. The notes also do not specify a means of determining water table depth. It also does not specify any action other than notifying the engineer before continuing work when groundwater is encountered (thus implying that a ground water assessment is the responsibility of the installer, not the engineer of record and that construction can proceed after the engineer is simply notified). But, this too conflicts with other notes regarding roles and responsibilities.

To exemplify these concerns (i.e., confused or conflicted roles and responsibilities as noted above), the following notes are excerpted verbatim from the reviewed installation plan:

> "DESIGN NOTES:
> The gravel slab foundation design applies only to sites that contain all of the following soil conditions:
>
> 1. Well drained granular soils that are not susceptible to frost heave.
> 2. No groundwater to a depth of at least 4 feet below the bottom of the proposed slab.
> 3. Soils with a safe bearing capacity of 2,000 psf or greater.
> 4. Soil conditions at each lot shall be verified by design engineer prior to construction.
>
> ...
> The slab design does not incorporate insulation around and/or under the proposed slab. The foundation shall be enclosed with skirting in accordance with manufacturer's installation instructions and in conformance to 24 CFR 3285.
> ...
> Foundation shall be placed on non-frost susceptible layers of well-drained, undisturbed ground or fill materials that extend below the required frost depth. The non-frost susceptible material shall be approved by the local authority having jurisdiction. When required by the local authority having jurisdiction, the material shall be tested in accordance with ASTM D422 and found to have less than 6% of mass passing #200 mesh sieve to be considered non-frost susceptible. Soil conditions shall be verified by a soils or geotechnical engineer to verify the soil conditions are not susceptible to frost heave.
> ...
> During construction if soil conditions other than well drained soils or groundwater is encountered at a depth of less than 4 feet, the contractor shall notify the design engineer prior to continuing construction. "

This FFF design also includes a detail (Figure 2) which requires the subgrade to be cohesion less (sand) extending to a minimum depth of 48 inches and compacted with a 10 ton or larger vibratory roller. The water table is required to be at least 48 inches below finish grade together with surface grading required to meet the HUD code. Thus, the detail seems reasonably consistent with the technical intent of the design notes, despite confusion regarding important installation process considerations related to roles and responsibilities as mentioned above. However, the indicated "cohesion less (sand)" subgrade material could be moderately frost susceptible if it is a very fine sand (e.g., approaching silt-size particles). Thus, the Design Notes and plan detail should be clarified that the "6% of mass passing #200 sieve" also applies to the vaguely described cohesion-less sand material in the installation detail.

It should be noted that the 8"thick crusher run #2 stone course above the non-frost-susceptible layer may include more than 6% fines and according to ASCE 32 could be considered to be frost-susceptible. However, for materials with large aggregate, the amount of fines can be increased somewhat and still

provide adequate protection against frost action. Furthermore, the 8" layer is located above what is intended to be a well-drained, non-frost-susceptible subgrade. In such a case, this sub-drainage will keep the 8" layer reasonably dry, particularly where located below the manufactured housing unit and protected from rainfall and runoff. Thus, the critical component of this design is assuring that the subgrade is indeed non-frost-susceptible and well-drained as called out on the plans consistent with the ASCE 32 standard.

Example #2: FFF Design B (directly on soil)

This FFF design appears to be based in large part on a report for the Systems Building Research Alliance (SBRA/Hayman, 2010). A typical installation detail is shown in Figure 3.

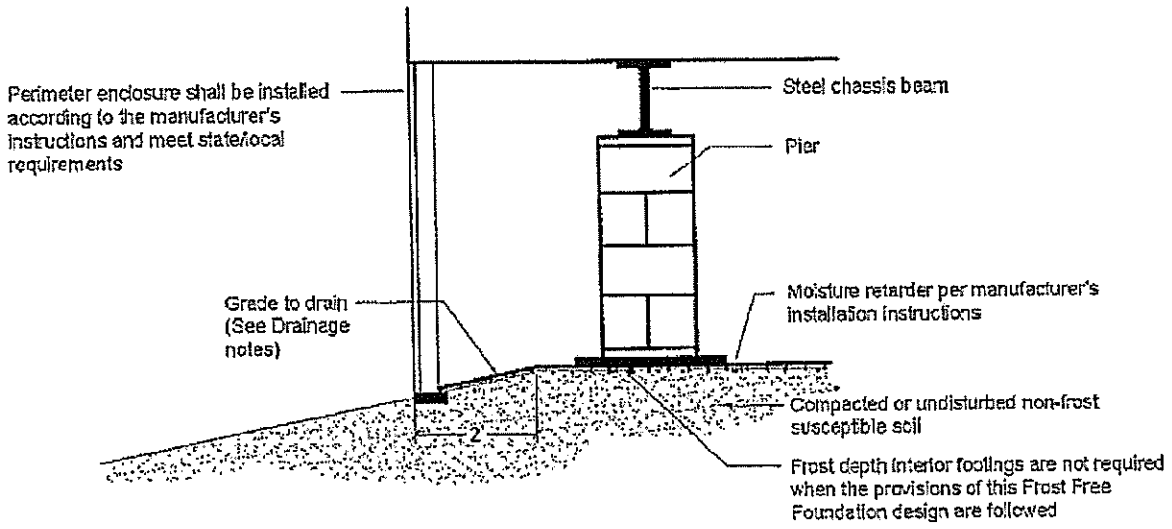

Figure 3. FFF installation detail for Example #2 (FFF with piers directly on soil) based on SBRA/Hayman (2010) report.

This design has a distinct difference from Example #1 and the ASCE 32 provisions: it relies exclusively on ensuring that "the soil beneath the manufactured home stays dry thereby preventing frost heave." The report by SBRA/Hayman (2010) mistakenly claims that "Soil type is not relevant using the Frost Free Foundation design. Soil tests are not necessary." For reasons discussed below, it is the opinion of this author, having served on the ASCE 32 committee and its task group on development of the non-frost-susceptible soil criteria, that these statements are not representative of the intent of the ASCE 32 standard or equivalent alternative procedures for ensuring the intent is met. (Refer to the earlier discussion on the meaning of key terms and clauses in the ASCE 32 standard.)

The SBRA/Hayman report claims that soil tests are a "potentially expensive and time consuming process" without providing documentation. In addition, undocumented quotes and other undocumented sources or anecdotal forms of experience (that are not repeatable or verifiable or fully

explained) are mentioned in the report. For example, a partial quote on page 6-7 of the report is extracted from the Unified Facilities Criteria (UFC, 2004) for roadway design and is apparently mistaken to mean that no soils analysis or other consideration is required under "special conditions". It is then asserted that manufactured homes create these special conditions.

To the contrary, the cited UFC document states elsewhere that only four material groups (gravel, crush stone, crush rock, and sand) can be considered as "generally suitable for base course and sub-base course materials" with respect to frost heave or thaw-weakening potential. The quote as contained and edited in the SBRA/Hayman (2010) report also leaves out important caveats related to the required justification for re-classifying the frost-susceptibility status of a material under "special conditions". The complete discussion in the Unified Facilities Criteria document is as follows:

> *d. Special conditions.* Under special conditions the frost group classification adopted for design may be permitted to differ from that obtained by application of the above frost group definitions. This will, however, he subject to the specific approval of HQUSACE (CEMP-ET) or the appropriate Air Force Major Command if the difference is not greater than one frost group number and if complete justification for the variation is presented. Such justification may take into account special conditions of subgrade moisture or soil uniformity, in addition to soil gradation and plasticity, and should include data on performance of existing pavements near those proposed to be constructed.

Clearly, there is substantial evidence and justification required on a case-by-case basis as well as approval by authorities familiar with the subject matter. The requirements also indicate the form of evidence required, including data to demonstrate soil gradation and plasticity, subgrade moisture conditions, and soil uniformity. It also includes supplemental data on performance of existing pavements near those proposed to be constructed. Thus, a complete analysis of the site conditions as well as consideration of neighboring conditions (experience) is required. The SBRA/Hayman report and design does not contain such procedural requirements or data requirements for a given site. It does not indicate how to ascertain moisture conditions below grade, the need to test for soil gradation and plasticity, or other equivalent technical or procedural matters mentioned in the full quote above.

Simply protecting the soil from direct rainfall over the small footprint of a manufactured home may do little to address moisture conditions at depth below the ground surface or the degree of frost-susceptibility of the subgrade should moisture be present at depth. Despite these omissions, the SBRA/Hayman (2010) report concludes that the FFF provides "superior under home water control capabilities". Also, important differences from road design are not address such as roads being designed for a much lesser life expectancy than buildings (i.e., design return periods for frost heave or freezing events are typically less than 30 years as commonly represented by using the average of the three worst years in a period of thirty years or the worst year in a short period of 10 years).

In addition, the SBRA/Hayman (2010) report references various sources of experience, mostly from the standpoint of attempting to prove a negative by making the assumption that an absence of complaints

means an absence of problems. While this is relevant information, it is very weak data unless properly evaluated and interpreted in context. For example, what are the variations in soil type and particle size at the sites represented by the generalized experience claim. What were the winter Air-Freezing indices observed during the period of record associated with the experience statement as needed to ascertain potential "sampling error" problems? For example, a cursory review of national average heating degree day data for years 1994-2004 (the same period of record for one quoted source of anecdotal evidence) indicates below average national winter conditions in 8 of the 11 years (with 3 of the years exceeding the average by a relatively small amount – certainly not reflective of design conditions). A more detailed association of climate data in relation to the ad-hoc experience reported is needed to make a reasoned scientific analysis and engineering interpretation of the claimed experience and its relevance to design conditions. This must also be weighed against the common foundation construction practice represented by the generalized experience claim (e.g., what depth or variation of depth were the footings actually placed at?). In other words, is the reported experience actually relevant to the FFF design as presented in the SBRA/Hayman (2010) report?

Reference is also made to reduced frost depths for footings located underneath and within an enclosed area beneath the manufactured home foundation. However, this allowance may be more appropriately associated with prevention of or suppression of freezing temperatures, not the supposed absence of sufficient soil moisture to prevent frost heave. A similar practice has been recognized and used for many years in Anchorage, AK for site built construction by differentiating between "cold" and "warm" footings (with different footing frost depths used for each condition). Thus, the stated experience in the SBRA/Hayman (2010) report, while valid when understood in context, is not justification for reliance on merely keeping the ground surface dry in the immediate vicinity of a footing as an appropriate or complete means to prevent frost heave and broadly avoid adequate frost protection measures or footing depths in general for all climates and conditions that may be experienced.

This experience also is not based on the use of FFF foundation designs and could be considered as irrelevant on that basis alone. The experience suggested in at least one place (i.e., Kentucky) was associated with footings at a frost depth of 24 inches at the perimeter and 12 inches within the enclosed portions of the foundation. Similar experience was noted in West Virginia. It is no surprise that this has worked well as demonstrated in Table 1 and Figure 4 presented later in this report. But, it is not directly relevant to the FFF design presented in the SBRA/Hayman (2010) report. Instead, it is more appropriately taken as support for the adequacy of conventional methods of foundation installation (e.g., placing footings at frost depth, including reduced frost depths in enclosed areas underneath the building).

The SBRA/Hayman (2010) report does appropriately recognize that "the possibility of ground water level overlapping the frost depth does need to be addressed...If the ground water depth is determined to be above the local frost depth, the Frost Free Foundation design cannot be used." (ibid. p.8). However, the means of establishing that the ground water table is below the frost depth during the winter season and is misappropriated to "the local authority having jurisdiction". As stated in the review of Example #1, this determination is a matter of design or construction management for individual sites; local authorities are supposed to have the role of only inspection and verification, not making decisions about and executing the practice of design. This confusion of roles and responsibilities presents a conflict of interest among regulators and perhaps also infringes on state laws regarding the practice of engineering. In addition, merely keeping the water table depth at the local frost depth does not control

frost-susceptibility in soils that are particularly frost-susceptible because water is "wicked" from the ground water source up to the freezing front in the soil. This is the mechanism by which frost heave occurs. Thus, for some soil conditions, the water table depth may need to be well below the local design frost depth to prevent frost heave.

Finally the proposed SBRA/Hayman (2010) FFF design focuses only on the following two criteria related to risk of frost heave or thaw weakening (ibid., p.9):

- Site – the design only requires that surface drainage minimally comply with HUD Code, 24 CFR Part 3285.203.
- Footings – frost depth footings are not required (can essentially locate footings at finish grade with no depth)

The first item neglects any means of establishing depth of ground water. It also fails to determine if the soil profile (at least to frost depth) is well drained. It also neglects the requirement that non-frost-susceptible soils be used in accordance with the HUD Code (24 CFR Part 3285.312(b)) and the ASCE 32 Standard. Reliance on surface drainage alone without site-specific soil drainage or water table analysis and soil particle size analysis is not consistent with accepted engineering practice for building foundations and also does not provide an equivalently reliable alternative to the methods and requirements specified in the ASCE 32 standard or the HUD Code.

The second item is not really a criteria for frost-protection, but is actually and exemption from frost protection based on the first item. Placing the footings with 0 (zero) frost depth presumes perfection in the control of frost heave risk merely by keeping the ground surface in the immediate vicinity of the footing free from direct rainfall (i.e., located underneath the housing unit) and providing for surface drainage. This is an unrealistic and unconventional presumption and, at best, may result in highly uncertain and unreliable performance. Therefore, the HUD/CODE CONFORMANCE section of the SBRA/Hayman (2010) report significantly overstates the degree of conformance or equivalency of the proposed FFF design. If a dry soil criteria is used alone for frost protection, then the level of protection against a wetted soil condition (at least to frost depth) must far exceed the level of criteria and verification specified in the FFF design by SBRA/Hayman (2010). Consequently the design criteria presented in the SBRA/Hayman (2010) report and the associated model installation plan are largely incomplete or inadequate.

For example, the installation detail based on the SBRA/Hayman (2010) report reveals the following (see Figure 3):

1. It leaves discretion for the means and methods of establishing the water table depth to the local authority. This is a design decision going beyond the role of regulatory authorities, creating a conflict of interest in their role and the practice of design and installation. The plans should specify a means of determining water table depth following accepted engineering practice and require that it be at or well below the frost depth if merely a "point-in-time" investigation is done by others than a geotechnical engineer or experienced professional.
2. It provides no means of determining or verifying the use of non-frost susceptible soil as required in the detail (but which is indicated as being unimportant in SBRA/Hayman (2010)). Such a practice is important and such inconsistencies unnecessarily confuse the issue. Specifications

and a means of determining and verifying important design criteria should be provided on installation details (see also the discussion on Example #1 which included appropriate specifications but misappropriated or confused roles and responsibilities related to design, installation, and enforcement).

3. The design does not require the use of a below foundation drainage system and gives no indication under what sub-grade conditions one may be required to maintain a "well-drained" condition.

Example #3 – FFF Design C ("Floating Slab")

Example #3 is a variant of the FFF design approach that utilizes a "floating slab" concept as shown in Figure 4 (other similar FFF variants include a "floating strip footing" approach). Interestingly, this "floating slab" installation detail was certified by an engineer and DAPIA-approved in one state, but is included in the manufacturer's installation manual for another state.

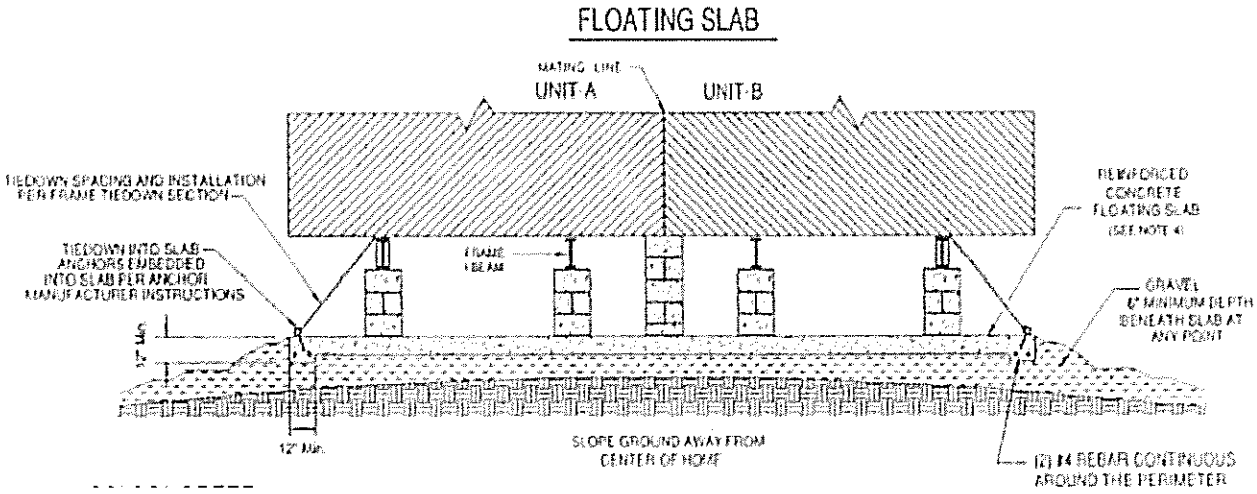

Figure 4. Installation detail for Example #3 ("Floating Slab" FFF)

Relevant notes accompanying the installation detail shown in Figure 4 are as follows:

NOTES :

1. SITE ONLY ON WELL DRAINED SOIL WITH AVERAGE MOISTURE CONTENT LESS THAN 25% TO FROST DEPTH.
2. THESE SOIL PREPARATION CONDITIONS ARE ADEQUATE FOR FOOTINGS INSTALLED ABOVE FROST LINE AND FOR FLOATING SLAB SYSTEMS WHEN INSTALLED WITH GRAVEL BACKFILL PROVIDED THE SOIL BENEATH THE GRAVEL IS WELL DRAINED WITH MINIMAL MOISTURE CONTENT.
3. FINAL DETERMINATION OF THE APPROPRIATE APPLICATION OF THE FOOTING ABOVE THE FROST LINE OR FLOATING SLAB, IS BY THE LOCAL AUTHORITY HAVING JURISDICTION FAMILIAR WITH ACTUAL SOIL CONDITIONS. BASED UPON ACTUAL SOIL CONDITIONS, DETERMINATION OF THE PROPER FOOTING DESIGN ILLUSTRATED ABOVE CAN BE MADE.

The following observations relate to concerns with the above-described "floating slab" FFF design:

1. Note #1 requires use on sites with "well drained soil with an average moisture content less than 25% to frost depth". The means of determining the average moisture content to frost depth is not specified. Is this an average at a given point in time or an average including seasonal variation? Is the moisture content volumetric or by mass? Does 25% average moisture content provide adequate frost protection for all frost-susceptible soil types? For example, soil may approach saturation at a volumetric moisture content of 25% or be saturated at a gravimetric moisture content of 20%. Furthermore, if soil moisture content is measured to a frost depth of say 4 feet, the top two feet may be relatively dry, but the bottom two feet wet; yet the average moisture content may meet the stated criteria (even though the overall moisture condition of the soil would promote frost heave in a frost susceptible soil – a risky soil condition which is not prohibited by this design). Clearly, the specification is incomplete and vague. Yet, this criteria is presented as the main "pass/fail" criteria for acceptance of a site for use of the "floating slab" FFF design.
2. Note #2 is significantly more vague and unenforceable referring to a requirement that "soil beneath the gravel is well drained with minimal moisture content". How is well drained determined in relation to frost-heave potential? What is a "minimal" moisture content?
3. Note #3 presents what is a common and inappropriate deferral of design decisions and site evaluation requirements to the "local authority having jurisdiction", thus, relying on the local enforcement authority to execute the practice of design to produce the evidence needed for enforcement (presenting a conflict of interest). It also requires the local authority to be "familiar with actual soil conditions". What are these soil conditions? Is the local authority supposed to measure moisture contents to confirm conformance with Note #1? Are there other conditions that need to be assessed?

Even if the above noted problems were resolved, the design still relies exclusively on keeping a potentially frost-susceptible soil adequately dry to the frost depth as the sole means of frost-protection. As mentioned in other reviewed examples of FFF designs, this design approach is not compliant with the provisions of the ASCE 32 standard or the HUD code. These standards require the use of non-frost-susceptible fill materials to frost depth and the provision of adequate drainage. With the above incomplete and vague design controls and confused roles and responsibilities as to the execution of design and verification of site conditions, this approach should not be considered as an equivalently reliable alternative means of frost protection.

Example #4 – FFF Design D (Monolithic Slab)

This FFF design is similar to that addressed in Examples #2 and #3. While purported to be used in a northeastern state, the design is certified by a registered engineer in a central mid-western state and was DAPIA approved. An example installation detail for this design is shown in Figure 5.

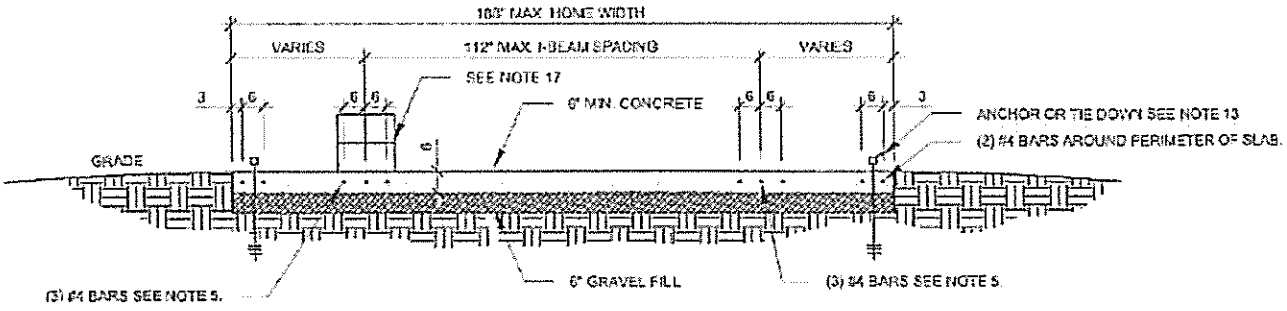

Figure 5. FFF installation detail for Example #4 (Monolithic Slab FFF)

Relevant "GENERAL NOTES" associated with the above installation detail are as follows:

7. THE SLAB FOUNDATION DESIGN IS SUSCEPTIBLE TO FROST HEAVE AND SHOULD NOT BE PLACED ON EXPANSIVE SOILS. CONSULT LOCAL JURISDICTION.
8. SLAB DEPTH NOTED SERVES ONLY AS A MINIMUM, THE BASE OF THE SLAB AND ITS GRAVEL FILL BASE MUST BE BELOW THE FROST LINE. CONSULT LOCAL JURISDICTION FOR THE FROST LINE DEPTH.
9. ADEQUATE DRAINAGE MUST BE PROVIDED UNDER THE SLAB TO THE PERIMETER OF THE SLAB. CONSULT LOCAL BUILDING CODE FOR REQUIREMENTS.

The above-described design raises concerns similar to those addressed in Examples #2 and #3. First, general note #7 does seem to admit that the design is susceptible to frost heave. However, it states that it should not be placed on expansive soils. While it is true it should not be placed on expansive clay soils, this is a different design matter than frost heave. Instead, the note should state that it should not be placed on frost-susceptible soils. Even so, the necessary criteria for evaluation of the frost-susceptibility of soils is not provided. Yet, this is presented as the critical "pass/fail" criteria for use of the design on a given site.

Second, general note #8 does seem to clarify that a gravel base must be below the frost line. Yet, the gravel base is not specified as to the amount of fines that can be tolerated. Is the intention to use clean (washed) gravel or bank run? Furthermore, the detail implies a shallow depth is intended (or may be interpreted) since the frost-depth is not shown to coincide with the depth of the gravel fill. Without careful installation and enforcement, the design intention may be overlooked or not be properly executed in the field.

Finally, note #9 indicates that drainage must be provided under the slab, but the drainage design is not defined or indicated on the detail other than to say that water is to be drained "to the perimeter of the slab". This may actually cause water to be concentrated at the edges of the slab where differential frost heave would be promoted. It also does not clarify where the drainage system is to be placed (e.g., at the bottom of the gravel layer) and that drainage water should be discharged to daylight well away from the perimeter of the slab foundation. The building code is referenced for detailed requirements, but building code foundation drainage requirements generally are not intended to address this application (e.g., drainage of fills and subgrades to prevent frost heave). The design should show a drainage plan for cases where the sub-grade is not well-drained (e.g. water table not below the frost depth or a soil layer at depth with a low infiltration rate).

Other Considerations

Skirting – Other considerations include installation of skirting. Where founded at a shallow depth, significant frost-heave may raise the skirting by as much as several inches, causing the building to be jacked and distorted since frost heave rarely occurs uniformly. Thus, provisions for skirting frost protection must also be considered (e.g., drainage and depth of non-frost-susceptible fill, use of a footing to frost depth as common to permanent wood foundations, or use of insulation to protect the ground against freezing). Some designs have used insulation for this purpose, but have not placed it in accordance with the ASCE 32 standard – leaving significant thermal bridges that may negate or diminish the function of the insulation. For example, see Figure 3.38 and others in the "Guide to Foundation and Support Systems for Manufactured Homes" prepared by SBRA for HUD.[2] In addition, for an FPSF design using a raised foundation (i.e., crawlspace) the enclosed area must be unvented (at least during winter months) and insulated around the perimeter (skirting) to prevent the potential for increased frost depth in the shaded ground underlying a raised foundation (PHRC, 2014).

Proprietary Foundations – Various proprietary foundation systems are commonly used to support and anchor manufactured housing units. These systems in general rely on the same means for frost protection as conventional foundations or piers. Thus, the findings and recommendations of this report apply equally to proprietary types of foundation supports that may use shallow footings or footing pads. Frost-heave does not distinguish between foundation types. If any shallow, uninsulated footing is on frost-susceptible soil with an adequate source of moisture from the surface or ground moisture from below (even if the surface appears dry) and experiences freezing temperatures within the ground, it will experience frost heave and/or thaw-weakening.

Local Regulations – One state's installation standards were provided for review in relation to the topic of this report. In New Hampshire's installation standards for manufactured housing (Chapter 600, Section 603.08), the following requirements are stated in regard to footings:

> (b) Every pier shall be supported by a footing of the following type:
> (1) A pad which shall be a monolithic concrete slab...and complies with the following:
> a. Fill shall extend a minimum of 3 inches up the side of the slab;
> b. Top soil and all organic soils shall be removed under the slab area;
> c. A minimum of 12 to 14 inches of sand or gravel compacted; and
> d. Shall be at minimum as set forth in Figure 600-3; or
> (2) Below frost footing, which shall be designed by a New Hampshire licensed professional engineer.

The above-mentioned "Figure 600-3" below is a detail of a FFF foundation slab similar to the "floating slab" design evaluated in Example #3 (and also similar to examples #2 and #4). There is no provision to ensure that the sub-grade is well drained or that non-frost-susceptible soils or fill are used to the frost depth. Also, it is extremely odd that the above provision allows the FFF approach (Item (1)) to be used with no engineering or site verification, yet a conventional footing design to frost depth (Item (2)) is required to be designed by a New Hampshire licensed professional engineer. The regulation appears to be significantly misguided in regard to which foundation approach should require an engineering design

[2] It should be noted that this guide, while containing much practical information, also contains many cases of incomplete information or questionable advice that can lead to poor practices for frost protection. HUD should consider withdrawing this document until such a time that the deficiencies can be remedied. The copy reviewed was noted as a Draft dated March 27, 2002.

and site investigation. Other state installation rules should be investigated for similar technical irregularities and corrected as needed to bring them into conformity with the HUD code (24 CFR Part 3285.312(b)).

CONCLUSIONS

The following conclusions summarize the key findings of this report:

1. Several problems with execution of the FFF design approach were identified in reviewed installation details. These problems include:
    a. Lack of enforceable or consistently actionable criteria related to important design factors governing the applicability of the FFF design and installation method for a particular site or development.
    b. Commonly confused assignments of roles and responsibilities for determining site conditions and suitability of a FFF design for a given site. In particular, matters of design in determining the suitability of a site are often deferred to local authorities which are not charged with a responsibility to practice design. Their role should be limited to enforcement and verification of evidence demonstrating conformance.
    c. Installation details for FFF designs often lack criteria for measuring the frost-susceptibility of soils or fill materials which is a critical aspect of the design and an important source of data for verification by local authorities.
    d. Requirements for determining soil moisture criteria and/or minimum water table depth are often vague and unenforceable.
    e. Similarly, means of measuring and confirming a "well-drained" soil condition generally are not defined or adequately specified. Suitable sub-drainage strategies for conditions that are not well-drained are generally not specified such that installers and inspectors can perform their duties consistently and in accordance with the design intent.
2. Because of the above problems, most of the reviewed FFF designs should not be considered compliant with the ASCE 32 standard or provisions in the HUD Code related to frost-protection of manufactured home foundations, including conventional and proprietary foundation systems that are placed at shallow depth (above the frost line) using the FFF concept.
3. It appears that at least some state installation rules also may be contributing to or propagating the above problems with FFF designs. The one example reviewed in this study was for New Hampshire. Therefore, state and local installation rules should be reviewed and corrected as necessary to ensure conformity with the ASCE 32 standard and the HUD code (24 CFR Part 3285.312(b)).
4. In at least one reviewed case (Example #1), a reasonably compliant implementation of an FFF design was achieved with only the exception of proper definition and assignment of roles and responsibilities in the assessment of site conditions (see 1.b. above). This demonstrates that the FFF design approach (and similarly FPSF designs) are capable of being executed properly, despite several examples where they are not. Consistency and conformance can be improved with supplemental guidelines for development and execution of FFF and FPSF foundation designs

including minimum design requirements, installation practices, and enforcement procedures. Recommendations toward this end are provided in the next section of this report.

RECOMMENDATIONS FOR DESIGN AND INSTALLATION

Refer to the section titled "CONFORMANCE OPTIONS FOR NEW DESIGNS AND FUTURE INSTALLATION PRACTICES" on page 7 of the main body of the report.

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APPENDIX B – GLOSSARY

Term	Definition
DAPIA	Design Approval Primary Inspection Agency
IPIA	Inspection Primary Inspection Agency
LAHJ	Local Authority Having Jurisdiction
Fill	Material that is used to level a building site
Non-frost susceptible soil/ fill	Existing soils that are not subject to the effects of frost; they can be identified as granular soils or fill material with less than 6% of mass passing a #200 (0.074 mm) mesh sieve in accordance with ASTM D442 tests
Frost susceptible soil	Silty soils that can retain water; these soils or fill contain more than 6% by mass of their material as passed through a #200 (0.074 mm) mesh sieve in accordance with ASTM D442 tests
Frost-susceptible climate	A climate which is susceptible to seasonal ground freezing
Frost Protected Shallow Foundations	A construction method that uses below-ground insulation and drainage to raise the frost line of soil to a level that allows relatively short and shallow foundations via preventing the soil beneath the home from freezing
Frost Heave	The raising of ground height due to ice crystallization action within the soil or other material beneath the home
Design Frost Depth	A depth into ground that frost is expected to reach under a given severity of winter freezing conditions and other factors as determined by local authorities or the Air Freezing Index
Frost Free Foundations (FFF)	1. A foundation that relies exclusively on the presence of non-frost-susceptible subgrade materials such as soil or fill on a well-drained site.

	2. The name of a foundation system designed by Paul Hayman
Monolithic slab	A foundation system constructed as one single concrete pour that consists of a concrete slab with thickened portions of the slab under load bearing walls and all perimeter edges that take the place of footers
Well-drained soil	Soil (or other applicable material) which allows water to percolate through it reasonably quickly and not pool
Water Table	Depths at which groundwater collects and pools under ground
Drainage	The natural or artificial removal of surface and sub-surface water from an area
Surface drainage	Drainage performed exclusively on the ground surface by shaping the grade to shed water
Subsurface drainage	Drainage performed beneath the surface of the ground to remove water

APPENDIX C - CONFORMING DESIGNS AND PRACTICES FOR INSTALLING MANUFACTURED HOMES IN LOCATIONS SUBJECT TO FREEZING TEMPERATURES

APPENDIX C - CONFORMING DESIGNS AND PRACTICES FOR INSTALLING MANUFACTURED HOMES IN LOCATIONS SUBJECT TO FREEZING TEMPERATURES

Appendix C includes examples of foundation systems that can be used to set manufactured homes in locations that are subject to freezing temperatures. When designing a foundation system and analyzing its potential use, significant consideration should be given to longevity, cost and access. The main objective should be to provide a foundation system that will last the life of the home while also being as cost effective as possible.

Options for sites that have Non-Frost Susceptible Soil

In locations with non-frost susceptible soil, one (1) of the three (3) below options can be used for installing the foundation.

1. Place pier footings per the Manufacturers Installation Manual with pads and in accordance with 24 CFR part 3285.312.
2. Pour runners with a minimum thickness of 6 inches in accordance with 24 CFR part 3285.312.
3. Pour slabs with a minimum of 6 inches of concrete.

Options for sites where soil is untested or known as Frost Susceptible

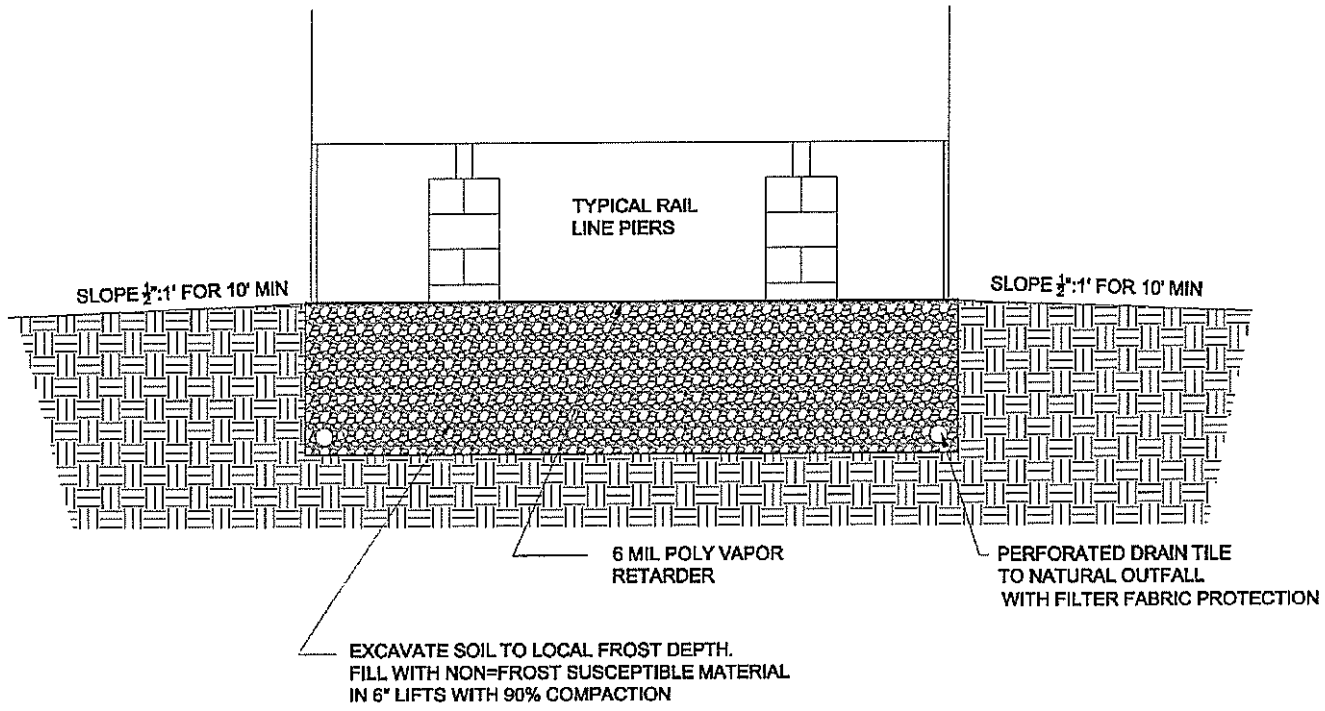
In areas with frost susceptible soil, or the soil type is unknown, the below process can be used to create a non-frost susceptible pad. These steps are required prior to beginning the foundation installation.

1. Cut the area of house pad to the frost depth as determined by the Local Authority Having Jurisdiction (LAHJ) or that of the Air Freezing Index (AFI). (see Cut and Fill to Make Pad details)
2. At the base level, install a drainage pipe to day light or install a mechanical means of de-watering below the frost depth. (see Cut and Fill to Make Pad details)
3. Fill cut area with non-frost susceptible free draining fill in 6 inch lifts. Compact each lift to a minimum of 90% of its relative density. Fill material must have at least a 1500 PSF bearing capacity.
4. Ensure the water table is at least two (2) feet below the frost depth at the site.

This process should be used to create a non-frost susceptible pad for a cut and fill process or filling low areas. Cut and fill is applicable when frost susceptible soil is replaced with non-frost susceptible fill on a flat site. Filling low areas or hilly areas to make a uniformly flat site may also be done with this method. In both cases organic material must be removed before fill is placed and/or added at the installation site.

Below are examples of the above described methods for creating non-frost susceptible pads prior to setting the home.

CUT AND FILL TO MAKE PAD



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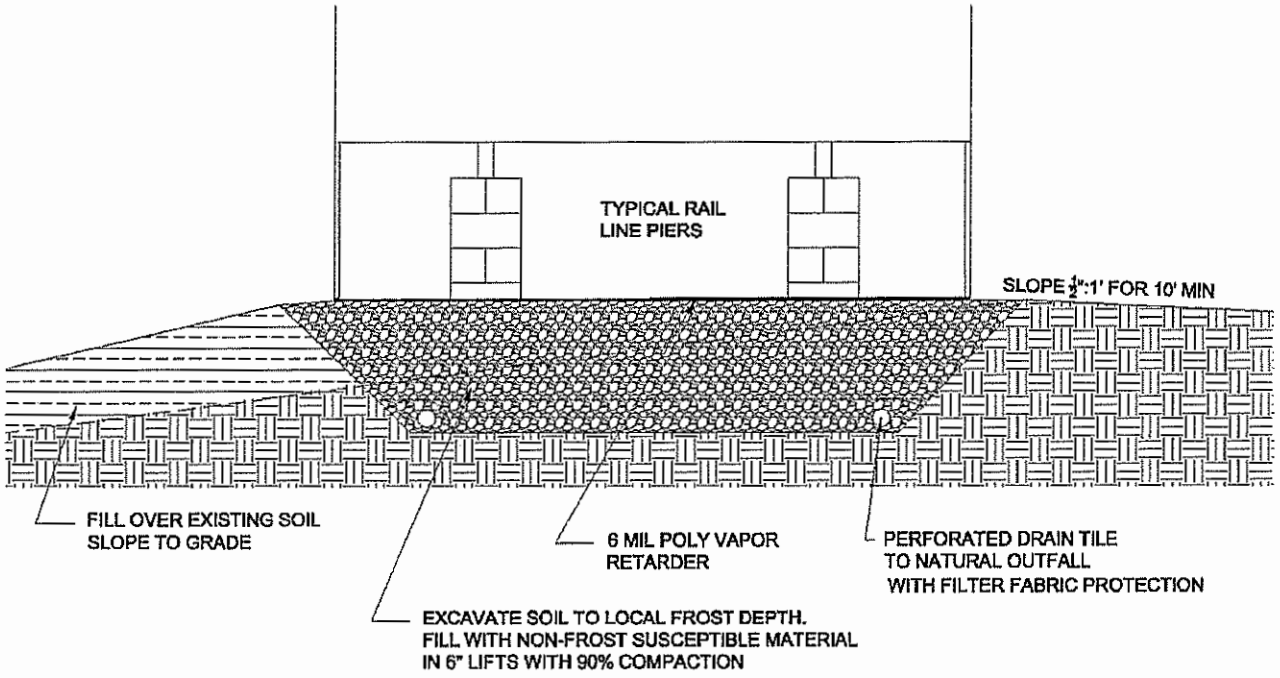
FILL EXISTING GRADE FOR PAD - SINGLE



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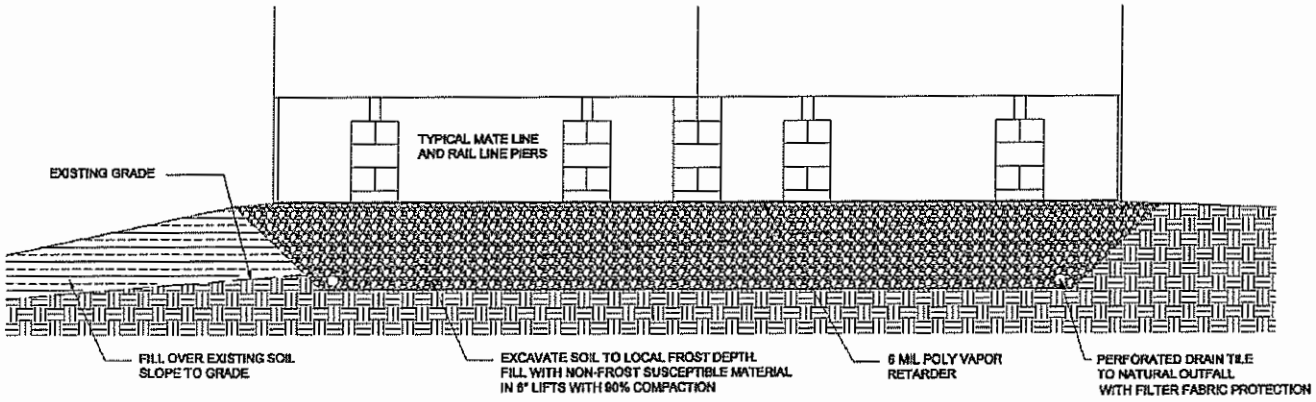
FILL EXISTING GRADE FOR PAD - DOUBLE



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The below steps and design can be used to install a monolithic slab with no insulation.

1. Remove all organic material from the pad site.
2. Place 4 inches of stone with 2 drain pipes to day light or provide a mechanical drain.
3. Form and pour the slab with tied #4 rebar as in diagram.
4. For best results the slab should have at least 1 inch center crown for drainage.
5. Grade around the perimeter of the slab so that there is at least ½ inch of fall for the first 10 feet. In areas that are too tight to achieve this, swales and surface drains can be used.

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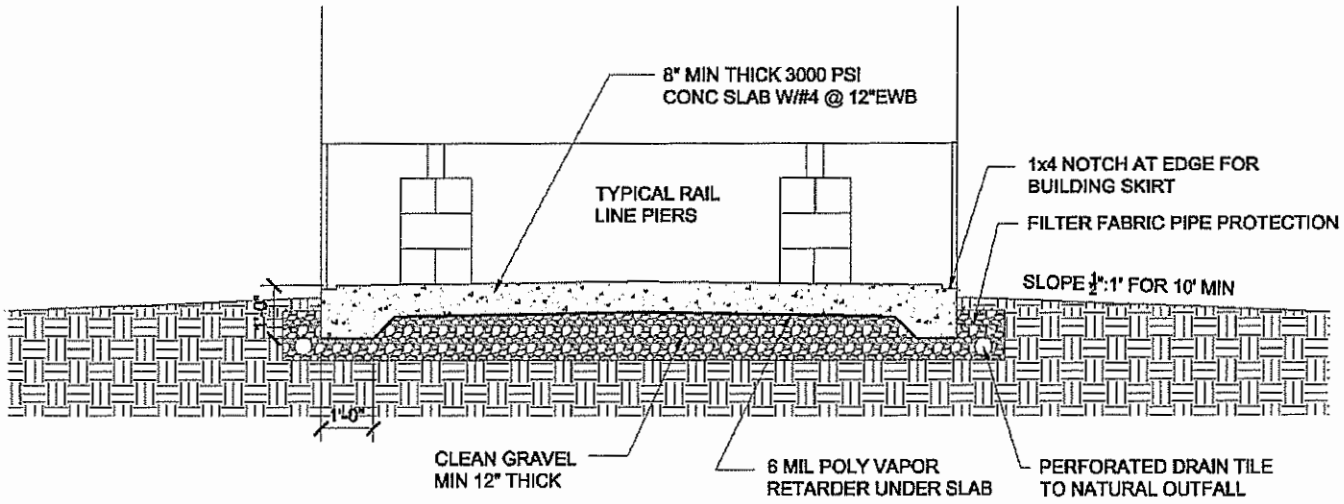
MONOLITHIC SLAB ALL SOIL - SINGLE



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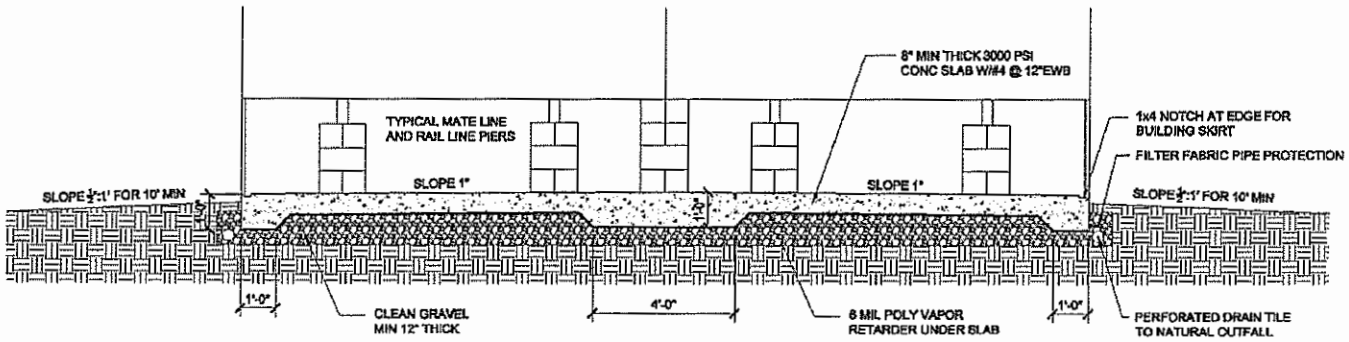
MONOLITHIC SLAB ALL SOIL - DOUBLE



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Examples of designs that are currently used in frost susceptible climates that utilize insulation to make a frost protected foundation systems.

Clayton Homes provided permission to include its plans SU-ADD 107.2, SU-ADD 107.3, and SU-ADD 107.4 to SU-ADD 107.6 in this Appendix. These systems have been approved for use in the state of New York, are designed by an engineer/architect and are approved by the Manufacturer and its DAPIA pursuant to 24 CFR Part 3285.2. The plans use AFI to determine the local frost depth requirements. This allows one plan to cover the entire state by referencing the localities' AFI, allowing for proper adjustments to current home designs. Future use of AFI will guarantee a plan to be applicable to the entire United States and thus increase usability. Several companies are currently working on similar plans and intend to have their products available on a national level. It is estimated that these plans will be available by the first quarter of 2017.

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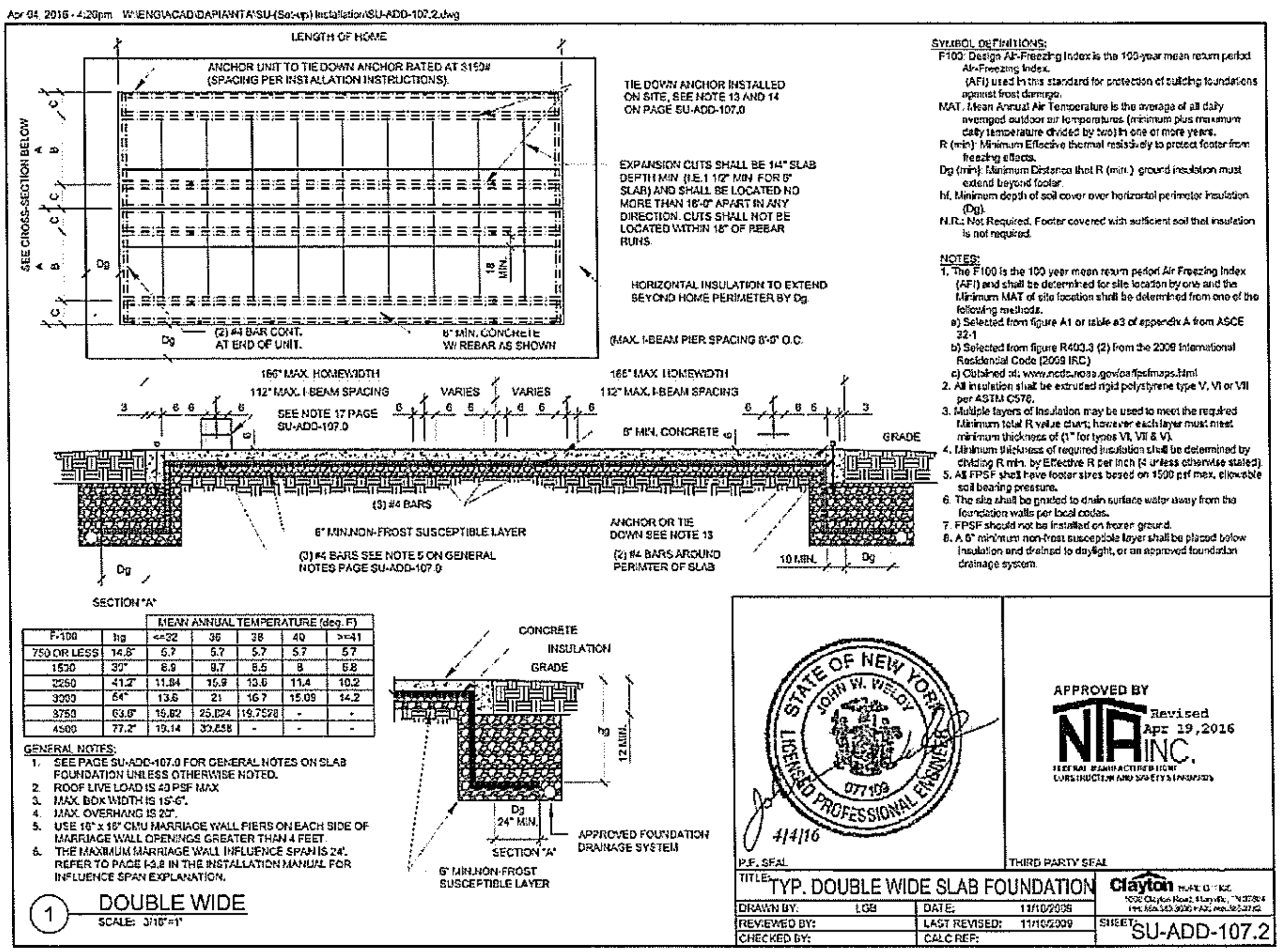
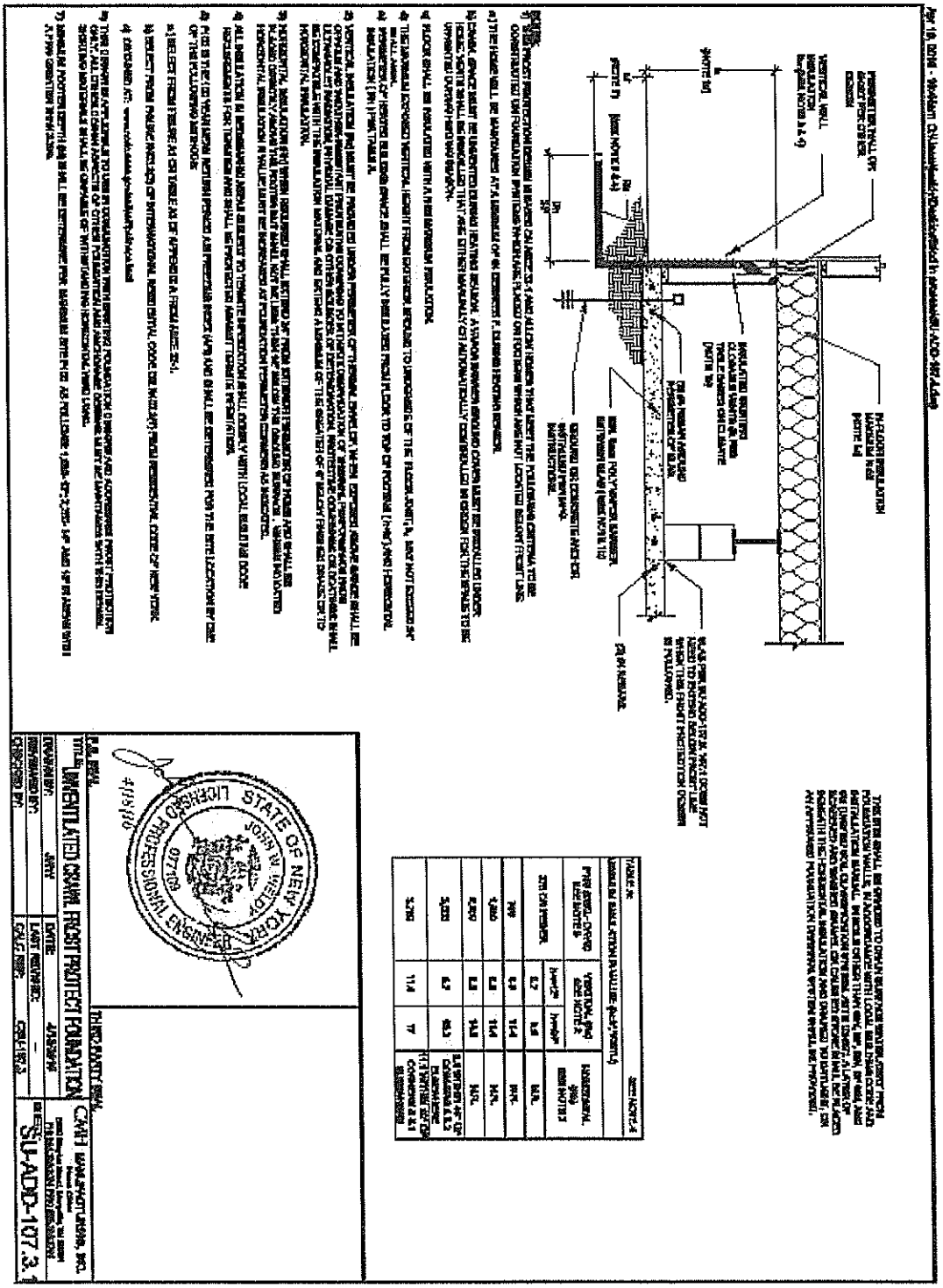
<u>New York Frost Protected Foundation Design (SU-ADD 107.2)</u>

This plan shows how to use insulation under the slab to create a frost protected foundation system.


Apr 04, 2016 - 4:20pm
LENGTH OF HOME
ANCHOR UNIT TO TIE DOWN ANCHOR RATED AT 3150#
(SPACING PER INSTALLATION INSTRUCTIONS).
TIE DOWN ANCHOR INSTALLED ON SITE, SEE NOTE 13 AND 14 ON PAGE SU-ADD-107.0
EXPANSION CUTS SHALL BE 1/4" SLAB DEPTH MIN (I.E. 1 1/2" MIN FOR 6" SLAB) AND SHALL BE LOCATED NO MORE THAN 16'-0" APART IN ANY DIRECTION. CUTS SHALL NOT BE LOCATED WITHIN 18" OF REBAR RUNS.
HORIZONTAL INSULATION TO EXTEND BEYOND HOME PERIMETER BY Dg
SEE CROSS-SECTION BELOW
(2) #4 BAR CONT. AT END OF UNIT.
6" MIN. CONCRETE W/ REBAR AS SHOWN
(MAX. I-BEAM PIER SPACING 8'-0" O.C.
166" MAX. HOMEWIDTH
112" MAX. I-BEAM SPACING
VARIES
SEE NOTE 17 PAGE SU-ADD-107.0
6" MIN. CONCRETE
GRADE
(3) #4 BARS
6" MIN.NON-FROST SUSCEPTIBLE LAYER
(3) #4 BARS SEE NOTE 5 ON GENERAL NOTES PAGE SU-ADD-107.0
ANCHOR OR TIE DOWN SEE NOTE 13
(2) #4 BARS AROUND PERIMTER OF SLAB
10 MIN.
Dg
SECTION "A"
SYMBOL DEFINITIONS:
F100: Design Air-Freezing Index is the 100-year mean return period Air-Freezing Index.
(AFI) used in this standard for protection of building foundations against frost damage.
MAT: Mean Annual Air Temperature is the average of all daily averaged outdoor air temperatures (minimum plus maximum daily temperature divided by two) in one or more years.
R (min): Minimum Effective thermal resistively to protect footer from freezing effects.
Dg (min): Minimum Distance that R (min.) ground insulation must extend beyond footer.
hf. Minimum depth of soil cover over horizontal perimeter insulation (Dg).
N.R.: Not Required. Footer covered with sufficient soil that insulation is not required.
NOTES:
1. The F100 is the 100 year mean return period Air Freezing Index (AFI) and shall be determined for site location by one and the Minimum MAT of site location shall be determined from one of the following methods.
a) Selected from figure A1 or table a3 of appendix A from ASCE 32-1
b) Selected from figure R403.3 (2) from the 2009 International Residential Code (2009 IRC)
c) Obtained at: www.ncdc.noaa.gov/oa/fpsfmaps.html
2. All insulation shall be extruded rigid polystyrene type V, VI or VII per ASTM C578.
3. Multiple layers of insulation may be used to meet the required Minimum total R value chart; however each layer must meet minimum thickness of (1" for types VI, VII & V).
4. Minimum thickness of required insulation shall be determined by dividing R min. by Effective R per inch (4 unless otherwise stated).
5. All FPSF shall have footer sizes based on 1500 psf max. allowable soil bearing pressure.
6. The site shall be graded to drain surface water away from the foundation walls per local codes.
7. FPSF should not be installed on frozen ground.
8. A 6" minimum non-frost susceptible layer shall be placed below insulation and drained to daylight, or an approved foundation drainage system.
MEAN ANNUAL TEMPERATURE (deg. F)
F-100 | hg | <=32 | 35 | 38 | 40 | >=41
750 OR LESS | 14.6" | 5.7 | 5.7 | 5.7 | 5.7 | 5.7
1500 | 30" | 8.9 | 8.7 | 8.5 | 8 | 5.8
2250 | 41.2" | 11.84 | 15.9 | 13.6 | 11.4 | 10.2
3000 | 54" | 13.8 | 21 | 16.7 | 15.09 | 14.2
3750 | 63.6" | 15.82 | 25.024 | 19.7528 | - | -
4500 | 77.2" | 19.14 | 30.856 | - | - | -
GENERAL NOTES:
1. SEE PAGE SU-ADD-107.0 FOR GENERAL NOTES ON SLAB FOUNDATION UNLESS OTHERWISE NOTED.
2. ROOF LIVE LOAD IS 40 PSF MAX
3. MAX. BOX WIDTH IS 15'-6".
4. MAX. OVERHANG IS 20".
5. USE 16" x 16" CMU MARRIAGE WALL PIERS ON EACH SIDE OF MARRIAGE WALL OPENINGS GREATER THAN 4 FEET.
6. THE MAXIMUM MARRIAGE WALL INFLUENCE SPAN IS 24'. REFER TO PAGE I-3.2 IN THE INSTALLATION MANUAL FOR INFLUENCE SPAN EXPLANATION.
1 DOUBLE WIDE
SCALE: 3/16"=1'
CONCRETE
INSULATION
GRADE
12 MIN.
24" MIN.
SECTION "A"
APPROVED FOUNDATION DRAINAGE SYSTEM
6" MIN.NON-FROST SUSCEPTIBLE LAYER
STATE OF NEW YORK
JOHN W. WELDY
077109
LICENSED PROFESSIONAL ENGINEER
4/4/16
P.E. SEAL
APPROVED BY
NTA INC.
Revised
Apr 19,2016
THIRD PARTY SEAL
TITLE TYP. DOUBLE WIDE SLAB FOUNDATION
Clayton
DRAWN BY: LGB
DATE: 11/10/2009
REVIEWED BY:
LAST REVISED: 11/10/2009
CHECKED BY:
CALC REF:
SHEET SU-ADD-107.2

New York Frost Protected Foundation Design (SU-ADD 107.3)

This plan shows how to use insulated skirting to provide a frost protected foundation system.

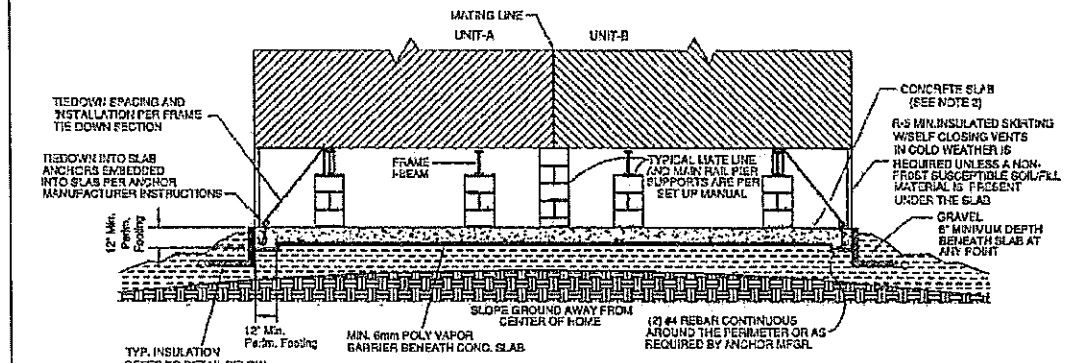


New York Slab Design – Insulated Skirting (SU-ADD 107.4 to SU-ADD 107.6)

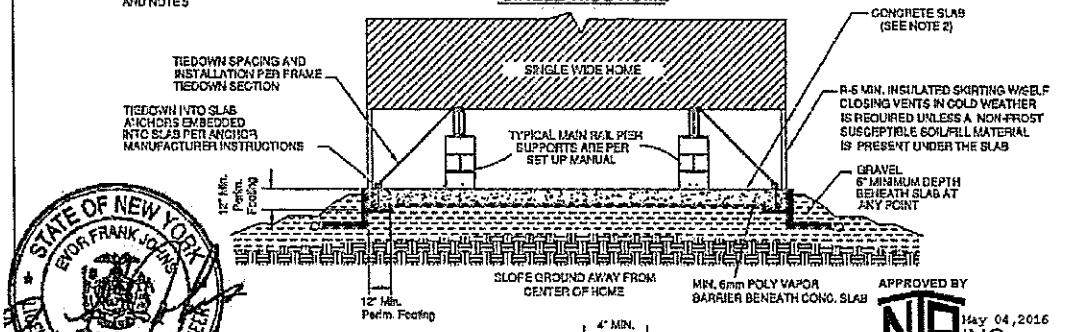
CLAYTON HOMES

ADDENDUM TO HUD INSTALLATION MANUAL

(NEW YORK STATE SLAB-ON-GROUND REQUIREMENTS USING INSULATED SKIRTING OPTION)

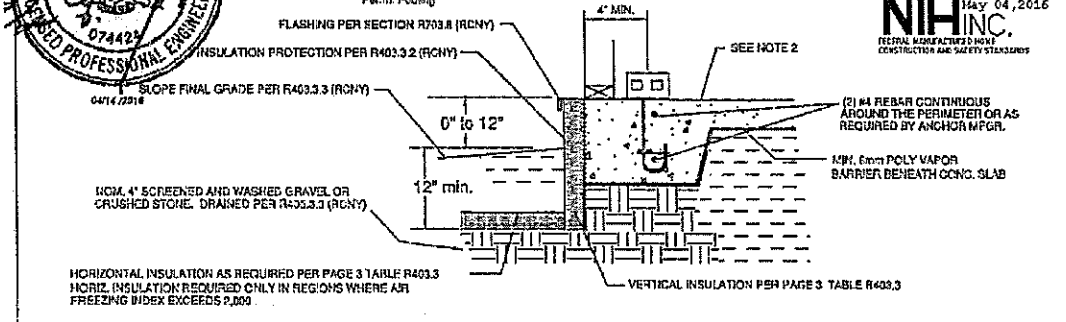


SINGLE WIDE HOME



STATE OF NEW YORK
ENOR. FRANK JOHNS
07442
LICENSED PROFESSIONAL ENGINEER
04/14/2016

APPROVED BY NTA INC. May 04, 2016
NATIONAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS



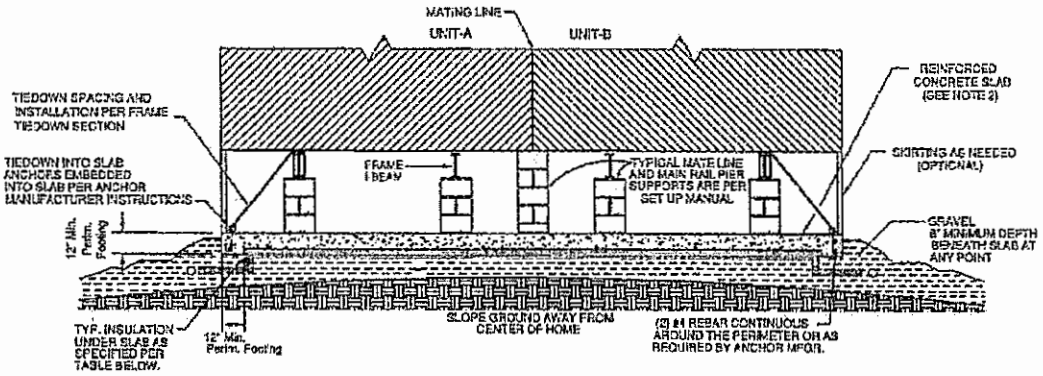
NOTES:

1. SITE ONLY ON WELL DRAINED SOIL WITH AVERAGE MOISTURE CONTENT LESS THAN 25% TO FROST DEPTH. SOIL CONDITIONS AS INDICATED ARE ADEQUATE FOR SLAB INSTALLED ABOVE FROST LINE.
2. THE THICKNESS OF THE SLAB IS SET AT 6" FOR AN ASSUMED 2000 PSF SOIL BEARING CAPACITY. FOR 1000 PSF MIN SOIL BEARING CAPACITY, USE 8" THICK CONCRETE SLAB. CONCRETE COMPRESSIVE STRENGTH: 3500 PSI MIN.
3. ALL INSULATION SHALL BE EXTRUDED POLYSTYRENE TYPE V, VI, OR VII PER ASTM C578.
4. INSULATION FOR SLAB IS NOT REQUIRED IF PLACED ON A LAYER OF WELL DRAINED, UNDISTURBED GROUND OR FILL THAT IS NOT SUSCEPTIBLE TO FROST. CLASSIFICATION OF FROST SUSCEPTIBILITY OF SOIL SHALL BE DETERMINED BY A SOILS OR GEOLOGICAL ENGINEER UNLESS OTHERWISE APPROVED. THE DETERMINATION PROVIDED TO THE LAHJ BY THE SOILS ENGINEER SHALL INCLUDE DATA THAT DESCRIBES THE SOIL CONDITIONS TO A MINIMUM DEPTH THAT INCLUDES THE FROST DEPTH.
5. REFER TO PAGE 3 FOR TABLE R403.3 (RCNY) SPECIFYING REQUIRED INSULATION LENGTH AND R-VALUES AND TABLE R-403.3(1) (RCNY) FOR AIR FREEZING INDEX VALUES PER GEOGRAPHIC LOCATION.
6. REFER TO INSTALLATION INSTRUCTIONS FOR ANCHOR TIE DOWN REQUIREMENTS AND SPACING. REFER TO ANCHOR MANUFACTURER INSTALLATION INSTRUCTIONS FOR ALL OTHER REQUIREMENTS.

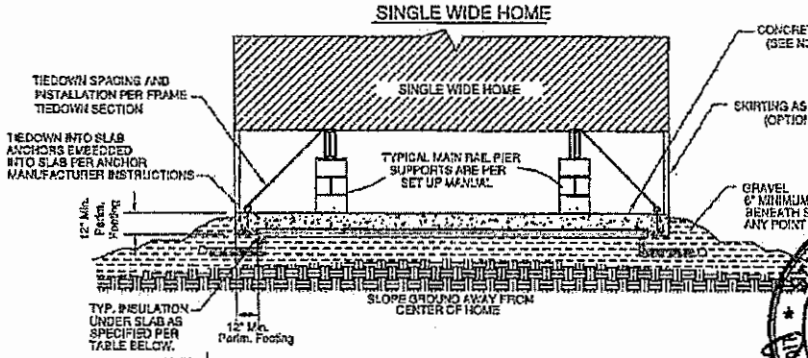
CLAYTON HOMES

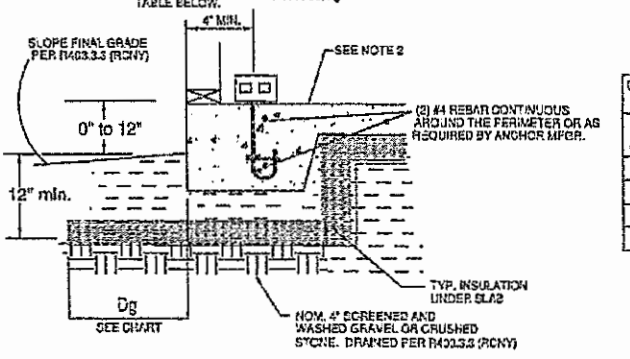
ADDENDUM TO HUD INSTALLATION MANUAL

(NEW YORK STATE SLAB-ON-GROUND REQUIREMENTS USING INSULATED SLAB OPTION)



SINGLE WIDE HOME





CONTINUOUS SLAB INSULATION REQUIREMENTS
(PER TABLE 8 OF SEI/ASCE 32-01)

AIR FREEZING INDEX (See page A-19.3)	Dg	REQUIRED R-VALUE * Assumes Mean Annual Temp. ≥ 41° F
750 OR LESS	30"	5.5
1500	49"	6.5
2250	63"	8.5
3000	79"	13.9

* INSULATION IS REDUCED BY 0.5 FOR R-VALUE OF 8" MINIMUM CONCRETE SLAB

STATE OF NEW YORK
EIVOR FRANK JOHNS
07442
LICENSED PROFESSIONAL ENGINEER

APPROVED BY
NTA INC.
May 04, 2016
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

NOTES:

1. SITE ONLY ON WELL DRAINED SOIL WITH AVERAGE MOISTURE CONTENT LESS THAN 25% TO FROST DEPTH. SOIL CONDITIONS AS INDICATED ARE ADEQUATE FOR SLAB INSTALLED ABOVE FROST LINE.
2. THE THICKNESS OF THE SLAB IS SET AT 8" FOR AN ASSUMED 2000 PSF SOIL BEARING CAPACITY. FOR 1000 PSF MIN SOIL BEARING CAPACITY, USE 8" THICK CONCRETE SLAB. CONCRETE COMPRESSIVE STRENGTH: 3500 PSI MIN.
3. ALL INSULATION SHALL BE EXTRUDED POLYSTYRENE TYPE V, VI, OR VII PER ASTM C578.
4. INSULATION FOR SLAB IS NOT REQUIRED IF PLACED ON A LAYER OF WELL DRAINED, UNDISTURBED GROUND OR FILL THAT IS NOT SUSCEPTIBLE TO FROST. CLASSIFICATION OF FROST SUSCEPTIBILITY OF SOIL SHALL BE DETERMINED BY A SOILS OR GEOLOGICAL ENGINEER UNLESS OTHERWISE APPROVED. THE DETERMINATION PROVIDED TO THE LHAJ BY THE SOILS ENGINEER SHALL INCLUDE DATA THAT DESCRIBES THE SOIL CONDITIONS TO A MINIMUM DEPTH THAT INCLUDES THE FROST DEPTH.
5. REFER TO INSTALLATION INSTRUCTIONS FOR ANCHOR TIE DOWN REQUIREMENTS AND SPACING. REFER TO ANCHOR MANUFACTURER INSTALLATION INSTRUCTIONS FOR ALL OTHER REQUIREMENTS.

TABLE R403.3
MINIMUM INSULATION REQUIREMENTS FOR FROST-PROTECTED FOOTINGS IN HEATED BUILDINGS[a]

AIR FREEZING INDEX (°F-days)[b]	VERTICAL INSULATION R-VALUE[c,d]	HORIZONTAL INSULATION R-VALUE[c,e]		HORIZONTAL INSULATION DIMENSIONS PER FIGURE R403.3(1) (inches)		
		Along walls	At corners	A	B	C
1,500 or less	4.5	Not required	Not required	Not required	Not required	Not required
2,000	5.6	Not required	Not required	Not required	Not required	Not required
2,500	6.7	1.7	4.9	12	24	40
3,000	7.8	6.2	8.6	12	24	40
3,500	9.0	8.0	11.2	24	30	60
4,000	10.1	10.5	13.1	24	36	60

a. Insulation requirements are for protection against frost damage in heated buildings. Greater values may be required to meet energy conservation standards. Interpolation between values is permissible.
b. See Table R403.3.1 for Air Freezing Index values.
c. Insulation materials shall provide the stated minimum *R*-values under long-term exposure to moist, below-ground conditions in freezing climates. The following *R*-values shall be used to determine insulation thicknesses required for this application: Type II expanded polystyrene-2.4*R* per inch; Type IV extruded polystyrene-4.5*R* per inch; Type VI extruded polystyrene-4.5*R* per inch; Type IX expanded polystyrene-3.2*R* per inch; Type X extruded polystyrene-4.5*R* per inch.
d. Vertical insulation shall be expanded polystyrene insulation or extruded polystyrene insulation.
e. Horizontal insulation shall be extruded polystyrene insulation.

TABLE R403.3(1)
AIR FREEZING INDEX (BASE 32° FAHRENHEIT) RETURN PERIOD OF 100 YEAR (99% PROBABILITY)

Station Name	Station Number	Air Freezing Index	Station Name	Station Number	Air Freezing Index
ALBANY WSO	300042	1350	LIBERTY	304731	1515
ALCOVE DAM	300063	1451	LITTLE FALLS CITY RES	304791	1586
ALFRED	300085	1499	LITTLE VALLEY	304808	1540
ALLEGANY STATE PARK	300093	1494	LOCKPORT 2 NE	304844	1147
ANGELICA	300183	1421	LOWVILLE	304912	1768
BAINBRIDGE	300360	1349	MILLBROOK	305334	1246
BATAVIA	300443	1310	MINEOLA	305377	496
BOONVILLE 2 SSW	300785	1963	MOHONK LAKE	305426	1109
BRIDGEHAMPTON	300889	510	MOUNT MORRIS 2 W	305597	1355
BROCKPORT 2 NW	300937	1195	NEW YORK CNTRL PK WSO	305801	440
CANANDAIGUA 3 S	301152	1185	NY WESTERLEIGH STAT IS	305821	521
CANTON 4 SE	301185	2124	NORWICH 1 NE	306085	1679
CARMEL 1 SW	301207	1093	OGDENSBURG 3 NE	306164	2038
CHASM FALLS	301387	1952	OSWEGO EAST	306314	1164
CHAZY	301401	1997	PATCHOGUE 2 N	306441	599
COOPERSTOWN	301752	1454	PENN YAN 2 SW	306510	1075
CORTLAND	301799	1396	PERU 2 WSW	306538	1733
DANNEMORA	301955	1794	PORT JERVIS	306774	990
DANSVILLE	301974	1230	POUGHKEEPSIE FAA AP	306820	1160
DOBBS FERRY	302129	576	RIVERHEAD RESEARCH	307134	510
ELIZABETHTOWN	302554	2078	ROCHESTER WSO	307167	1199
ELMIRA	302610	1361	SALEM	307405	1706
FRANKLINVILLE	303025	1715	SCARSDALE	307497	618
FREDONIA	303033	1143	SETAUKET	307603	452
GENEVA RESEARCH FARM	303184	1297	SODUS CENTER	307842	1248
GLENHAM	303259	985	SPENCER 3 W	308088	1514
GLENS FALLS FAA AP	303294	1688	STILLWATER RESERVOIR	308248	2483
GLOVERSVILLE	303319	1500	SYRACUSE WSO	308383	1215
GOUVERNEUR	303346	1877	TUPPER LAKE SUNMOUNT	308631	2372
GRAFTON	303360	1516	UTICA FAA AP	308737	1545
HEMLOCK	303773	1436	WANAKENA RANGER SCHOOL	308944	2192
INDIAN LAKE 2 SW	304102	2317	WATERTOWN	309080	1701
ITHACA CORNELL UNIV.	304174	1367	WESTFIELD 3 SW	309189	1247
LAKE PLACID CLUB	304555	2518	WEST POINT	309292	899
LAWRENCEVILLE	304647	1956	WHITEHALL	309389	1594

ATTACHMENT 3

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

October 28, 2016

VIA FEDERAL EXPRESS

Ms. Vicky J. Lewis
Office of the Executive Secretariat
U.S. Department of Housing and Urban Development
Room 10139
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: Freedom of Information Act Request

Dear Ms. Lewis:

The Manufactured Housing Association for Regulatory Reform ("MHARR") hereby requests, pursuant to the Freedom of Information Act, 5 U.S.C. 552 ("FOIA"), that copies of the following documents related to the regulation of manufactured housing by the Department of Housing and Urban Development ("HUD") pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5401, et seq.), as amended ("Act") be provided to us. The term "document," as used herein, includes records of electronic communications and both written and electronic records of telephonic communications.

HUD, at the October 25-27, 2016 meeting of the Manufactured Housing Consensus Committee (MHCC), presented a report to the MHCC for its consideration prepared by the HUD manufactured housing program installation contractor, SEBA Professional Services, L.L.C. (SEBA). That report (SEBA Report) incorporates ostensible "recommendations" and/or "guidance" concerning the requirements and enforcement of the HUD manufactured housing installation standards set forth at 24 U.S.C. 3285.312(b).

In connection therewith, MHARR requests the production of:

1. Any contract or work order issued by HUD to SEBA in connection with the preparation of the above-described SEBA Report;
2. Documents reflecting any and all amounts paid by HUD to SEBA in connection with the preparation of the above-described SEBA Report;
3. Any contract, subcontract or work order issued by SEBA to any other individual or entity in connection with the preparation of the above-described SEBA Report;

4. Documents reflecting any and all amounts paid by SEBA to any such other individual or entity in connection with the preparation of the above-described SEBA Report;
5. Any contract, subcontract or work order issued by HUD to any individual or entity other than SEBA in connection with the preparation of the above-described SEBA Report;
6. Documents reflecting any and all amounts (if any) paid by HUD to any individual or entity other than SEBA in connection with the preparation of the above-described SEBA Report;
7. Documents reflecting the identity of any individual or entity that participated in any way in the preparation of the above-described SEBA Report;
8. Any and all documents provided to SEBA and/or HUD by any individual or entity in connection with the preparation of the above-described SEBA Report;
9. Documents reflecting the role of Jay H. Crandell, P.E. (Crandell) and/or "ARES Consulting" (ARES) in the preparation of the above-described SEBA Report;
10. Documents reflecting the qualifications of Crandell and/or ARES to participate in the preparation of the above-described SEBA Report;
11. Copies of all invoices or other payment and/or reimbursement requests submitted to HUD and/or SEBA by Crandell and/or ARES;
12. Copies of any and all documents submitted to HUD and/or SEBA by Crandell and/or ARES (other than those encompassed within request no. 11, above);
13. Documents reflecting all clients/customers provided services by Crandell and/or ARES from January 1, 2011 to the present;
14. Copies of any and all documents submitted to HUD and/or SEBA and/or Crandell and/or ARES by any individual or entity in connection with the preparation of the SEBA Report;
15. Any and all documents showing or relating to failures of HUD Code manufactured home installations as a result of "the effects of frost heave" as set forth in 24 C.F.R. 3285.312(b);
16. Any and all documents showing the cost and cost impact of the "recommendations," "guidance" and/or mandates set forth in the SEBA Report; and
17. Any and all documents showing or relating to the consideration by HUD of the cost and cost impact of the "recommendations," guidance" and/or mandates set forth in the SEBA Report.

The documents requested herein are sought in the public interest concerning the operation, activities, transparency and accountability of the HUD manufactured housing program and its compliance or non-compliance with applicable law, and not primarily for any commercial interest of the requester.

If all or part of this request is denied, please cite each specific FOIA exemption which you contend justifies the said denial and advise us accordingly.

Please contact me if you have any questions about processing this request.

Thank you in advance for your assistance.

Sincerely,

Mark Weiss
President and CEO

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

August 4, 2017

VIA FEDERAL EXPRESS

Mr. Howard Rosenberg
Office of the Executive Secretariat
FOIA Branch
U.S. Department of Housing and Urban Development
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: Delay and Mishandling of MHARR Freedom of Information Act Requests
Regarding Questionable Manufactured Housing Program Activities

Dear Mr. Rosenberg:

I am writing as a follow-up to our telephone conversation of August 1, 2017 and my letter to HUD, dated July 27, 2017 (Attachment 1), regarding Freedom of Information Act (FOIA) request number 17-FI-HQ-01637.

During that conversation, you stated that HUD had not received – prior to its inclusion with my letter of July 27, 2017 – an FOIA request by the Manufactured Housing Association for Regulatory Reform (MHARR) dated October 28, 2016 seeking documents pertaining to a report by a contractor for HUD's Office of Manufactured Housing Programs (OMHP) which has now become the ostensible basis for a proposed Interpretive Bulletin construing HUD's manufactured housing installation standards. (See, 82 Federal Register, No. 118 at p. 28279, et seq.) You further indicated that HUD, as a result, would treat that FOIA request as having been filed contemporaneously with my letter of July 27, 2017.

At the time of our conversation, I did not have information regarding the delivery of the October 28, 2016 request by Federal Express. Upon further research, however, there is documentation confirming that the October 28, 2016 request was, in fact, delivered to HUD on November 1, 2016. This proof includes: (1) the Federal Express label for the FOIA package (Attachment 2); (2) the Federal Express receipt for the FOIA package with a tracking number corresponding with the label (Attachment 3); (3) a "proof-of-delivery" from Federal Express showing the package with that tracking number delivered to HUD on November 1, 2016 and

signed-for by an individual named "M. Harley" (Attachment 4); and (4) a screen capture from HUD's website showing a "Marcus Harley" as an employee at HUD headquarters (Attachment 5).

Based on this proof of delivery of MHARR's FOIA request to HUD on November 1, 2016, we will insist that its October 28, 2016 FOIA request, now denominated with Control Number 17-FI-HQ-01637, be treated by HUD as having been filed on November 1, 2016 for purposes of all response deadlines and responsibilities imposed on HUD by the FOIA statute. Accordingly, we demand that all responsive documents (and a statement of any allegedly applicable FOIA exemptions) be provided to MHARR by HUD forthwith and without further delay.

HUD's apparent bad faith effort to "slow-roll" and delay this request for crucial information relating to substantive regulatory action pending public comment in a rulemaking pursuant to the Manufactured Housing Improvement Act of 2000 and the Administrative Procedure Act (with an impending comment deadline on August 1, 2017) is part of a planned pattern and practice of denial and obfuscation which is evident from the underlying OMHP program. That pattern and practice of failing to respond to MHARR FOIA requests regarding OMHP program activity includes, but is not limited to, failing to respond – to date, nearly two years later – to MHARR FOIA request number 16-FI-HQ-00762, filed on January 16, 2016 (Attachment 6) and seeking a baseless "modification" of that request which MHARR rejected in correspondence dated April 25, 2016 (Attachment 7).

This pattern and practice is unacceptable and directly contradicts the regulatory and governmental reform policies of President Trump. Moreover, it is consistent with an ongoing effort at HUD to protect, defend and keep in place the current Obama Administration-holdover program administrator. MHARR expects and will demand that HUD provide full, complete, and immediate responses and disclosures pursuant to both of these long and illegitimately-delayed FOIA requests.

Very truly yours,

Mark Weiss
President and CEO

cc: Hon. Benjamin Carson (without attachments)
Hon. Paul Compton, Esq. (without attachments)
Ms. Sheila Greenwood (without attachments)
Ms. Nandini Rao (without attachments)
Ms. Maren Kasper (without attachments)

Attachments

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

July 27, 2017

VIA FEDERAL EXPRESS

Ms. Vicky J. Lewis
Office of the Executive Secretariat
U.S. Department of Housing and Urban Development
Room 10139
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: MHARR Freedom of Information Act Request

Dear Ms. Lewis:

On October 28, 2016, the Manufactured Housing Association for Regulatory Reform (MHARR) sent the attached Freedom of Information Act (FOIA) request to the Department of Housing and Urban Development (HUD). MHARR's records, however, indicate that, to date, MHARR has received no response to -- or acknowledgment of -- this request from HUD.

Therefore, we ask that you please confirm receipt of this request and provide MHARR with an FOIA tracking number and estimate of processing costs.

Thank you.

Sincerely,

Mark Weiss
President and CEO

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

October 28, 2016

VIA FEDERAL EXPRESS

Ms. Vicky J. Lewis
Office of the Executive Secretariat
U.S. Department of Housing and Urban Development
Room 10139
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: Freedom of Information Act Request

Dear Ms. Lewis:

The Manufactured Housing Association for Regulatory Reform ("MHARR") hereby requests, pursuant to the Freedom of Information Act, 5 U.S.C. 552 ("FOIA"), that copies of the following documents related to the regulation of manufactured housing by the Department of Housing and Urban Development ("HUD") pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5401, et seq.), as amended ("Act") be provided to us. The term "document," as used herein, includes records of electronic communications and both written and electronic records of telephonic communications.

HUD, at the October 25-27, 2016 meeting of the Manufactured Housing Consensus Committee (MHCC), presented a report to the MHCC for its consideration prepared by the HUD manufactured housing program installation contractor, SEBA Professional Services, L.L.C. (SEBA). That report (SEBA Report) incorporates ostensible "recommendations" and/or "guidance" concerning the requirements and enforcement of the HUD manufactured housing installation standards set forth at 24 U.S.C. 3285.312(b).

In connection therewith, MHARR requests the production of:

1. Any contract or work order issued by HUD to SEBA in connection with the preparation of the above-described SEBA Report;
2. Documents reflecting any and all amounts paid by HUD to SEBA in connection with the preparation of the above-described SEBA Report;
3. Any contract, subcontract or work order issued by SEBA to any other individual or entity in connection with the preparation of the above-described SEBA Report;

4. Documents reflecting any and all amounts paid by SEBA to any such other individual or entity in connection with the preparation of the above-described SEBA Report;
5. Any contract, subcontract or work order issued by HUD to any individual or entity other than SEBA in connection with the preparation of the above-described SEBA Report;
6. Documents reflecting any and all amounts (if any) paid by HUD to any individual or entity other than SEBA in connection with the preparation of the above-described SEBA Report;
7. Documents reflecting the identity of any individual or entity that participated in any way in the preparation of the above-described SEBA Report;
8. Any and all documents provided to SEBA and/or HUD by any individual or entity in connection with the preparation of the above-described SEBA Report;
9. Documents reflecting the role of Jay H. Crandell, P.E. (Crandell) and/or "ARES Consulting" (ARES) in the preparation of the above-described SEBA Report;
10. Documents reflecting the qualifications of Crandell and/or ARES to participate in the preparation of the above-described SEBA Report;
11. Copies of all invoices or other payment and/or reimbursement requests submitted to HUD and/or SEBA by Crandell and/or ARES;
12. Copies of any and all documents submitted to HUD and/or SEBA by Crandell and/or ARES (other than those encompassed within request no. 11, above);
13. Documents reflecting all clients/customers provided services by Crandell and/or ARES from January 1, 2011 to the present;
14. Copies of any and all documents submitted to HUD and/or SEBA and/or Crandell and/or ARES by any individual or entity in connection with the preparation of the SEBA Report;
15. Any and all documents showing or relating to failures of HUD Code manufactured home installations as a result of "the effects of frost heave" as set forth in 24 C.F.R. 3285.312(b);
16. Any and all documents showing the cost and cost impact of the "recommendations," "guidance" and/or mandates set forth in the SEBA Report; and
17. Any and all documents showing or relating to the consideration by HUD of the cost and cost impact of the "recommendations," guidance" and/or mandates set forth in the SEBA Report.

The documents requested herein are sought in the public interest concerning the operation, activities, transparency and accountability of the HUD manufactured housing program and its compliance or non-compliance with applicable law, and not primarily for any commercial interest of the requester.

If all or part of this request is denied, please cite each specific FOIA exemption which you contend justifies the said denial and advise us accordingly.

Please contact me if you have any questions about processing this request.

Thank you in advance for your assistance.

Sincerely,

Mark Weiss
President and CEO

MUR 1

ATTACHMENT 2

FedEx Express — Package US Airbill

FedEx Tracking Number 8097 1097 0673

Form ID No. 0215

1 From *Please print and press hard.*

Date 10/25/16 Sender's FedEx Account Number 1183-5217-3

Sender's Name MARK WEISS Phone (202) 783-4087

Company MH ASSOC FOR REGULATORY REFORM

Address 1331 PENN AVE NW STE 512 Dept/Floor/Suite/Room

City WASHINGTON State DC ZIP 20004-1703

2 Your Internal Billing Reference First 24 characters will appear on invoice.

3 To

Recipient's Name VICKY J. LEWIS Phone (202) 402-6147

Company OFFICE OF EXECUTIVE SECRETARIAT US DEPT. OF HOUSING AND URBAN DEVELOPMENT, ROOM 10152

Address 451 SEVENTH ST. S.W. Dept/Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Use this line for the HOLD location address or for continuation of your shipping address.

City WASHINGTON State DC ZIP 20410

Hold Weekday — FedEx location address REQUIRED. FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. FedEx Priority Overnight and FedEx 2Day to select locations.

012186746 1

4 Express Package Service * To most locations.

Packages up to 150 lbs. *For packages over 150 lbs., use the FedEx Express Freight US Airbill.*

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☒ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☒ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery — FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☒ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery.
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

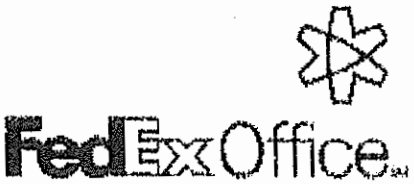
FedEx Acct. No. / Credit Card No. Exp. Date

Total Packages ____ Total Weight ____ lbs. Total Declared Value† $ ____ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this airbill you agree to the service conditions on the back of this airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

Rev. Date 9/15 • Part #163134 • ©1994-2015 FedEx • PRINTED IN U.S.A. SRM



ATTACHMENT 3

10661 BRADDOCK RD
Fairfax, VA 22032

Location:	ZFOKK
Device ID:	ZFOKK-POS2
Employee:	1790237
Transaction:	680125757673

STANDARD OVERNIGHT

809710970673	0.15 lb (S)	21.70

Scheduled Delivery Date 11/01/2016

Shipment subtotal:	21.70
Total Due:	21.70
FedEx Account: *****2173	21.70

M = Weight entered manually
S = Weight read from scale
T = Taxable item

Subject to additional charges. See FedEx Service Guide at fedex.com for details. All merchandise sales final.

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Or call 1.800.GoFedEx
1.800.463.3339

October 31, 2016 6:44:48 PM

********** WE LISTEN **********
Tell us how we're doing
& receive a discount on your next order!
fedex.com/welisten or 800-398-0242
Redemption Code: _____

*** Thank you ***

ATTACHMENT 4

FedEx

August 3,2017

Dear Customer:

The following is the proof-of-delivery for tracking number **809710970673**.

Delivery Information:			
Status:	Delivered	**Delivery location:**	WASHINGTON, DC
Signed for by:	M.HARLEY	**Delivery date:**	Nov 1, 2016 10:59
Service type:	FedEx Standard Overnight		
Special Handling:	Deliver Weekday		

Signature image is available. In order to view image and detailed information, the shipper or payor account number of the shipment must be provided.

Shipping Information:			
Tracking number:	809710970673	**Ship date:**	Oct 31, 2016

Recipient:
WASHINGTON, DC US

Shipper:
WASHINGTON, DC US

Thank you for choosing FedEx.

ATTACHMENT 5

Search Results

Name	Corr. Code	Room	Phone	Ext.	Location
Harley, Kimberly	DOTMC	7233	202-402-4753		Headquarters
Harley, Marcus	HRDS	9139	202-402-2592		Headquarters
Harley, Yvonne	HP	WOC	202-708-0599	2221	Headquarters

Subj: **RE: FW: FOIA 16-FI-HQ-00762**
Date: 2/27/2017 12:26:59 P.M. Eastern Standard Time
From: William.D.Smith@hud.gov
To: Mmarkweiss@aol.com
CC: Sandra.J.Wright@hud.gov

Hello Mr. Weiss,
Please, pardon any delays. As you may know, the HUD FOIA program employs a first in and first out processing procedure to adequately respond to FOIA request.

We are presently processing a large number of FOIA requests and are working diligently to complete each request. Unfortunately, there are many FOIA requests of varying types ahead of yours for processing and even more requiring the same lengthy review process as your request requires.

However, I assure you that we will sufficiently complete processing your request, as we must as soon as possible.

Sincerely,
William Smith
HUD Exec Sec/FOIA Branch

From: Mmarkweiss@aol.com [mailto:Mmarkweiss@aol.com]
Sent: Wednesday, February 22, 2017 2:30 PM
To: Smith, William D <William.D.Smith@hud.gov>
Cc: Wright, Sandra J <Sandra.J.Wright@hud.gov>
Subject: Re: FW: FOIA 16-FI-HQ-00762

Mr. Smith, could you please provide me with an update on the status of MHARR's below-referenced FOIA request No. 16-FI-HQ-00762, which has been outstanding for some time now.

Thank you.

Mark Weiss
President & CEO
Manufactured Housing Association for Regulatory Reform (MHARR)
1331 Pennsylvania Ave. N.W., Suite 512
Washington, D.C. 20004
Phone: 202/783-4087
Fax: 202/783-4075
Email: MHARRDG@AOL.COM

In a message dated 11/21/2016 12:38:17 P.M. Eastern Standard Time, William.D.Smith@hud.gov writes:

ATTACHMENT 7

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

April 25, 2016

VIA FEDERAL EXPRESS AND ELECTRONIC SUBMISSION

Mr. William Smith
Office of the Executive Secretariat
FOIA Branch
U.S. Department of Housing and Urban Development
Room 10139
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: MHARR Freedom of Information Act Request
FOIA Control Number – 16-FI-HQ-00762

Dear Mr. Smith:

On January 15, 2016, the Manufactured Housing Association for Regulatory Reform (MHARR) filed a request for the disclosure of certain identified documents pursuant to the Freedom of Information Act (FOIA) (5 U.S.C. 552). MHARR's request, in relevant part, sought the disclosure of: "All applications for appointment to the Manufactured Housing Consensus Committee (MHCC)[1] (regardless of whether any such applicant has been appointed to membership on the MHCC) received by HUD or the MHCC Administering Organization(s) (AO), under contract to HUD, from January 1, 2008 to present." By letter dated February 8, 2016, HUD acknowledged receipt of this request.

Subsequently, by telephone and by email dated April 20, 2016, you advised us: "I have been informed that the [MHCC] applicant documents you seek contain pre-decisional as well as personal and private information. All such information is exempt from disclosure under the FOIA. Please, clarify or modify your request accordingly, and forward to me via email, for an appropriate release of information needed for your purposes."

This response addresses HUD's request for a clarification and/or or modification of MHARR's original FOIA request regarding MHCC applicant documents and its broader contention that such documents are generically exempt from disclosure.

[1] As established by HUD, the MHCC is organized and operates under the provisions of the Federal Advisory Committees Act (FACA) (5 U.S.C. App. 1).

Applicants to be appointed to the MHCC are required to complete an on-line form maintained by the MHCC AO. That form,[2] in relevant part, requests the applicant's name, contact information and employment information, including employment history, current position and employment duties. Applicants are also prompted to "provide evidence" of their "knowledge and qualifications" for the category (i.e., producer, user, general interest) of MHCC membership that they seek. In the past, HUD has solicited applicants for appointment to the MHCC via notices posted in the Federal Register.[3] Such notices have not contained any promise or guarantee of confidentiality for information submitted by MHCC applicants.

Based on the foregoing, and as previously stated during our telephone conversation regarding this matter, MHARR does not seek information from otherwise responsive applicant documents that would disclose an applicant's home address, home telephone number, email address, or social security number, and would not object to the redaction of such information from otherwise responsive documents. Nor would we object to the proper redaction of pre-decisional notations by covered personnel that may be on any otherwise responsive document(s). To this extent – and to this extent only – we hereby agree to modify document category 1 of MHARR's January 15, 2016 request.

Regarding HUD's general assertion that the MHCC applications of appointed and non-appointed MHCC applicants are subject to FOIA exemption 6, which permits the withholding of "personnel and medical files and similar files," when disclosure would constitute a clearly unwarranted invasion of personal privacy (5 U.S.C. 552(b)(6)), the decision of the United States District Court for the District of Columbia in Physicians Committee for Responsible Medicine v. Glickman, 117 F. Supp. 2d. 1 (2000)[4] is dispositive and requires production of the applicant materials pursuant to MHARR's request as modified above.

That case involved a FACA federal advisory committee established by the U.S. Department of Agriculture (USDA) to provide recommendations for federal dietary guidelines. The Plaintiff -- "a collection of individuals and groups" -- alleged that its "views were not adequately represented on the Committee." In an FOIA request to USDA, Plaintiff sought the disclosure of: (1) documents revealing the sources of income of nominees who were appointed to the Committee; and (2) the curricula vitae – submitted to USDA – of "nominees who were not appointed to the Committee." (Emphasis added). USDA withheld such documents under FOIA exemption 6.

In ruling for the Plaintiffs on both requests, the court framed the controlling issue as first determining whether "the individuals involved have rights of privacy in th[e] records" claimed exempt from disclosure and then "weigh[ing] those rights against the public's interest in disclosure."

With regard to source of income information for appointed members, the court stated that "an individual does have a privacy interest in information about the sources of her income, but employment history ... is not normally regarded as highly personal [and] the incremental privacy

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[2] See Attachment 1, hereto.

[3] See, e.g., 79 Federal Register, No. 12 (January 17, 2014) at p. 3219.

[4] See, attachment 2, hereto.

interest in the identity of the corporation [paying such income] is minimal." (Emphasis added). By contrast, the court noted: "The asserted public interest is in learning whether a Committee member was financially beholden to a person or entity that had an interest in how the Dietary Guidelines might be amended. I find that the public interest outweighs the privacy interest of the individual whose disclosure form was redacted." (Citing Washington Post v. U.S. Department of Health and Human Services, 690 F.2d 252 (1982) at 265: "The public disclosure of conflicts of interest is desirable despite its cost in loss of personal privacy.")

With regard to disclosure of non-appointees' curricula vitae, the court stated: "CVs would presumably by redacted to protect personal data such as home addresses, telephone numbers, email addresses and social security numbers. Other information in a CV is ordinarily written down precisely so that it will be displayed. *** Neither the applicants nor their nominators were given assurances of confidentiality. The [nomination] notice in the Federal Register did not promise anonymity. I find the privacy interests of the non-appointed applicants to be minimal." (Emphasis in original).

More significantly, in applying the requisite balancing test, the court stated: "The asserted public interest in disclosure is to understand the agency's selection process. Knowing who was selected and who was not, and learning their qualifications and affiliations, would advance that public interest. *** I find that the public interest in disclosure of the CVs of non-appointed applicants outweighs the privacy interests of the individuals involved."

In this case, the information contained in the application forms (and attachments, if any) sought by MHARR (with the modification/clarification for purely personal information set forth above) is no different than the information in the curricula vitae addressed by the court in Physicians Committee, supra. Moreover, the public interest in the proper operation of the MHCC and the transparency of the MHCC appointment process is the same as that as that asserted in Physicians Committee, supra and, indeed, if anything, is even stronger, as the MHCC is an ongoing committee, its members serve multi-year terms, and its jurisdiction pertains to virtually all aspects of the HUD manufactured housing standards and regulations, as well as the operation of the federal manufactured housing program.

As to any alleged "pre-decisional" exemption for notations by covered agency personnel on MHCC application forms (and any attached materials) or any separate document, the issue is moot, as MHARR has agreed to the redaction of such specific covered notations. As to any possible generalized assertion by HUD that the non-selection, per se, of any particular applicant is a reflection of pre-decisional activity warranting non-disclosure, the court's decision in Physicians Committee, supra, requiring the disclosure of applicant information, indicates that there would be no legitimate basis for any such claim.

Accordingly, there is no valid basis for non-disclosure of the documents requested by MHARR, as clarified above and during our initial telephone discussion of this matter. Moreover, MHARR strongly objects to a continuing pattern of abuse and obfuscation by HUD in failing to respond to MHARR FOIA requests in a timely and lawful manner. This includes, but is not limited to, unconscionable delays (and related repeated failures to respond to MHARR inquiries) in connection with MHARR FOIA request no. 15-FI-HQ-01514 (filed June 5, 2015) and

unconscionable delays and clearly excessive cost projections in connection with MHARR FOIA request no. 13-FI-HQ-00035.

We ask that you please confirm receipt of this communication and advise us of HUD's response in a timely manner.

Thank you.

Very truly yours,

Mark Weiss
President and CEO

cc: Ms. Pamela Danner

ATTACHMENT 1

MANUFACTURED HOUSING CONSENSUS COMMITTEE

Proposed Changes Form | Member Application Form

MHCC MEMBER APPLICATION FORM

PART 1: GENERAL INFORMATION

First Name:

Last Name:

Professional Title:

Street Address Line 1:

Street Address Line 2:

City:

State: ... State Required ...

Zip

Applicant Phone:

Applicant Cell:

Applicant Fax:

Email:

Provide evidence of your knowledge and qualifications for the category selected (describe below or attach extra pages if needed).

PART 2: CATEGORY INTEREST

Producer/Retailer – Producers or retailers of manufactured housing.

User/Consumer – Persons representing consumer interests, such as consumer organizations, recognized consumer leaders, and owners who are residents of manufactured homes.

General Interest and Public Officials

Interest Category: ... Category Required ...

PART 3: EMPLOYER/EMPLOYMENT

Employer Name:

Employer AddressL1:

Employer AddressL2:

Employer Address City:

Employer State: ... State Required ...

Employer Zip:

Your Emploment Position:

Your Employment Duties:

Your Employment History:

Identify the background and description of the business of your employer.

Explain if your current employment is related to the interest category you seek.

PART 4: FINANCIAL INDEPENDENCE

A significant financial interest in any segment of the manufactured housing industry?
- ° Yes
- ° No

A significant relationship to any person engaged in the manufactured housing industry?
- ° Yes
- ° No

Will you be able to actively participate in the work of the MHCC, including responding to correspondence and attending committee meetings?
- ° Yes
- ° No

Additional comments or information:

If appointed as an MHCC member, I agree to undertake the responsibilities required by the National Manufactured Housing Construction and Safety Standards Act MHCC Charter, By-laws, and other applicable requirements. In addition, I agree to notify the Administering Organization and the HUD Secretary of a change in status, including change of employment, organization represented, potential conflicts of interest, and, if required, an annual certificate of financial independence.

I certify that all of the information on this application is true and accurate.

Submit Application

ATTACHMENT 2

Physicians Committee for Resp. Medicine v. Glickman, 117 F. Supp. 2d 1 (D.D.C. 2000)

U.S. District Court for the District of Columbia - 117 F. Supp. 2d 1 (D.D.C. 2000)
September 30, 2000

117 F. Supp. 2d 1 (2000)
PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE, et al., Plaintiffs,
v.
Dan GLICKMAN, Secretary, Department of Agriculture, et al., Defendants.

Civil Action No. 99-3107(JR).

United States District Court, District of Columbia.

September 30, 2000.

*2 Mindy S. Kursban, Physicians Committee for Responsible Medicine, Eric R. Glitzenstein, Washington, DC, for plaintiff.

Meredith Manning, Assistant U.S. Attorney, Washington, DC, for defendants.

MEMORANDUM

ROBERTSON, District Judge.

In December 1999, plaintiffs filed a three-count complaint seeking declaratory and injunctive relief under the Federal Advisory Committee Act (FACA), 5 U.S.C.App. II, et seq. (1972), and the Freedom of Information Act (FOIA), 5 U.S.C. § 552, for claims arising out of the appointment and operation of the Dietary Guidelines Advisory Committee for Year 2000 by the United States Department of *3 Agriculture (USDA)

and the United States Department of Heath and Human Services (DHHS). The parties have agreed to the dismissal of Count I. Defendants have moved to dismiss Count II. The parties have filed cross-motions for summary judgment on Count III. After hearing oral argument on September 6, 2000, and having considered the entire record, I have decided for the reasons set forth in this memorandum that plaintiffs are entitled to a declaratory judgment on their FACA claim (Count II) and to the release of certain documents on their FOIA claim (Count III).

Facts

The National Nutritional Monitoring and Related Research Act of 1990 requires that the Secretaries of Agriculture and Health and Human Services publish Dietary Guidelines for Americans at least once every five years. 7 U.S.C. § 5341(a) (1). The Guidelines set forth recommended nutritional and dietary information, and are relied upon by federal agencies in carrying out their responsibilities under federal food, nutrition, and health programs.

On September 18, 1997, acting pursuant to regulations issued under the Act, USDA announced the formation of an advisory committee that would consider whether the 1995 Dietary Guidelines for Americans should be revised "based on thorough evaluation of recent scientific and applied literature and, if so, [to] proceed to develop recommendations for these revisions in a report to the Secretaries." 62 Fed.Reg. 48982 (Sept. 18, 1997). After soliciting nominees for Committee membership through publication in the Federal Register, 62 Fed.Reg. at 48982, USDA announced the appointment of an eleven-member Committee on August 28, 1998.

The Committee met from September 1998 through September 1999. Beginning in June 1999, plaintiff Physicians Committee for Responsible Medicine submitted FOIA requests to USDA seeking information about the Committee and its members, including the financial disclosure forms of all Committee members and records relating to persons who were nominated but not appointed. The USDA responded to these FOIA requests by releasing some and withholding others under specific FOIA exemptions. By December 1999, according to USDA, "[a]ll documents which were made available to or prepared by the Committee had been made available to the public." Bowman Decl. at ¶

12. In early February 2000, the Committee issued its report to the Secretaries of Agriculture and Health and Human Services, and the Committee was disbanded.

Plaintiffs, a collection of individuals and groups who assert that their views on nutrition and health were not adequately represented on the Committee, filed this action in December 1999. Count I of the complaint, which has been dismissed by agreement, challenged the composition of the Committee itself under sections 5(b) and 5(c) of FACA. Count II alleges that defendants violated the public accountability and disclosure requirements of FACA section 10(b) and seeks a declaratory judgment that a violation occurred and discovery into the extent of the violation. The question presented by Count III has been narrowed to whether USDA violated FOIA by withholding and redacting documents under FOIA Exemption 6.

Analysis

A. *Count II Public Disclosure of Documents under FACA*

The relief plaintiffs seek is a judgment declaring that defendants violated the public disclosure requirements of FACA section 10 by failing to disclose on an ongoing basis all records prepared by or for the Committee. Plaintiffs also seek leave to take discovery directed to the question whether certain Committee working groups constituted "advisory committees" subject to FACA's disclosure requirements. The motion to dismiss asserts that *4 all documents have been released, that the claims set forth in count II are moot, and that the injury plaintiffs allege is not redressable by the requested relief.

1. Discovery concerning working groups

Notwithstanding the USDA's representation that "all documents which were made available to or prepared for or by the Committee" have been made available to the

public, plaintiffs suspect that Committee working groups generated documents that were never produced.

There is no record basis for such a suspicion. Plaintiffs do not attack the adequacy of the defendants' affidavits, or challenge the thoroughness of USDA's search of its records, or point to any "countervailing evidence or apparent inconsistency of proof" that discredits the agency's position that it has no such records. *Perry v. Block,*684 F.2d 121, 127 (D.C.Cir.1982); *see also Military Audit Project v. Casey,* 656 F.2d 724, 738 (D.C.Cir.1981) (relying on affidavits appropriate if they "are not controverted by either contrary evidence in the record [or] by evidence of agency bad faith"). Nevertheless, plaintiffs insist that additional records must exist in the form of email communications between working group members or notes from private meetings.

It may well be that Committee members exchanged personal emails and telephone conversations. There is no evidence, however, that the *agency* ever had records describing these events. An agency "is under no duty to disclose documents not in its possession," *Rothschild v. Department of Energy,* 6 F. Supp. 2d 38, 40 (D.D.C.1998), nor is an agency required to create documents to respond to FOIA requests, *N.L.R.B. v. Sears, Roebuck & Co.,* 421 U.S. 132, 161-62, 95 S. Ct. 1504, 44 L. Ed. 2d 29 (1975). *See also Goldgar v. Office of Administration, Executive Office of the President,* 26 F.3d 32, 35 (5th Cir. 1994). Discovery to pursue a suspicion or a hunch is unwarranted.

2. Declaratory judgment

FACA obligates the government to make publicly available documents "which were made available to or prepared for or by each advisory committee." FACA § 10(b). And, unless the agency claims an exemption under FOIA, "a member of the public need not request disclosure in order for FACA 10(b) materials to be made available." *Food Chemical News v. Department of Health & Human Services,* 980 F.2d 1468, 1469 (D.C.Cir.1992).

Defendants do not dispute plaintiffs' claim that FACA 10(b) material, not subject to a FOIA exception, was unavailable "for public inspection and copying before or on the date of the advisory committee meeting to which they apply." *Id.* What they do say is

that plaintiffs' FACA claim is moot, because all documents have now been made public. Plaintiffs nevertheless demand a declaration that defendants violated FACA by failing to release the documents on an ongoing basis,[1] asserting that a declaratory judgment would provide them "valuable ammunition for publicly questioning the final Dietary Guidelines."

A case is moot when it "has lost its character as a present, live controversy of the kind that must exist if [the court] is to avoid advisory opinions on abstract questions of law." *Schering Corp. v. Shalala,* 995 F.2d 1103, 1106 (D.C.Cir.1993). Nevertheless "even the availability of a `partial remedy' is `sufficient to prevent [a] case from being moot.'" *Calderon v.* *5 *Moore,* 518 U.S. 149, 150, 116 S. Ct. 2066, 135 L. Ed. 2d 453 (1996).

In *Byrd v. EPA,* 174 F.3d 239 (D.C.Cir. 1999), a panel of the Court of Appeals declined to find mootness on facts closely analogous to those of this case. "Because Byrd's injury resulted not only from EPA's failure to provide him materials but also from the tardiness of their eventual release, ... declaratory relief would afford Byrd some relief and prevent his action from becoming moot." *Id.* at 244; *see also Cummock v. Gore,* 180 F.3d 282 (D.C.Cir.1999) (finding a declaratory judgment to be an appropriate remedy for a FACA violation). The *Byrd* opinion is difficult to reconcile with *Payne Enterprises v. United States,* 837 F.2d 486, 491 (D.C.Cir.1988) ("A declaration that an agency's initial refusal to disclose requested information was unlawful, after the agency made that information available, would constitute an advisory opinion in contravention of Article II of the Constitution"); and with *Hill v. U.S. Air Force,* 795 F.2d 1067, 1071 (D.C.Cir.1986). It is nevertheless controlling authority. Here, as in *Byrd,* declaratory relief "will provide [the plaintiffs] with this Court's declaration that the agency failed to comply with FACA; and such a declaration will give [them] `ammunition for [their] attack on the Committee's findings.'" *Byrd,* 174 F.3d at 244. How effective such "ammunition" will be is not for this Court to say.

B. *Count III-FOIA Exemption 6.*

The FOIA dispute centers on plaintiffs' request for documents revealing the sources of income of members and the curricula vitae[2] of nominees who were not appointed to the Committee. The dispute about income sources has been narrowed still further and now

involves USDA's redaction of a single entry on one Committee member's disclosure form. In support of that redaction, and the withholding of documents concerning non-appointed nominees, USDA invokes FOIA Exemption 6, which permits withholding of all information in "personnel and medical files and similar files" when the disclosure of such information "would constitute a clearly unwarranted invasion of personal privacy." 5 U.S.C. § 552(b) (6).

The parties are in agreement that the disputed documents and information are "personnel and medical files and similar files" under exemption 6. I must accordingly consider whether the individuals involved have rights of privacy in those records, and, if they do, weigh those rights against the public's interest in disclosure. *Department of the Air Force v. Rose,* 425 U.S. 352, 372, 96 S. Ct. 1592, 48 L. Ed. 2d 11 (1976).

1. Sources of Income

An individual does have a privacy interest in information about the sources of her income, but "employment history ... is not normally regarded as highly personal." *United States Dep't of State v. Washington Post,* 456 U.S. 595, 600, 102 S. Ct. 1957, 72 L. Ed. 2d 358 (1982); *see also Washington Post v. United States Dep't of Health,* 690 F.2d 252, 261 (D.C.Cir.1982) (Exemption 6 does not apply to a list of organizations in which consultants had financial interests). USDA has already disclosed that the redacted entry represents income related to the Committee member's service on a corporate editorial board, and the form itself *6 discloses that the amount of income is greater than $10,000. The incremental privacy interest in the identity of the corporation is minimal.

The asserted public interest is in learning whether a Committee member was financially beholden to a person or entity that had an interest in how the Dietary Guidelines might be amended. I find that that public interest outweighs the privacy interest of the individual whose disclosure form was redacted. *See Washington Post,* 690 F.2d at 265 ("[T]he public disclosure of conflicts of interest is desirable despite its cost in loss of personal privacy.").

2. Curricula vitae

The Supreme Court has rejected the position that "disclosure of a list of names and other identifying information is inherently and always a significant threat to the privacy of the individuals on the list. Instead, ... whether disclosure of a list of names is a significant or a de minimis threat depends upon the characteristic(s) revealed by virtue of being on the particular list, and the consequences likely to ensue." *Department of State v. Ray,* 502 U.S. 164, 176 n. 12, 112 S. Ct. 541, 116 L. Ed. 2d 526 (1991); *see also Kurzon v. Department of Health & Human Services,* 649 F.2d 65, 69 (1st Cir. 1981) ("[T]he loss of privacy involved in disclosing the identities of all applicants is minimal; it is only the fact of rejection that raises the possibility of an invasion of privacy.").

C.V.'s would presumably be redacted to protect personal data such as home addresses, telephone numbers, email addresses, and social security numbers. Other information in a C.V. is ordinarily written down precisely so that it *will* be displayed. The asserted stigma of rejection is significantly diluted when shared among approximately 140 people. Neither the applicants nor their nominators were given assurances of confidentiality. The notice in the Federal Register did not promise anonymity. 62 Fed.Reg. 48982 (Sept. 18, 1997); *see also Kurzon v. Department of Health and Human Services,* 649 F.2d 65, 70 (1st Cir.1981) (finding no reasonable expectation of privacy in non-funded grant applications). I find the privacy interests of the non-appointed applicants to be minimal.

The asserted public interest in disclosure is to understand the agency's selection process. Knowing who was selected and who was not, and learning their qualifications and affiliations, would advance that public interest. This is not a case like *Core v. United States Postal Service,* 730 F.2d 946 (4th Cir.1984). There the asserted public interest was to evaluate the competency of selected applicants; information about non-selected applicants did not further that interest. I find that the public interest in disclosure of the C.V.'s of non-appointed applicants outweighs the privacy interests of the individuals involved.

NOTES

[1] Plaintiffs also suggest they are entitled to a declaratory judgment that defendants have a practice of delayed compliance with FACA. However, plaintiffs have not offered any evidence of "a policy or practice of delayed disclosure ... and not merely isolate

mistakes by agency officials." *Payne Enterprises v. United States,* 837 F.2d 486, 491 (D.C.Cir. 1988).

[2] Although plaintiffs indicate that they want both the nominating letters and the C.V.'s of the unselected nominees, it is unclear from the record before me whether the nomination letters for the *selected* Committee members were released, or, indeed, if plaintiffs continue to insist on access to the nomination letters. This ruling accordingly applies only to C.V.'s. The parties may have leave to seek amendment or reconsideration to include coverage of nomination letters, but they should note that evaluating the proper FOIA treatment of the nomination letters would require a separate evaluation of the privacy interest, if any, of the persons making the nominations. Neither party has presented argument addressed specifically to that point.

ATTACHMENT 5

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

October 20, 2016

VIA FEDERAL EXPRESS

Ms. Pamela Danner
Administrator
Office of Manufactured Housing Programs
U.S. Department of Housing and Urban Development
Room 9166
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: Manufactured Home Foundations in Freezing Climates

Dear Ms. Danner:

On April 14, 2016, the Manufactured Housing Association for Regulatory Reform (MHARR) wrote to you, to assert, among other things, its "strenuous objections" to a unilateral April 11, 2016 HUD "Interim Guidance" memorandum on the use of "Frost-Free Foundations or Frost-Protected Shallow Foundations" for manufactured homes. (See, copy attached).

MHARR, in that communication, stressed that this "Interim Guidance" violated controlling federal law in four separate respects:

1. The "Interim Guidance" constituted an "interpretation" of 24 C.F.R. 3285.312 subject to mandatory review by the Manufactured Housing Consensus Committee (MHCC) prior to publication pursuant to 42 U.S.C. 5403(b)(6);
2. The "Interim Guidance" violated 42 U.S.C. 5403(a)(4) (and 24 C.F.R. 3285.1(c)) by unilaterally amending 24 C.F.R. 3285.312 -- effectively removing the disjunctive "or" in sections 3285.312(b)(2)(i) and 3285(b)(3)(i) – thereby, in practical application, requiring compliance with the prescriptive elements of SEI/ASCE 32-01 in each such instance;
3. The "Interim Guidance" failed to provide any evidence that HUD determined or considered either the objective necessity of such a change based upon applicable statutory criteria, or the cost impact of this change as mandated by 42 U.S.C. 5403(e); and
4. The "Interim Guidance" violated the primacy of state authority pursuant to 42 U.S.C. 5404 with respect to the content and interpretation of installation

standards adopted under state law and enforced by state (and/or local) officials under authority of state law, in states with complying manufactured home installation programs.

Based on these violations, MHARR stated, in its communication to HUD, that the April 11, 2016 "Interim Guidance," which was not prompted by an "emergency" as defined by the Manufactured Housing Improvement Act of 2000, "must ... be submitted to the MHCC for review and input prior to its implementation."

Now, according to the "Tentative Agenda" for the impending meeting of the MHCC on October 25-27, 2016, as published in the Federal Register (see, 81 Federal Register No. 187 at pp. 66288-66289) HUD has scheduled this matter -- involving the construction and enforcement of 24 C.F.R. 3285.312(b) -- for review by the MHCC. Although this action potentially addresses MHARR's first objection, as set forth in its communication of April 14, 2016 and restated above, the "recommended guidelines" for manufactured home "foundation systems in freezing climates" that HUD apparently plans to present to the MHCC -- set forth in a report developed by the HUD program's installation contractor, SEBA Professional Services, L.L.C. (SEBA)[1] – do not resolve and, indeed, compound and exacerbate the violations of controlling law set forth in numbered paragraphs 2-4, above. MHARR, accordingly, renews and reasserts its vigorous objections to such substantive revisions (and related inadequate procedures) that would fundamentally alter the character, nature and scope of installation regulation in both approved and default states, and the responsibilities of regulated stakeholders and public officials.

As a threshold matter, it is unclear from the language of the published MHCC Tentative Agenda and from the SEBA Report whether HUD plans to present the contents of the SEBA report (which goes far beyond HUD's April 11, 2016 "Interim Guidance) as a mandatory "interpretation" of 24 C.F.R. 3285.312(b), or as incorporating non-mandatory, permissive, recommended "guidelines." The Tentative Agenda, for example, refers both to "recommended guidelines on foundation system requirements in freezing climates" (emphasis added) and "recommended guidelines for foundation systems in freezing climates." Similarly, the SEBA Report itself simultaneously refers to its content – which varies from and exceeds the express provisions of section 3285.312(b) – as "guidance" and "recommendations" on the one hand, and as mandatory "requirements ... that must be met," in some instances on the same page.[2] In either case, though, given the program's established track record of transitioning so-called voluntary guidelines or "voluntary cooperation" into mandatory requirements subject to prescriptive enforcement and both civil and criminal penalties under applicable federal law,[3] MHARR believes and, therefore,

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[1] That SEBA Report, in turn, appears to be substantially – if not exclusively – based on a written report prepared by Mr. Jay H. Crandell, P.E. of ARES Consulting, Inc. (ARES). The SEBA report fails to indicate whether this report was produced pursuant to a paid subcontract with SEBA, a direct contract with HUD, or on some other compensated basis. Nor does the SEBA Report contain any type of transparency disclosure regarding either Mr. Crandell or ARES that would indicate their respective clients or other pecuniary interests that could create a potential conflict of interest.

[2] See e.g., SEBA Report at p. 2, "Executive Summary." See also, for example, SEBA Report: at p. 5 ("recommendations for manufacturers;" "a site-specific soil test is required."); p. 6 ("recommendations for design professional and DAPIAs;" "FFF installations that rely exclusively on surface drainage ... are not acceptable. ...designs of this type should be removed for use ... and DAPIA approval withdrawn.");

[3] E.g., HUD's program of expanded in-plant regulation, initially presented and characterized as "voluntary" and "cooperative," only to be later re-defined by HUD as "not voluntary." See e.g., Memorandum from William W.

assumes that the prescriptive assertions set forth in the SEBA Report are – or will be – regulatory mandates subject to enforcement by HUD and/or its contractors. Consequently, all procedures required by law – including those set forth in 42 U.S.C. 5403 (MHCC review, MHCC consensus recommendations to the HUD Secretary, approval, rejection or modification by the HUD Secretary, followed by notice and comment rulemaking), the Administrative Procedure Act (APA), 5 U.S.C. 553 (notice and comment rulemaking) and 24 C.F.R. 3285.1(c) ("consultation" with the MHCC, MHCC review, MHCC consensus recommendations to the HUD Secretary, approval, rejection or modification by the HUD Secretary, followed by notice and comment rulemaking) – apply and must be followed.

Beyond this threshold issue, a review of the SEBA Report demonstrates that – if adopted -- it would materially and significantly alter 24 C.F.R. 3285.312(b)(2) and (b)(3) in ways that extend well beyond a mere "interpretation" of that standard for purposes of enforcement. Specifically, the construction of those sections set forth in the report – based on the assertions and apparent conclusions of just one individual[4]-- would effectively eliminate the disjunctive "or" in sections 3285.312(b)(2)(i) and 3285.312(b)(3)(i) which currently, and since the time of final adoption of Part 3285, nine years ago, in October 2007, has allowed HUD Code manufacturers to elect between monolithic slab systems and insulated foundations in "freezing climates"[5] designed by a registered professional engineer or registered architect in accordance with either "acceptable engineering practice to prevent the effects of frost heave," or Structural Engineering Institute/American Society of Civil Engineers (SEI/ASCE) standard 32-01 (Design and Construction of Frost-Protected Shallow Foundations). The SEBA Report accomplishes this by creating an apparently mandatory functional equivalence between "acceptable engineering practice" and the prescriptive requirements of SEI/ASCE 32-01that effectively eliminates any discretion or professional judgment on the part of the "registered professional engineer or registered architect" referenced in sections 3285.312(b)(2) and (3).

Matchneer, III, Associate Deputy Assistant Secretary for Regulatory Affairs and manufactured Housing, dated March 3, 2010. The program has also, in the past, specifically couched enforcement mandates in as "recommendations" in order to avoid required procedural safeguards. See, e.g., Memorandum from James C. Nistler, Deputy Assistant Secretary for Single Family Housing, dated April 11, 1985: "To assist IPIAs in their compliance with the regulatory requirement, memos were issued ... which set forth a schedule for increasing inspections.... However, I have recently been advised by HUD's Office of General Counsel that there is a question as to whether ... these memos should have been published in the Federal Register. Therefore ... the ... memos should be treated by IPIAs as recommendations rather than mandatory requirements. *** Adherence to the recommendations contained in the ... memos will ensure [the] IPIA will receive an acceptable rating with respect to this function." (Emphasis added).

[4] I.e., Mr. Crandell and/or ARES as a corporate entity. MHARR does not discount, however, the potential yet undisclosed involvement of other individuals and/or entities with specific pecuniary interests in the development, revision, or completion of the SEBA Report. MHARR, accordingly, seeks full disclosure and full transparency from HUD – at or before the time that the SEBA Report is presented to the MHCC – regarding all individuals and/or entities that participated in the development, revision or completion of that report, including the nature and scope of their participation as well as any and all amounts paid to those individuals and/or entities.

[5] MHARR notes, in addition, that the SEBA Report would change the predicate condition for the applicability of 24 C.F.R. 3285.312(b)(1), (2) and (3). Specifically, section 3285.312(b) currently prefaces subsections (1), (2) and (3) with the predicate that they apply in "freezing climates." The SEBA Report, however, states that its proscriptions apply to "new manufactured homes in frost-susceptible climates" (see, SEBA Report at p. 2), which would appear to set a lower threshold predicate than the current language, thereby expanding the area geographical subject to such dictates and expanding the number of states subject to attempted HUD interference with approved state installation programs.

Thus, for example, the SEBA Report states that "an approved installation design" must comply "with [the] SEI/ASCE 32 standard," or comply "with accepted engineering practice to prevent the effects of frost heave in a manner equivalent to the SEI/ASCE 32 standard."[6] (Emphasis added). The underlined language, however, significantly changes the existing regulation. First, the shift from "acceptable" engineering practice, as stated in the existing regulation, to "accepted engineering practice," while subtle, acts to preclude any design or design related activity that is not already "accepted" – i.e., compliant with SEI/ASCE 32-01 – whereas the term "acceptable" engineering practice clearly allows for innovation and technical advancement based on the professional judgment and knowledge (particularly including knowledge of climate and soil conditions in the area of the home site) of individual registered (i.e., state-licensed) professional engineers or architects. Second, the "in a manner equivalent to the SEI/ASCE 32 standard" language is not present at all in either 3285.312(b)(2)(i) or (b)(3)(i), and, again, effectively nullifies the professional judgment of licensed engineering and architectural professionals, while binding them, effectively, to the prescriptive terms of SEI/ASCE 32-01, as well as the judgments and determinations underlying that standard. Such a profound and elemental change to an existing standard does not constitute an "interpretation" of the standard, but rather a substantive amendment that can, should and must comply with the procedural requirements and safeguards of all applicable law, as noted above. Therefore, MHCC consideration of the SEBA Report may be a prelude to the development of a proposed rule concerning appropriate consensus modifications to section 3285.312(b), but is not a substitute for all required procedures under the 2000 reform law and other applicable statutes and regulations.

Consequently, the provisions of the SEBA Report, if mandatory and subject to enforcement in any respect against any regulated party under Part 3285, must be presented to the MHCC as a proposed rule, with clear and specific terms that are expressly stated and not subject to the type of fundamental ambiguity that is inherent in the SEBA Report. Any such proposed rule, moreover, must comply with the requirements of section 604 of the 2000 reform law, 42 U.S.C. 5403(e).

That section, in relevant part, requires that the "consensus committee, in recommending standards, regulations and interpretations ... shall – (3) consider whether any proposed standard is reasonable for ... the geographic region for which it is prescribed; [and] (4) consider the probable effect of such standard on the cost of the manufactured home to the public."[7] The SEBA Report, however, fails to provide any information relevant to an analysis of these two fundamental issues.

First, the SEBA Report fails to provide any evidence showing the alleged insufficiency of the current standard or current practice under that standard and whether its unilateral changes are "reasonable" for any given region. Nine years after the promulgation of the final installation standards rule, the SEBA Report fails to cite any evidence of either systemic failures resulting from the 3285.312(b) standards as originally stated and enforced, or an objective justification of any sort, showing the need for such material and significant alterations.[8]

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[6] See, e.g., SEBA Report at p. 12.

[7] The express applicability of section 604(e) is not limited to a circumscribed type or class of manufactured housing "standards" or "regulations" and, therefore, on its face, extends to revisions to the installation standards as described in 24 C.F.R. 3285.1(c).

[8] Nor does the Crandell/ARES appendix to the SEBA Report provide any such evidence.

Second, the SEBA Report fails to provide any evidence showing the cost of any such change, which would be substantial given the Report's apparent mandate for, among other things, a site-specific soil test "to determine frost susceptibility" in each instance, site-specific groundwater tests, and other related preparatory work and determinations.

Accordingly, the SEBA Report fails to comply with the most fundamental requirements of the 2000 reform law for the modification of existing federal manufactured housing standards, and, therefore, cannot – and does not – provide a legitimate basis for any such change or the proper consideration and analysis of such changes by the MHCC. There is thus no legitimate statutory basis for MHCC recommendations or other actions(s) premised on the SEBA Report.

Even more significantly, though, the "recommendations" and "guidance" of the SEBA Report appear to be a unilateral power-grab by HUD to supplant the primacy of state authority over installation in states with approved installation programs. In stating "recommendations" for "Local Regulatory Officials and Inspectors,"[9] the SEBA Report -- like HUD's April 11, 2016 "Interim Guidance" – does not distinguish between officials in HUD-approved and default states, and appears to impose affirmative mandates (either de jure or de facto) on state and/or local officials acting on the basis of approved state-law installation standards under color of state law. As MHARR stated in its April 14, 2016 communication to HUD, however, "while the Part 3285 standards, pursuant to 42 U.S.C. 5404, are model standards that provide a baseline for state standards to provide 'protection that equals or exceeds' the model federal provisions, the law provides no mechanism or basis for the imposition of unilateral HUD interpretations of the model federal standards on state officials enforcing state standards under color and authority of state law." Nor does that statute provide any mechanism or basis for HUD to impose a specific federal standard, modification of a specific federal standard, or interpretation of a specific federal standard on a state program that, in the aggregate, has been approved as providing a degree of protection that equals or exceeds the model federal program. Put differently, the applicability, interpretation and enforcement of state manufactured housing installation standards, following their adoption and approval by HUD, are a matter within the sole authority and discretion of state officials and not subject to unilateral dictates by HUD or by HUD contractors.

For all of these reasons, while MHARR supports HUD's engagement of the MHCC in this matter, as set forth in its April 14, 2016 communication, the SEBA Report does not provide a proper, sufficient or adequate basis for any MHCC recommendations concerning this matter, and may not be the basis for the imposition of any mandatory requirements on any party regulated under Part 3285, any approved state installation program and/or state or local regulatory officials acting under such a program.

Very truly yours,

Mark Weiss
President and CEO

[9] See, SEBA Report at p. 7, "Recommendations for Local Regulatory Officials and Inspectors."

cc: Hon. Julian Castro
Hon. Helen Kanovsky
Mr. Edward Golding
Manufactured Housing Consensus Committee Members
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April 14, 2016

VIA FEDERAL EXPRESS

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Administrator
Office of Manufactured Housing Programs
U.S. Department of Housing and Urban Development
Room 9166
451 7th Street, S.W.
Washington, D.C. 20410

Re: HUD Manufactured Housing Installation Directives

Dear Ms. Danner:

We are writing to state our strenuous objections to the latest in a series of unilateral actions by the HUD Office of Manufactured Housing Programs and you, as program Administrator, that will needlessly increase regulatory compliance costs for smaller industry businesses and consumers through "make-work" activity for program contractors, while violating specific mandates of the Manufactured Housing Improvement Act of 2000. We will address these two unilateral actions, regarding installation regulation and enforcement, seriatim.

APRIL 11, 2016 "INTERIM GUIDANCE" MEMORANDUM

The 2000 law, as you know, was designed, among other things, to provide the states with primary regulatory authority over manufactured home installation (supplemented by HUD authority in "default" states) and to require Manufactured Housing Consensus Committee (MHCC) pre-consideration and review of any "statement of policies practices, or procedures relating to ... enforcement activities that ... implement[s], interpret[s], or prescribe[s] law or policy...." (See, 42 U.S.C. 5403(b)(6)). The same section of the law states that "any change adopted in violation" of this procedural requirement (absent an "emergency" declared in writing by the Secretary), "is void."

On April 11, 2016, a memorandum entitled "Interim Guidance on use of Frost-Free Foundations or Frost Protected Shallow Foundations" was issued under your signature and ostensible authority. That memorandum purports to set forth "recommendations regarding the safe

installation of [manufactured home] foundations in freezing climates." Referencing section 24 C.F.R. 3285.312(b) of the Model Manufactured Home Installation Standards, the HUD memorandum "recommends," among other things, that installers, "for Frost Free Foundations, have a site investigation performed by a soils engineer or geotechnical engineer to verify if the soil condition at each home site is of a non-frost susceptible classification and is well drained." In lieu of such an investigation at each home site, the HUD "Interim Guidance" provides that "crushed stone or course (sic) or dense sand may be provided to the frost line depth."

As an initial matter, the dismal track record of the manufactured housing program – with specific examples over the course of decades – shows that HUD "guidance" and "recommendations," and invocations of "voluntary cooperation," have a history of evolving into mandatory, enforced dictates, while circumventing the procedural protections and guarantees provided to regulated parties under applicable law.

That said, the April 11, 2016 HUD "guidance," issued unilaterally, violates the law in at least four respects. First, the "guidance" represents, at a minimum, an "interpretation" of 24 C.F.R. 3285.312 that should have been brought to and reviewed by the MHCC for consensus input to HUD prior to issuance pursuant to 42 U.S.C. 5403(b)(6). Second, the "guidance" memorandum – to the extent that it is now, or in the future, may be construed as mandatory -- unilaterally modifies 24 C.F.R. 3285.312 by effectively removing the "or" in section 3285.312(b)(2)(i) and requiring compliance with the prescriptive elements of the SEI/ASCE 32-01 standard in each instance instead of as an available option (and also by eliminating local jurisdiction soils approvals), in violation of 42 U.S.C. 5403(a)(4). Third, there is no indication or evidence that HUD has considered the cost impact of this change as affirmatively required by 42 U.S.C. 5403(e). Fourth, the memorandum violates the primacy of state authority with respect to the interpretation and construction of installation standards adopted pursuant to state law and enforced by state officials under authority conferred by state law in states with complying manufactured home installation programs as provided by the 2000 Act in 42 U.S.C. 5404. While the Part 3285 standards are model standards that provide a baseline for state standards to provide "protection that equals or exceeds" the model federal provisions, the Act provides no mechanism or basis for the imposition of unilateral HUD interpretations of the model federal standards on state officials enforcing state standards under color and authority of state law.

As with so many other actions taken during your tenure as program Administrator, this measure, in clear defiance of the procedural requirements and protections of the 2000 law, will unnecessarily and arbitrarily increase the cost of manufactured housing while needlessly undercutting the ability of the industry – and particularly its smaller businesses -- to compete with other types of housing in a highly-competitive market.

This "guidance," accordingly, which was not prompted by an "emergency" and, as acknowledged in your own memorandum, is still under HUD review, should and must – under the 2000 reform law – be submitted to the MHCC for review and input prior to its implementation.

APRIL 8, 2016 NOTICE REGARDING INSTALLATION MANUAL "REVIEWS"

Similarly, in an April 8, 2016 communication, you unilaterally advise Primary Inspection Agencies that: (1) a HUD contractor, SEBA Professional Services (SEBA), "will be assisting the Department with the review of installation manuals for manufactured homes;" (2) that SEBA will use "a design review process based on the design review process used by HUD's monitoring contractor;" (3) that "upon review of an installation manual, SEBA will transmit a finding report to the appropriate DAPIA that outlines the issue and requests action; (4) that "upon receipt of a SEBA finding(s) DAPIAs will have 15 business days to respond....; and (5) that "findings that are refuted or require comment will result in a dialogue with SEBA and HUD, as applicable, to find a resolution." (Emphasis added).

As with the HUD April 11, 2016 "Interim Guidance" directive, this new, unilateral mandate will needlessly increase regulatory compliance costs for smaller industry businesses and consumers, and undermine the industry's ability to compete with site-builders and other competitors, while it violates key reforms of the 2000 law and other applicable authority.

First, your letter provides no legal basis or authority for the "review" described therein, nor does your letter describe the nature, purpose, objective or extent of this 'review," effectively granting a private entity an open-ended, unrestricted and unaccountable writ to impose unilateral demands and costs on regulated parties, DAPIAs and, by extension, consumers. Thus, among other things, precisely what are the manuals being "reviewed" for, what are the qualification(s) of SEBA or specific SEBA personnel to conduct such a review, and under what authority is that "review" being conducted?

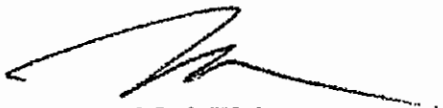
Second, your letter provides no factual or cost basis, or justification for such reviews which appear to be duplicative of DAPIA monitoring currently conducted by HUD's monitoring contractor. Pursuant to sections 3282.452(e) and 3282(b)(10), DAPIA activities, including installation instruction approvals, are subject to monitoring "on a random basis" at levels of "at least 10 percent." Given minimal complaint levels, as illustrated by documents disclosed by HUD in response to MHARR Freedom of Information Act (FOIA) requests and other related dispute resolution information, there is nothing to indicate that any such new, additional and/or duplicative reviews are cost-justified, as required by the 2000 reform law, or that HUD considered such costs in relation to this activity (see, 42 U.S.C. 5403(e)). Moreover, to the extent that such enforcement-related activity constitutes a change in program practices or procedures – by either supplanting, supplementing, or in any other way changing current monitoring activity relating to installation instruction approvals -- the 2000 law is clear that any such change must be presented to and considered by the MHCC prior to implementation (see, 42 U.S.C. 5403(b)(6)).

Third, there is no basis or authority for SEBA (or any other HUD contractor) to make unilateral "findings" with respect to any regulated activity, including any aspect of installation instructions, their approval by a DAPIA, or their compliance with any relevant federal standard, or to otherwise exercise inherently governmental authority with respect to a "dialogue" concerning those "findings," or their imposition in the absence of adequate "refutation" as determined by the said contractor. As relevant guidance from the Office of Management and Budget (OMB)

provides, the exercise of discretionary authority by a private contractor that is barred by the delegation doctrine, but "even where Federal officials retain ultimate authority to approve and review contractor actions, the contractor may nonetheless be performing an inherently governmental action if its role is extensive and the Federal officials' role is minimal." (Emphasis added).

Based on all of the foregoing, these documents involve HUD action that exceeds its authority under the Manufactured Housing Improvement Act of 2000 and otherwise violates provisions of that law and other applicable governing authority. Accordingly, those documents should be withdrawn and the issues addressed by those documents should be presented to – and considered by – the MHCC, as required by law.

Very truly yours,



Mark Weiss
President and CEO

cc: Mr. Edward Golding (HUD)
Members, Manufactured Housing Consensus Committee
HUD Code Industry Manufacturers

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

December 9, 2016

VIA FEDERAL EXPRESS AND ELECTRONIC SUBMISSION

Manufactured Housing Consensus Committee
C/O Home Innovation Research Labs
MHCC Administering Organization
400 Prince George's Boulevard
Upper Marlboro, Maryland 20774

Re: Public Comment – HUD-Proposed Interpretive Bulletin
Entitled "Foundation Requirements in Freezing Climates"

Dear MHCC Members:

Purporting to act under sections 604(b)(2) and (3) of the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended by the Manufactured Housing Improvement Act of 2000 (42 U.S.C. 5403(b)(2), (3)), the U.S. Department of Housing and Urban Development (HUD) has developed and submitted to the Manufactured Housing Consensus Committee (MHCC) – for consideration at a meeting on December 12, 2016 – a proposed "Interpretive Bulletin" (IB) entitled "Foundation Requirements in Freezing Climates." The text of the 25-page proposed IB was provided to MHCC members and program stakeholders by the MHCC Administering Organization (AO) on December 8, 2016, less than two full business days prior to the scheduled meeting date.

Following a complete review of the proposed IB, MHARR reiterates its strenuous opposition to this unlawful effort to: (1) substantively modify and amend sections 3285.312(b)(2) and (3) of the federal installation standards (24 C.F.R. 3285.312(b)(2),(3)) via a purported "interpretation;" (2) impose costly, restrictive and unnecessary new mandates on manufacturers, retailers, communities, consumers and others without specific objective evidence of systemic failures under the existing standards; and (3) unlawfully dictate the content of installation standards in 37 states with existing HUD-approved state-law installation programs – all as previously detailed in an October 20, 2016 MHARR communication to HUD (incorporating its earlier April 14, 2016 objections), attached as "Appendix E" to the draft minutes of the November 28, 2016 meeting of the MHCC Regulatory and Enforcement Subcommittee.

Based on these objections, the proposed IB represents a blatant abuse of HUD's authority and the procedures of the 2000 reform law relating to the development and use of Interpretive Bulletins. What it proposes is a significant, substantive change both to the HUD standards and –

by extension – the existing standards in 37 states with state installation programs previously approved by HUD. Further, the IB – despite claims to the contrary by HUD – expressly and deliberately ignores the outcome of the two resolutions addressed by the MHCC Regulatory and Enforcement Subcommittee at its November 28, 2016 meeting.

The first resolution addressed by the Subcommittee would have "recommend[ed] to HUD to use the SEBA[1] report, Manufactured Home Foundations in Freezing Climates including appendices as the basis for an Interpretative Bulletin." (Emphasis added). That motion was rejected by the Subcommittee, by a 6-2 margin of voting members.[2] Yet the proposed IB does exactly what the Subcommittee rejected, expressly stating that "the appendix" – i.e., the SEBA report – "provides the technical basis for the guidance and recommendations included herein."[3]

The second Subcommittee resolution – which was approved unanimously – asked HUD to "draft an Interpretative Bulletin before the December 12 MHCC teleconference taking into consideration the comments from the November 28th MHCC Regulatory Subcommittee teleconference." There is no indication whatsoever, though, in the proposed IB that HUD has considered – let alone addressed – the concerns raised by the Subcommittee, which overlap with the specific objections previously asserted by MHARR. Indeed, the only evidence in the IB is that HUD did just the opposite – by ignoring the Subcommittee's rejection of the SEBA Report as the basis for any resulting IB.

For these reasons alone, the proposed IB should either be withdrawn by HUD or rejected by the MHCC with instructions to HUD to specifically address the major concerns that have been raised regarding the substance, legitimacy and extremely harmful expected impacts of the IB and the allegedly supporting SEBA report. With a new administration set to take office in just five weeks, which may take an entirely different view of this and other related regulatory matters,[4] there is no basis whatsoever – and no demonstrated need – to railroad the proposed IB (or any similar measure) through the MHCC without sufficient time for proper analysis and consideration of all relevant statutory factors, including evidence of necessity and evidence of cost impacts – as well as proper compliance with the law in treating this action as a proposed amendment to the standards. Instead, the program and the program Administrator – as has increasingly been the case – are simply taking the conclusions of paid contractors and seeking to impose those conclusions as high-cost mandates on program stakeholders. This is unacceptable and should be rejected by the MHCC if HUD insists on going forward.

Sincerely,

Mark Weiss
President and CEO

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[1] I.e., SEBA Professional Services, L.L.C., the HUD program's installation contractor.
[2] See, Draft Minutes – MHCC Regulatory Subcommittee Meeting at p. 3.
[3] See, proposed IB at p. 5.
[4] Indeed, both the incoming administration and Congress – on November 15, 2016 – have called for a moratorium on all pending regulations.

cc: Hon. Julian Castro
Mr. Edward Golding
Other Interested HUD Code Industry Retailers, Communities, Manufacturers and Installers

ATTACHMENT 7

From the Press Office

Speeches & Remarks

Press Briefings

Statements & Releases

Nominations & Appointments

Presidential Actions

Executive Orders

Presidential Memoranda

Proclamations

Legislation

Disclosures

The White House

Office of the Press Secretary

For Immediate Release January 20, 2017

Memorandum for the Heads of Executive Departments and Agencies

FROM: Reince Priebus
Assistant to the President and Chief of Staff

SUBJECT: Regulatory Freeze Pending Review

The President has asked me to communicate to each of you his plan for managing the Federal regulatory process at the outset of his Administration. In order to ensure that the President's appointees or designees have the opportunity to review any new or pending regulations, I ask on behalf of the President that you immediately take the following steps:

1. Subject to any exceptions the Director or Acting Director of the Office of Management and Budget (the "OMB Director") allows for emergency situations or

other urgent circumstances relating to health, safety, financial, or national security matters, or otherwise, send no regulation to the Office of the Federal Register (the "OFR") until a department or agency head appointed or designated by the President after noon on January 20, 2017, reviews and approves the regulation. The department or agency head may delegate this power of review and approval to any other person so appointed or designated by the President, consistent with applicable law.

2. With respect to regulations that have been sent to the OFR but not published in the Federal Register, immediately withdraw them from the OFR for review and approval as described in paragraph 1, subject to the exceptions described in paragraph 1. This withdrawal must be conducted consistent with OFR procedures.

3. With respect to regulations that have been published in the OFR but have not taken effect, as permitted by applicable law, temporarily postpone their effective date for 60 days from the date of this memorandum, subject to the exceptions described in paragraph 1, for the purpose of reviewing questions of fact, law, and policy they raise. Where appropriate and as permitted by applicable law, you should consider proposing for notice and comment a rule to delay the effective date for regulations beyond that 60-day period. In cases where the effective date has been delayed in order to review questions of fact, law, or policy, you should consider potentially proposing further notice-and-comment rulemaking. Following the delay in effective date

    a. for those regulations that raise no substantial questions of law or policy, no further action needs to be taken; and

b. for those regulations that raise substantial questions of law or policy, agencies should notify the OMB Director and take further appropriate action in consultation with the OMB Director.

4. Exclude from the actions requested in paragraphs 1 through 3 any regulations subject to statutory or judicial deadlines and identify such exclusions to the OMB Director as soon as possible.

5. Notify the OMB Director promptly of any regulations that, in your view, should be excluded from the directives in paragraphs 1 through 3 because those regulations affect critical health, safety, financial, or national security matters, or for some other reason. The OMB Director will review any such notifications and determine whether such exclusion is appropriate under the circumstances.

6. Continue in all circumstances to comply with any applicable Executive Orders concerning regulatory management.

As used in this memorandum, "regulation" has the meaning given to "regulatory action" in section 3(e) of Executive Order 12866, and also includes any "guidance document" as defined in section 3(g) thereof as it existed when Executive Order 13422 was in effect. That is, the requirements of this memorandum apply to "any substantive action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking," and also covers any agency statement of general applicability and future effect "that sets forth a policy on a statutory, regulatory, or technical issue or an interpretation of a

statutory or regulatory issue."

This regulatory review will be implemented by the OMB Director. Communications regarding any matters pertaining to this review should be addressed to the OMB Director.

The OMB Director is authorized and directed to publish this memorandum in the Federal Register.

REINCE PRIEBUS

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

November 18, 2016

VIA FEDERAL EXPRESS

Hon. Julian Castro
Secretary
U.S. Department of Housing and Urban Development
Suite 10000
451 Seventh Street, S.W.
Washington, D.C. 20410

Re: Manufactured Housing Installation Regulation

Dear Secretary Castro:

We are writing on behalf of our members – small businesses located throughout the United States which produce affordable manufactured homes regulated by the U.S. Department of Housing and Urban Development (HUD) – to call on you to defer any further action, for the duration of the Obama Administration, on any and all activities that would alter the relationship between HUD and the states regarding state-law manufactured housing installation standards and programs previously approved by the Department. Specifically, we ask that you direct the HUD manufactured housing program to withdraw – and take no further action with regard to – a proposed "Interpretative Bulletin" entitled "An Assessment of Design and Installation Practices for Manufactured Homes in Climates with Seasonally Frozen Ground" ("Frost-Free IB") pending further consideration and appropriate review by the incoming Trump Administration. This so-called "Interpretative Bulletin" – which, as noted, should be retracted -- was submitted to the Manufactured Housing Consensus Committee (MHCC) for 120-day review pursuant to section 604(b)(2) of the Manufactured Housing Improvement Act of 2000 (42 U.S.C. 5403(b)(2)) at its just-concluded October 25-27, 2016 meeting. A conference call meeting of the MHCC's Regulatory Subcommittee is currently scheduled for November 28, 2016 to consider that alleged IB, but should be cancelled in accordance with the IB's withdrawal.

As you know, president-elect Trump has stated that he will "eliminate" wasteful and unnecessary federal regulations "which kil[l] jobs, and which d[o] not improve public safety." Similarly, as you are aware, Congress, in a letter dated November 15, 2016, called on the Secretaries, Administrators and Directors of all federal agencies to defer "finalizing pending rules or regulations in the Administration's last days," noting that rushed regulations could entail "unintended consequences" that could "harm consumers and businesses." The congressional communication further noted that "such forbearance is necessary to afford the recently elected administration and Congress the opportunity to review and give direction concerning pending rulemakings," and stated that if Congress' request were "ignored," it would "scrutiniz[e] [such] actions – and, if appropriate, overturn them – pursuant to the Congressional Review Act."

The proposed Frost-Free IB is a prime example of the type of unnecessary, costly and destructive regulation that the president-elect has pledged to eliminate. MHARR's strenuous and fundamental objections to this proposed action – which would violate substantive and procedural elements of the 2000 reform law -- are set forth in detail in an October 20, 2016 MHARR communication to the manufactured housing program Administrator.

As that communication indicates, the Frost-Free IB is unacceptable as an unnecessary, unnecessarily costly and unjustifiable disruption and imposition upon the state-law, HUD-approved installation programs that have been established by 37 states. The IB amounts to a HUD attack on the primacy of state-based installation regulation that – if implemented -- would undermine the federal-state partnership mandated by Congress, while imposing high-cost, prescriptive, one-size-fits all installation mandates with no showing of need, necessity or cost-effectiveness, in violation of the 2000 reform law. While the federal installation standards are model standards that provide a baseline for state standards to provide "protection that equals or exceeds" the model federal provisions, the 2000 reform law provides no mechanism or basis for the imposition of unilateral HUD interpretations of the model federal standards on state officials enforcing state standards under color and authority of state law.

Insofar as this illegitimate power grab by the HUD program and its contractors would completely overturn the federal-state installation enforcement system painstakingly crafted by Congress based on input from all affected program stakeholders and would directly endanger the federal-state partnership underlying the program as a whole, this proposed IB should be withdrawn – in toto – prior to any pending proceedings and recanted by HUD as a needless and baseless encroachment on legitimate state authority. This action, moreover, would also be consistent with guidance issued at the start of the Obama Administration, calling on agency heads to refrain from finalizing new rules, noting that it was "important that [the President's] appointees and designees have the opportunity to review and approve any new or pending regulations."

Sincerely,

Mark Weiss
President and CEO

cc: Hon. Mike Pence, Vice President-Elect and Transition Chairman
Hon. Shaun Donovan, Director, Office of Management and Budget
Hon. Jeb Hensarling, Chairman, House Financial Services Committee
Hon. Maxine Waters, Ranking Member, House Financial Services Committee
Hon. Richard Shelby, Chairman, Senate Banking Committee
Hon. Sherrod Brown, Ranking Member, Senate Banking Committee

ATTACHMENT 9

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

OFFICE OF HOUSING

December 7, 2016

Mark Weiss
President and CEO
Manufactured Housing Association for Regulatory Reform
1331 Pennsylvania Avenue, NW, Suite 512
Washington, DC 20004

Dear Mr. Weiss:

Thank you for your letter of November 18, 2016, concerning a proposed interpretative bulletin providing guidance on the Department of Housing and Urban Development's (HUD) Model Manufactured Home Installation Standards. HUD's Office of Manufactured Housing (OMHP) remains committed to fully implementing the 2000 Amendments to the National Manufactured Home Construction and Safety Standards Act ("the Act"). In 42 U.S.C. 5404, which forms part of the Act, instructs HUD to "develop and establish model manufactured home installation standards, which shall, to the maximum extent practicable, taking into account the factors described in 42 U.S.C. 5403(e), be consistent with the manufactured home designs that have been approved by a design approval primary inspection agency and the designs and instructions for the installation of manufactured homes provided by manufacturers under 42 U.S.C. 5404(a)."

As you note, at the October 2016 meeting of the Manufactured Housing Consensus Committee (MHCC), the OMHP submitted an interpretative bulletin to the committee that interprets the Model Installation Standards, specifically concerning frost free foundations, pursuant to its obligations under 42 U.S.C. 5403(b)(2). On November 28, 2016, the MHCC's Regulatory Subcommittee met via conference call and considered the interpretative bulletin. The full MHCC will also meet via conference call on December 12, 2016, to consider the proposed interpretative bulletin and, pursuant to the Act, will be able to submit written comments to the Secretary regarding the proposed bulletin.

The OMHP notes your reference to recent communications from Congress concerning finalizing pending rules or regulations. It is important to note that this proposed interpretative bulletin has yet to be "finalized," even within the broadest definition of that term in a regulatory context. The OMHP is committed to continuing to execute its program obligations consistent with the 2000 Amendments to the Act. As part of the Act's requirements, the OMHP will publish the proposed interpretative bulletin and the consensus committee's written comments, along with OMHP's response, in the Federal Register, and provide an opportunity for public comment in accordance with 5 U.S.C. 553. Only then, upon receipt, consideration of public comment, and consideration of the factors prescribed by the Act, will the OMHP potentially 'finalize' the interpretative bulletin.

HUD believes that both the MHCC and the public should have ample opportunity to review and comment on the proposed interpretative bulletin. Thus, while the OMHP notes your request that the interpretative bulletin be withdrawn, HUD sees no basis for taking such an action.

The Department trusts that this information is helpful to you.

Sincerely,

Pamela Beck Danner
Administrator
Office of Manufactured Housing Programs

Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

June 7, 2017

VIA FEDERAL EXPRESS AND ELECTRONIC SUBMISSION

Regulations Division
Office of General Counsel
U.S. Department of Housing and Urban Development
Room 10276
451 7th Street, S.W.
Washington, D.C. 20410-0500

Re: Reducing Regulatory Burdens; Enforcing the Regulatory Reform Agenda
Under Executive Order No. 13777 – Docket No. FR-6030 – N – 01

Dear Sir or Madam:

The following comments are submitted on behalf of the Manufactured Housing Association for Regulatory Reform (MHARR). MHARR is a Washington, D.C.-based national trade association representing the views and interests of producers of manufactured housing regulated by the U.S. Department of Housing and Urban Development (HUD) pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5401, et seq.) as amended by the Manufactured Housing Improvement Act of 2000 (2000 reform law). MHARR was founded in 1985. Its members include mostly smaller and medium-sized independent producers of manufactured housing from all regions of the United States.

I. INTRODUCTION

On May 15, 2017, HUD published a Notice and Request for Comment (Notice)[1] seeking public comment – pursuant to Executive Order (EO) 13777 ("Enforcing the Regulatory Reform Agenda"), issued by President Trump on February 24, 2017 -- concerning HUD regulations or portions thereof that are "outdated, ineffective, or excessively burdensome" and, therefore, "appropriate for repeal, replacement or modification."[2] In relevant part, EO 13777 provides:

[1] See, 82 Federal Register, No. 92 at p. 22344.
[2] Id. at p. 22345.

"Section 1. Policy. It is the policy of the United States to alleviate unnecessary regulatory burdens placed on the American people.

***

Section 3 Regulatory Reform Task Forces *** (d) Each Regulatory Reform Task Force shall evaluate existing regulations ... and make recommendations to the agency head regarding their repeal replacement or modification, consistent with applicable law. At a minimum, each Regulatory Reform Task Force shall attempt to identify regulations that: (i) eliminate jobs or inhibit job creation; (ii) are outdated, unnecessary or ineffective; (iii) impose burdens that exceed benefits; [or] (iv) create a serious inconsistency, or otherwise interfere with regulatory reform initiatives and policies.

(e) In performing the evaluation described in subsection (d) of this section, each Regulatory Reform Task Force shall seek input and other assistance, as permitted by law, from entities significantly affected by federal regulations, including ... small businesses ... and trade associations."

(Emphasis added).

In accordance with this presidential directive, MHARR – representing small manufactured housing industry businesses "significantly affected" by HUD regulation[3] -- asserts and maintains that significant elements of HUD's existing manufactured housing regulations and related "interpretations," directives, "guidance," and other similar pseudo-regulatory pronouncements (enforced against regulated parties by HUD and/or its regulatory contractors), as set forth and detailed below,[4] are either outdated, inappropriate, unduly burdensome, not cost-effective, or are otherwise inconsistent with governing law (particularly the Manufactured Housing Improvement Act of 2000) and, therefore, should be repealed or amended pursuant to EO 13777.

[3] All of MHARR's member manufacturers are "small businesses," as defined by the U.S. Small Business Administration (SBA) and "small entities" for purposes of the Regulatory Flexibility Act (5 U.S.C. 601, et seq.).

[4] Pursuant to section 3(d) of EO 13777, agency Regulatory Reform Task Forces are required to "evaluate existing regulations (as defined in section 4 of Executive Order 13771)." That section, in turn, states that "for purposes of this order, the term 'regulation' or 'rule' means an agency statement of general or particular applicability and future effect, designed to implement, interpret, or prescribe law or policy or to describe the procedure or practice requirements of an agency...." The Administration's January 20, 2017 order to the heads of executive departments and agencies entitled "Regulatory Freeze Pending Review," further states that "regulatory action" includes "guidance documents" as well as "an interpretation of a statutory or regulatory issue." Accordingly, each of the regulations and regulatory actions identified herein, falls within the scope of EO 13777.

II. COMMENTS

A. BACKGROUND OF HUD MANUFACTURED HOUSING REGULATION

Manufactured housing, as both houses of Congress have repeatedly and unanimously recognized, is affordable housing, historically relied-upon primarily by lower and moderate-income families.[5] In order to maintain that affordability without the need for costly taxpayer-funded subsidies, manufactured housing construction and safety must be regulated at the federal level, while simultaneously maintaining a full partnership with the states. Federal regulation allows the full cost efficiencies and savings of factory-based construction to be passed to homebuyers by ensuring: (1) federal preemption of state and local standards, regulations and requirements, which facilitates interstate commerce and allows manufactured homes to be produced and sited anywhere in the United States; (2) uniform, performance-based standards, incorporating a balance between affordability and protection of homeowners, which facilitate technological innovation to achieve cost savings; and (3) uniform enforcement based on a federal-state partnership which lies at the core of the federal program.

These unique concepts were incorporated by Congress in the National Manufactured Housing Construction and Safety Standards Act of 1974. That law established the basic framework for the current HUD manufactured housing program and most aspects of the federal standards and enforcement system. At the time the 1974 law was adopted, however, manufactured homes were still transitioning from the vehicle-like "trailers" of the Post-War Era to legitimate, full-fledged housing. As a result, Congress based the 1974 law on the existing federal safety law for automobiles, the National Traffic and Motor Vehicle Safety Act of 1966 (NTMVSA), complete with vehicle-like recall provisions (set forth in Subpart I of the current HUD Procedural and Enforcement Regulations – 24 C.F.R. 3282.401, et seq.).

As manufactured housing progressed and evolved into full-fledged housing, however, both Congress and federal program stakeholders recognized the need to reform and modernize the original law to acknowledge and protect manufactured homes as legitimate, affordable "housing" at parity, for all purposes, with other types of housing. At the same time, a string of HUD regulatory abuses involving the adoption and enforcement of de facto standards, regulations and regulatory practices through "interpretations" adopted without notice and comment rulemaking -- which denied the due process rights of manufacturers and simultaneously imposed needless and unjustified regulatory compliance costs on both producers and consumers -- highlighted the need for an open, transparent and accountable process for the development of standards, enforcement regulations, enforcement practices and related activities, as well as other fundamental program reforms.

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[5] The most recent statistics show that 73% of all manufactured home households earn less than $40,000 (see, e.g., "2012 Manufactured Home Market Facts," Foremost Insurance Group, at p. 5), while the median income of manufactured home households is $26,400 (see, "Manufactured Housing Consumer Finance in the United States," U.S. Consumer Finance Protection Bureau (September 2014)) and 45% of all manufactured home borrowers earned 80% or less of Area Median Income.

Thus, in December 2000, after 12 years of congressional hearings, studies and analysis – and based upon the recommendations of the National Commission on Manufactured Housing[6]– Congress, through unanimous consent in both houses, enacted the Manufactured Housing Improvement Act of 2000. This landmark legislation adopted key reforms to the original 1974 law which, if fully and properly implemented by HUD, would help transform manufactured housing from the "trailers" of the past, to modern, legitimate housing at parity with other types of homes. These reforms include, but are not limited to:

1. Specific congressional recognition of manufactured housing as "affordable" housing and mandatory HUD consideration of affordability in all decisions relating to the standards and their enforcement (section 602);

2. Creation of an independent, statutory consensus committee comprised of representatives of all program stakeholders with defined authority and procedures to consider, evaluate and recommend new or revised standards, enforcement regulations, interpretations and enforcement, and monitoring practices and policies no matter how denominated (section 604);

3. Presumptive Manufactured Housing Consensus Committee (MHCC) prior review of all program policies and practices of general applicability and impact (section 604(b)(6));

4. Mandatory appointment of a non-career manufactured housing program administrator as a statutory "responsibility" of the Secretary (Section 620);

5. Enhanced federal preemption, applicable to all state or local standards or requirements (section 604(d));

6. Specific statutory directives to HUD to: (A) "facilitate the availability of affordable manufactured homes and to increase homeownership for all Americans;" and (B) "facilitate[e] the acceptance of the quality, durability, safety and affordability of manufactured housing within [HUD];"

7. Establishment of installation standards in all states, either under state law or through default federal standards, in conjunction with state-law enforcement or federal enforcement in states without state law installation programs (section 605);

8. Establishment of a federal dispute resolution program for states without a state law alternate dispute resolution program meeting specified criteria (section 623);

9. A prohibition on the use of any such revenues for any purpose not "specifically authorized" by the law as amended (section 620); and

10. Provisions requiring separate and independent contractors for all contract-based program functions including in-plant monitoring and inspections (section 620).

[6] See, Final Report and Minority Report of the National Commission on Manufactured Housing, August 1, 1994.

HUD, however, has failed to fully and properly implement these reforms, effectively leaving manufactured homes as second-class "trailers" for purposes of federal regulation, financing, zoning, placement, insurance and other purposes -- subject to overt and specific forms of discrimination that have undermined the availability of affordable manufactured homes and the ability of lower and moderate-income consumers to purchase and own a home that they can truly afford. The HUD manufactured housing program, therefore, as established by law, is well-conceived and absolutely necessary. It is in the implementation of the laws enacted by Congress that HUD and the HUD program have failed. Consequently, and in order to properly implement EO 13777 within the unique context of the federal manufactured housing program, the entire program – and all of its various aspects and practices – must be reviewed by departmental leadership for compliance (or, more precisely, non-compliance) with the 2000 reform law, as well as the regulatory reform objectives and policies enunciated in EO 13777 itself.

MHARR submits that any objective, evidence-based review of the federal manufactured housing program and program regulations for the period following the adoption of the 2000 reform law (and especially for the period since 2014, when the current program administrator, an outsider, was "parachuted" into the program on a career basis in violation of that law), would find that: (1) while the industry, has succeeded in achieving a level of quality, durability and safety (at an inherently affordable price point) that meets and, in fact exceeds the substantive statutory benchmark established by Congress,[7] resulting in de minimus levels of consumer complaints referred to the federal dispute resolution program established under the 2000 reform law;[8] (2) HUD – directly and via a 40-year, revenue-driven, "make-work" "monitoring" contractor, continues to expand the scope, extent, intrusiveness and cost of federal regulation, needlessly increasing regulatory compliance burdens and related costs ultimately paid by consumers; (3) as it persists in treating manufactured homes as vehicles – in violation of the 2000 reform law – by prioritizing, structuring and organizing the vast majority of program activity (again, with its 40-year, revenue-driven, "make-work" "program "monitoring" contractor) around the de facto "recall" elements of its Procedural and Enforcement Regulations (24 C.F.R. 3282.401, et seq.) (and successive "interpretations," "guidance documents," checklists and other pseudo-regulatory materials developed, in substantial part by its revenue-driven "monitoring" contractor), rather than "facilitating" the availability of affordable manufactured housing and its acceptance within HUD as mandated by Congress in the 2000 reform law.

Put differently, the vast bulk of the existing regulatory apparatus of the HUD manufactured housing program – focusing on the vehicle-like "recall" of manufactured homes – despite the existence, following the enactment of the 2000 reform law, of an integrated consumer protection

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[7] Applicable federal law establishes a benchmark standard of "reasonable" safety, quality and durability for manufactured homes. Accordingly, the law defines "manufactured housing safety" as "the performance of a manufactured homes in such a manner that the public is protected against any unreasonable risk of the occurrence of accidents due to the design or construction of such manufactured home or, or any unreasonable risk of death or injury to the user...." (Emphasis added). Similarly, the law defines a "federal manufactured home construction and safety standard" as a "reasonable standard for the construction, design and performance of a manufactured home which meets the needs of the public including the need for quality, durability and safety." (Emphasis added). (See, 42 U.S.C. 5402(7) and (8)).

[8] According to HUD's dispute resolution contractor, between 2008 and 2014, out of 123,174 manufactured homes sited in HUD-administered dispute resolution states, HUD received only 24 dispute resolution referrals – a referral rate of only .019%. And, of those referrals, only 3 – comprising just .002% -- were found to qualify for dispute resolution under governing law.

system that addresses and resolves nearly all consumer issues within the first year after the installation of the home, is a costly, wasteful, unnecessary and, ultimately, unlawful relic of a bygone era that: (1) needlessly discriminates against manufactured homes, manufactured homebuyers, would-be manufactured homebuyers and manufactured homeowners; (2) needlessly increases the cost of manufactured housing; (3) needlessly excludes millions of Americans from the American Dream of home ownership;[9] (4) needlessly constrains and limits the availability of affordable manufactured housing for American families in direct violation of the 2000 reform law; (5) needlessly eliminates jobs or inhibits job creation within an entirely domestic manufacturing industry; and (6) needlessly increases the cost of the manufactured housing program itself.

Thus, while the industry, as proven by quantifiable evidence, has achieved the vision of the original 1974 manufactured housing law – providing a safe, durable, quality home at an affordable price – the program, its structure and its fundamental regulatory policies (particularly since the installation of the current program administrator in 2014) continue to deny that objective reality, imposing ever-more stringent and costly regulatory demands, while the broader objectives of the 2000 reform law – to advance the availability, affordability and utilization of manufactured housing, both within HUD and beyond -- have been and are being ignored,[10] or have been distorted beyond recognition by HUD through specious alleged "interpretations." As a result, much of the good that Congress sought to accomplish through the 2000 reform law – particularly in terms of ending discrimination against manufactured housing and achieving parity between manufactured homes and other types of residential construction -- has not been accomplished. This has not only harmed the industry in terms of lost production,[11] technical advancement and its ability to compete with other type of housing, but more importantly, has hurt consumers and especially the lower and moderate-income families that rely on affordable, non-sub manufactured housing the most.

The process mandated by EO 13777 provides HUD with both the opportunity and administrative mechanism to restructure and re-prioritize the federal manufactured housing program to accomplish the key objectives of the 2000 reform law, insofar as the baseline goals of the original 1974 law have already been achieved. That re-structuring should include the repeal or significant modification of the regulations and regulatory activities set forth below, as well as action to appoint a non-career program administrator in accordance with the 2000 reform law and to terminate the revenue-driven, "make-work," de facto sole-source monitoring contract and arrangement that has been in place since the inception of federal regulation more than 40 years-ago.

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[9] A 2014 study by the National Association of Home Builders (NAHB), presented to the U.S. Department of Energy (DOE) Manufactured Housing Working Group concluded that a $1,000.00 increase in the purchase price of a new manufactured home would exclude 347,901 households from the market for a single-section home, while the same $1,000.00 increase would exclude 315,385 households from the market for a double-section home. Insofar as studies conducted by HUD itself have concluded that manufactured homes are the nation's most affordable source of non-subsidized housing and home-ownership, these consumers would necessarily be excluded from home ownership entirely. See, e.g., U.S. Department of Housing and Urban Development, "Is Manufactured Housing a Good Alternative for Low-Income Families? Evidence from the American Housing Survey" (December 2004).

[10] For example, manufactured housing, regulated by HUD itself, has been ignored as an affordable housing resource in each of HUD's last two Strategic Plans – i.e., HUD's 2010-2015 Strategic Plan and its 2014-2018 Strategic Plan.

[11] Total industry production reported by HUD in 2016 was 81,136 homes, a decline of over 67% from the 250,366 manufactured homes produced in 2000, the year that the Manufactured Housing Improvement Act of 2000 was enacted.

B. EXISTING HUD MANUFACTURED HOUSING REGULATIONS AND/OR REGULATORY ACTIONS THAT SHOULD BE REPEALED OR MODIFIED

1. Expanded In-Plant Regulation[12]

HUD's program of expanded in-plant manufactured housing regulation, initiated in 2008 with no evidence of systemic deficiencies in the then-existing regulatory model (seemingly designed to sustain and generate substantial additional revenues for the program's entrenched, 40-year, de facto sole-source monitoring contractor in the face of a significant decline in manufactured housing production), and implemented in all phases by HUD in 2014, is the premier illustration of the Department's regulatory over-reach and violation of key reform provisions of the 2000 law – and resulting harm to the program, the industry and consumers of affordable housing.

Originally characterized as "cooperative" and "voluntary" by HUD,[13] this program which, according to the Department itself, fundamentally changed the focus, basis and emphasis of HUD in-plant production regulation,[14]was subsequently re-characterized as "not voluntary" by the Department, with no public process – in violation of both the 2000 reform law and the Administrative Procedure Act (APA) -- in 2010.[15] Since August 2014, the program has been enforced on a mandatory basis through arbitrary, subjective and costly in-plant "audits" conducted by HUD's "monitoring" contractor,[16] based on criteria exceeding the existing HUD Manufactured Housing Construction and Safety Standards (HUD Code) contained in an agglomeration of non-regulatory and extra-regulatory materials (developed and/or modified at least in part by the same "monitoring" contractor)[17] including, but not limited to, "enhanced" inspection checklists,

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[12] "Expanded in-plant regulation," as referenced in this section, is not a discrete regulation, per se, but rather, a pseudo-regulatory construct of the HUD manufactured housing program, relying on extra-regulatory and ultra vires materials and criteria incorporated within "guidelines," "field guidance," "checklists," "standard operating procedures," and other similar documents developed by HUD and/or its monitoring contractor that are enforced as de facto regulations against manufacturers, as the primary regulated party within the HUD program. These extra-regulatory materials (see, Attachment 1 hereto) and their de facto criteria and mandates allegedly rest upon interpretations of existing HUD Procedural and Enforcement Regulations (PER), including those addressing the duties and functions of Design Approval Primary Inspection Agencies (DAPIAs) (e.g., 24 C.F.R. 3282.361) and Production Inspection Primary Inspection Agencies (IPIAs) (e.g., 24 C.F.R. 3282.362), but significantly exceed the express terms of those sections.

[13] See, Attachment 2, hereto, MHARR March 4, 2010 letter to William W. Matchneer, III, Associate Deputy Secretary for Regulatory Affairs and Manufactured Housing.

[14] See, Minutes, Manufactured Housing Consensus Committee meeting, June 17, 2008 at p. 2. "Inspectors currently look at number of errors rather than a quality system. HUD will be directing their resources to be aimed at quality control system[s]."

[15] See, HUD (William W. Matchneer, III, Associate Deputy Assistant Secretary for Regulatory Affairs and Manufactured Housing) (hereafter "ADAS") Memorandum dated March 3, 2010.

[16] The Institute for Building Technology and Safety (IBTS) has held the HUD manufactured housing program "monitoring" contract (albeit under differing corporate names) continuously since the inception of federal regulation in 1976 under successive de facto sole-source procurements utilizing evaluation and award criteria tailored to IBTS' specific experience as the program's sole monitoring contractor. IBTS was awarded its most recent five-year "monitoring" contract (with total compensation of $25,006,546.00) in August 2013. In 2014, according to public federal tax filings, IBTS revenue from the HUD manufactured housing contract accounted for more than one-quarter of its total revenues (i.e., 26.3%).

[17] See e.g., HUD FOIA October 21, 2014 production, July 16, 2009 communication from then-IBTS employee Jason McJury to HUD.

"Standard Operating Procedures," program "Field Guidance" memoranda,[18] an "Investigation and Reporting of Quality System Issues (QSI)" "guidebook," and other related materials.[19] Neither these criteria and materials, or the HUD program of expanded in-plant regulation itself, however, was ever subjected to the due process, stakeholder participation, accountability and transparency requirements of the 2000 reform law.

Because the HUD program, prior to the 2000 law, repeatedly relied on "interpretations" developed behind closed doors without the involvement or input of the public, program stakeholders, or regulated parties, to alter the effective meaning of existing standards and regulations, thereby unilaterally imposing new de facto regulatory mandates, Congress required in the 2000 reform law, that: (1) all new and amended standards and/or regulations be presented to the MHCC for consensus review and recommendations;[20] (2) that all new "Interpretive Bulletins" concerning the standards and/or regulations be presented to the MHCC for consensus review and recommendations;[21] and (3) that any "statement of policies, practices, or procedures relating to [the] construction and safety standards, regulations, inspections, monitoring, or other enforcement activities that constitutes a statement of general or particular applicability to implement, interpret or prescribe law or policy," must be brought to the MHCC for consensus review and recommendations.[22] Congress also provided that "any" such "change" – absent a declared public health or safety emergency – adopted without full compliance with the consensus committee procedures of section 604, is "void,"[23]while it mandated specific follow-up steps by the HUD Secretary upon receipt of an MHCC standards recommendation,[24] including the publication of all such recommendations, whether accepted or rejected, mandatory action by the Secretary within 12 months of submission, notice and comment rulemaking and sanctions for any failure to act within 12 months) or a proposed regulation or interpretation,[25] including publication of an approved recommendation for notice and comment, and a written explanation to the MHCC for any rejected recommendation, together with publication of the reasons for such rejection, or recommended modifications, in the Federal Register.

Given the fact that HUD's program of expanded in-plant regulation changes program policies, practices and procedures with respect to the focus, extent and basis of in-plant regulation, inspections and monitoring, that program – and all of its constituent elements – regardless of how characterized or denominated by HUD, should have been brought to the MHCC for consensus review and recommendations. No such review, however, has ever occurred. Moreover, when HUD did refer certain proposals related to this program to the MHCC in 2008, those proposals did not gain consensus support and, as a result, were effectively rejected. Rather than returning to the MHCC at any point, however – or publishing the elements of its program for notice and comment

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[18] See, HUD ADAS Memorandum dated June 23, 2008.

[19] See, materials included in Attachment 1, hereto.

[20] See, sections 604(a)(4), 604(b)(1) and 604(b)(3).

[21] See, section 604(b)(3).

[22] See, section 604(b)(6).

[23] HUD, ironically via an alleged "Interpretive Rule" issued in February 2010 without opportunity for public comment, attempted to emasculate and effectively nullify section 604(b)(6) of the 2000 reform law. Section II B 5, below, addresses this rule and calls for its repeal.

[24] See, section 604(a)(4)-(5).

[25] See, section 604(b)(4).

-- HUD chose to unilaterally impose its full program of expanded in-plant regulation in violation of the law and its resultant status under the 2000 reform law as a "void" agency action.

Significantly, by circumventing the MHCC and its consensus process, as well as the further requirements of the 2000 reform law regarding mandatory response, publication and notice and comment procedures for any matter emerging from the Committee (and by failing to otherwise publish its program of expanded in-plant regulation as a new or amended regulation or Interpretive Bulletin), HUD purposely evaded the requirements of section 604(e) of the 2000 reform law. That section directs both the MHCC and the Secretary of HUD, in recommending or establishing standards, regulations, or interpretations, to consider both: (1) "the extent to which any such [action would] contribute to carrying out the purposes of" the 2000 law; and (2) "the probable effect of such [action] on the cost of the manufactured home to the public." Through these directives, the law requires the MHCC and HUD to determine that any change to the regulations and/or their interpretation is both objectively justified in relation to the purposes of the 2000 reform law, and cost-effective from the standpoint of maintaining the congressionally-recognized affordability of manufactured housing.

An analysis of the available evidence relevant to these requirements shows *why* HUD chose to circumvent the MHCC and proper rulemaking. First, there was – and is -- no evidence of any objective need or justification for the wholesale change in regulatory focus and procedures ushered-in by HUD's program of expanded in-plant regulation. Under the 2000 reform law, alternative dispute resolution programs for manufactured housing "defects" are mandated in every state – either pursuant to state law or a federal "default" program administered by HUD. Insofar as these programs address "defects" reported during the first year after the sale of a manufactured home, DR referrals are a direct barometer of home quality, manufacturer quality assurance and overall compliance with the HUD standards. Information disclosed by HUD, however, shows that between 2008 and 2014 (spanning a period pre-dating the expanded in-plant regulation program to just before its mandatory implementation), of the 123,174 HUD Code homes sited in 23 federally-administered states, only 24 homes – or .019% -- were referred for dispute resolution and of those 24 referrals, only 3 homes – or .002% -- were found to actually qualify for DR resolution under standards (24 C.F.R. Part 3288) adopted by HUD. In two representative states with state administered DR programs (i.e., Texas and Virginia), the DR referral rate was only marginally higher, at 1.4%. From this evidence, it is clear that HUD's pre-existing in-plant inspection regime already provided manufactured housing residents the "reasonable protection" required by applicable law.

Second, HUD has never offered any evidence or basis to demonstrate that its program of expanded in-plant regulation is cost-justified. Anecdotal evidence available from manufacturers, however, shows that the costs of responding to repeated multi-day production facility audits based on arbitrary and ever-shifting criteria and "monitoring" contractor demands, involving additional employee-hours, documentation, response time and other new and additional costs, is substantial and disproportionately impacts smaller industry businesses.[26] Furthermore, to the extent that HUD's program of expanded in-plant regulation is not objectively justified in relation to the

[26] A 2010 report by the U.S. Small Business Administration, "The Impact of Regulatory Costs on Small Firms," concluded that "small businesses, defined as firms employing fewer than 20 employees, bear the largest burden of federal regulations."

purposes of the 2000 law, any additional costs that it imposes would be excessive by definition and an unwarranted and unnecessary burden on consumers, particularly the lower and moderate income homebuyers who rely the most upon the affordability of HUD Code manufactured housing.

Nor have the full costs and negative impacts of expanded in-plant regulation been realized to date. Given the extra-regulatory status of the program and the absence of any procedural or substantive safeguards connected to its evolution or enforcement, the program is, effectively, a platform for the imposition of virtually any type of subjective, arbitrary, or capricious demand that HUD and/or its revenue-driven "monitoring" contractor wishes to impose on any regulated party at any time.[27] And, insofar as the most recent HUD "monitoring" contract directs the program contractor to "resolve" disputed "quality assurance" issues directly with Primary Inspection Agencies wherever possible, without HUD involvement, the program contractor is free to impose whatever demands it wishes based on its own construction of extra-regulatory criteria and sources with no transparency and/or direct accountability to HUD officials.

Based on all of the above, HUD's program of expanded in-plant regulation violates the 2000 reform law and has no basis or justification grounded in fact. To the extent that it expands and extends in-plant regulation without basis or justification, it constitutes useless "make-work" for HUD's monitoring contractor that imposes needless costs on manufacturers with no quantifiable corresponding benefits whatsoever for consumers. To the extent, then, that this program entails all cost and no demonstrated benefits, it should be repealed in toto pursuant to Section 3(d) of EO 13777.

2. On-Site Completion of Construction[28]

HUD, in September 2015, issued a final rule establishing regulations (24 C.F.R. 3282, Subpart M) for the completion of certain manufactured homes at the site of installation. The so-called "on-site" construction rules – effective March 7, 2016 – ostensibly supplanted costly and time-consuming "Alternate Construction" (AC) regulations and procedures that have heretofore been applied to the completion of certain more limited aspects of construction at the home-site.[29]

A new program for the on-site completion of manufactured homes under procedures that would be faster, more flexible and more economical than the cumbersome AC process was among the earliest issues the industry brought to the MHCC and was the subject of a comprehensive

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[27] It must also be noted that due to "make work" monitoring contractor activity under HUD's program of expanded in-plant regulation, annual HUD payments to the monitoring contractor between 2007 and 2014 grew by more than 50%, while per capita direct HUD payments to the monitoring contractor increased by 127%, despite a 32.8% decline in annual industry production over the same period. This ongoing expansion of the role and compensation of the monitoring contractor directly contradicts Congress' directive in the Report accompanying the Transportation and Housing and Urban Development and Related Agencies Appropriations Bill of 2015, stating: "...[T]he Committee recognizes that manufactured housing production has declined substantially since peak industry production in 1998, and continues to decline due to a variety of factors. Expenditures supporting the [manufactured housing] programs should reflect and correspond with this decline, which has specifically reduced the number of inpsections and inspection hours required for new units." (Emphasis added).

[28] 24 C.F.R. 3282.601, et seq.

[29] See, 24 C.F.R. 3282.14 regarding alternate construction of HUD Code homes.

MHCC recommendation submitted to HUD. The on-site regulations ultimately promulgated by HUD, however, are a bureaucratic morass of costly paperwork, record-keeping and red tape that completely undermines the objectives underlying the original MHCC proposal and will eliminate the price and construction flexibility advantages that HUD Code manufactured housing could otherwise offer to consumers in competition with site-built, modular and other types of residential construction, through readily available mortgage-type financing.

One of the central reforms of the Manufactured Housing Improvement Act of 2000 was its matching directives to HUD to: (1) "facilitate the availability of affordable manufactured homes" and (2) to "facilitate[e] the acceptance of the quality, durability, safety and affordability of manufactured housing within the Department" itself. For these statutory directives to have any meaningful market impact for American consumers of affordable housing, they must be read, among other things, as a statutory command to HUD to enable and empower manufactured homes to compete on an equal, non-discriminatory, free-market basis with other segments of the housing industry. And it is only through that unconstrained ability to compete and the corresponding freedom from unreasonable, unnecessary or excessive market or governmental restraints, that the public (and especially lower and moderate-income homebuyers) can realize the full benefits of affordable, non-subsidized manufactured homes, as Congress intended when it adopted the 2000 reform law.

Facilitating this kind of open and robust free-market competition to unlock an important new market segment for manufactured housing, while allowing consumers to take full advantage of all the unique attributes and benefits of HUD Code manufactured housing, was a key motivation driving the industry's effort to develop and implement new on-site construction regulations to take the place (in most instances) of the existing – and extremely cumbersome, costly and time-consuming – HUD "Alternate Construction" process. And, in fact, a new program for on-site completion of manufactured home construction under procedures that would be faster, more flexible and more economical than the burdensome AC process, while providing expanded access to non-chattel consumer financing, was among the earliest issues brought to and considered by the Manufactured Housing Consensus Committee -- initially in 2003. Following extensive, thorough and painstakingly detailed debate within the MHCC, a consensus recommendation was submitted to HUD, finally leading to a proposed on-site construction rule, published in June 2010.

That MHCC consensus recommendation, consistent with the original objectives of all program stakeholders, was designed to take full advantage of the price and construction flexibility offered by HUD Code construction to enable the industry to compete more effectively with other segments of the housing industry – including site-built homes and the rental housing industry -- through homes eligible for readily-available mortgage-type financing, and thereby provide beneficial new opportunities for consumers of affordable housing. The MHCC recommendation, however, upon reaching HUD, was transformed into a distorted, convoluted caricature of pointless paperwork, needless record-keeping, red-tape and duplicative, costly, multi-layered "inspections," that has undermined the site-completion market and has pushed manufacturers into the more costly modular housing market in order to meet the needs of consumers seeking site-completed amenities.

Specifically, under the final rule, as detailed by HUD at the January 2016 MHCC meeting, HUD Code manufacturers are responsible for 18 new and separate actions to engage in the on-site

completion of one or more homes, and that number reflects only the steps that would need to be taken before the 100% inspection of all such homes on-site by the manufacturer and the manufacturer's Production Inspection Primary Inspection Agency (IPIA) (or IPIA designee), subject, in turn, to oversight by HUD's 40-year, revenue-driven, "make-work" "monitoring" contractor. Nor does it reflect the multitude of new functions – including substantial new paperwork and record-keeping mandates – that IPIAs and Design Approval Primary Inspection Agencies (DAPIAs) would be responsible for, with significant corresponding costs passed-along to manufacturers and, ultimately, consumers. In addition to creating this time-consuming and costly new on-site bureaucracy -- which will inevitably interfere with the timely and efficient delivery of homes to consumers, leading to needless but predictable disputes -- the HUD final rule is also over-reaching and over-broad in scope, applying to routine finishing items that were not previously subject to the AC system and have previously been completed with little fanfare, cost, regulatory involvement, or -- most importantly – problems for the homebuyer.

Significantly, HUD, during a presentation regarding this rule at the MHCC's January 2016 meeting, indicated that it had failed to specifically quantify or consider costs related to the requirements of the final rule, contrary to section 604(e)(4) of the Manufactured Housing Improvement Act of 2000. Based on this acknowledgment by HUD and recognizing that the HUD final on-site rule represents a gross distortion of the concept it originally envisaged, the MHCC unanimously adopted a resolution calling on HUD to defer enforcement of the rule for 12 months, while the MHCC reviewed its mandates and related costs for possible revisions. HUD, however, has ignored these and other repeated requests for a deferral of the site-completion rule, and has instead moved forward, demanding full compliance with the final rule.

Based on the foregoing, the on-site construction rule adopted by HUD, rather than enhancing the ability of affordable manufactured homes to compete with site-built structures within the free-market, instead stymies any such competition by subjecting manufactured homes to excessive, discriminatory mandates. As a result, it unnecessarily constrains the affordable housing choices available to Americans, it unnecessarily constrains the growth and evolution of the manufactured housing industry and, as a result, unnecessarily inhibits job growth within the manufactured housing industry, contrary to EO 13777. The existing rule, therefore, should be repealed and replaced with a new rule that comports with the recommendations of the MHCC and provides for the on-site completion of manufactured homes in accordance with the federal standards with a minimum of additional regulatory compliance burdens.[30]

[30] In addition to repealing the final "on-site" construction rule, the EO 13777 review process should also repeal HUD's May 10, 2017 unilateral determination that would require Alternate Construction approval of "carport-ready" manufactured home designs or designs to facilitate an "add-on" structure at the home-site. This determination, which clearly alters and modifies prior HUD practice and policy, needlessly restricts the choices and amenities available to consumers and needlessly complicates and increases costs relating to regulatory compliance, again harming consumers. Moreover, as a specific change in previous policy and practice regarding HUD construction and interpretation of its standards and regulations, this action, at a minimum, should have been brought to the MHCC pursuant to section 604(b)(6) of the 2000 reform law. To the extent that it was not, it is preemptively "void" under that same section.

3. Subpart I "Recall" Provisions[31]

Subpart I of the HUD Procedural and Enforcement Regulations is the single most significant driver of unnecessary regulatory compliance costs within the federal manufactured housing program. As currently structured, it is a quagmire of redundant and pointless paperwork, needless "investigations" and reports, and multiple layers of document "reviews" by both third-party inspectors and HUD's 40-year, revenue-driven, "make-work" "monitoring" contractor, which in 2014 was paid 127% more for each home than it did when the industry was producing far more homes. With no expiration date or statute of limitations and, effectively, no severity threshold (at least for its initial stages), it represents a constant and ongoing regulatory uncertainty that cannot be predicted, accounted-for, or budgeted-for in any meaningful way, thus aggravating its cost impact on manufacturers and ultimately consumers, who pay more but derive little if anything in the way of benefits.

At the same time, Subpart I's ambiguous and often open-ended mandates, even after the adoption of certain reforms in 2013,[32] remain an invitation for abusive and inconsistent enforcement, including increasingly subjective, arbitrary and costly demands imposed on manufacturers by the revenue-driven program "monitoring" contractor in the absence of proper oversight by -- and accountability to – HUD. Quantifiable evidence, though, demonstrates that Subpart I has outlived any conceivable usefulness to manufactured homebuyers and should be: (1) restructured, to adhere strictly to the express terms of section 615 of the 1974 law; and (2) de-emphasized and de-prioritized as an element of the federal program.

At its core, Subpart I is an antiquated throwback to times when manufactured homes were viewed as a type of specialty vehicle rather than a permanent residence and dwelling. As with much of the original federal manufactured housing law, section 615 of the National Manufactured Housing Construction and Safety Standards Act of 1974 -- which provides the statutory basis for Subpart I -- was derived from the National Traffic and Motor Vehicle Safety Act of 1966. The entire concept of a "recall," however, is foreign to the housing industry and inappropriate and unnecessary for structures that are designed – and used – for permanent occupancy. Moreover, significant elements and aspects of the Subpart I regulations, as detailed below, are either not affirmatively mandated or required by section 615 of the 1974 law, or materially exceed the authority provided by that section.

HUD's Subpart I regulations (as contrasted with section 615 of the 1974 law) require manufactured home producers to investigate and document virtually any piece of "information," regardless of its facial credibility, that could indicate the possible existence of a "defect" or standards non-conformance in a manufactured home.[33] In a small number of cases it requires notice

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[31] See, 24 C.F.R. 3282.401, et seq.

[32] See, 78 Federal Register, No. 190 at p. 60193, et seq., Final Rule, "Revision of Notification, Correction and Procedural Regulations," (October 1, 2013).

[33] Section 615 includes no such "investigation" mandate, nor does it, therefore, require the investigation of any and all information possibly or likely indicating the existence of a "defect" or "non-compliance." Nor does section 615 require or authorize a multitude of other mandates contained in the Subpart I regulations, including, but not limited to: (1) "class" determinations; (2) "periodic" record reviews; (3) monthly service record reviews; (4) multiple IPIA concurrences; (5) notification or correction of a defect in an appliance; and (6) presumptive inclusion of homes in a class unless affirmatively excluded, among other things.

to consumers and, in rare cases, correction of more serious defects, up to and including replacement of the home. This mechanism, however, is, for the most part, a costly exercise in paper-shuffling and red tape that that benefits HUD's entrenched 40-year, revenue-driven, "make-work" "monitoring" contractor, but today adds little or nothing to the multiple layers of protection that homeowners already have as a result of: (1) multi-tiered in-plant manufacturer and IPIA home inspections; (2) third-party (DAPIA) design and quality control approvals; (3) state and federal manufactured housing dispute resolution (DR) programs; (4) manufacturer home warranties; (5) component supplier warranties; (6) manufacturer and/or retailer consumer satisfaction programs; and/or (7) contract, tort, or statutory consumer protection claims that may be available under state law -- and that is without even considering the additional multi-layered protections available to homebuyers under the state and federal installation programs adopted as a consequence of the 2000 reform law.

By forcing manufacturers to hire additional employees and use additional man-hours to "investigate" every conceivable scrap of information, create and review paperwork, by forcing manufacturers to pay for more IPIA time to review and assess that paperwork, and by generating more make-work billing hours for the program contractor to review those reviews, Subpart I adds substantially to the bottom-line cost of manufactured homes, and, therefore, per se, excludes significant numbers of Americans from the benefits of home ownership.

The National Commission on Manufactured Housing (Commission) – chartered by Congress in 1990 to examine all aspects of the federal program and recommend improvements – recognized the cost, futility and flawed concept of Subpart I. In its August 1994 Final Report, the Commission, comprised of representatives of all stakeholders in the federal program, recommended a significant curtailment of Subpart I that would have eliminated notification "of defects alone" regardless of the existence of any alleged "class," while requiring investigation and potential consumer notification and correction only for "serious defects," defined as "any nonconformance with [the] national manufactured home construction and safety standards that results in a defect in the performance, construction, or material of a manufactured home that constitutes a safety hazard or that affects the home to the extent that it becomes unsafe or otherwise unlivable." The Commission would thus have limited the scope and reach of Subpart I to "safety hazards," and to "serious" ones, at that. Just as importantly, in recommending a significantly scaled-back Subpart I, the National Commission took pains to note that "improper installation," at that time, was "a more frequent source of defects than manufacturing or design errors."

Ultimately, while the Manufactured Housing Improvement Act of 2000 did not specifically modify section 615 or Subpart I, it did enact nationwide installation regulation and alternate dispute resolution, and those key changes -- as anticipated by Congress and the National Commission -- have fundamentally altered the landscape of consumer protection under the federal law and federal program, as confirmed by the most recent HUD data regarding dispute resolution referrals. Yet, HUD today persists in maintaining and even intensifying the Subpart I of the bygone "trailer" era, imposing new and more costly mandates -- even to the point of altering an MHCC Subpart I reform proposal, at the final rule stage (in 2013), to require expensive, labor-intensive "monthly" Subpart I IPIA record reviews regardless of manufacturer performance.

Given the underlying purpose of the 2000 reform law – to complete the transition of manufactured homes from the "trailers" of yesteryear to legitimate "housing" for all purposes, at all levels of government – Congress affirmatively mandated either state or federal regulation of the installation of every new manufactured home, thus definitively addressing the single largest cause of manufactured home "defects" as determined by the National Commission during nearly two years of hearings. Similarly, by instituting a system of alternate dispute resolution – under either federal or state authority – for issues manifesting during the first year following the initial sale, the 2000 reform law addressed a source of persistent consumer complaints regarding "finger-pointing" between manufacturers, retailers and installers, while providing an additional positive incentive for those regulated parties to effectively resolve consumer complaints affecting new homes.

The results of these changes, for consumers, have been significant. Again, according to HUD information, the number of referrals to dispute resolution in both the federal system for "default" states and representative state systems – which provide a de facto "barometer" for the overall level of consumer complaints – have been minimal. This objective evidence necessarily confirms two key metrics: (1) that manufacturers are producing homes which fully comply with the federal construction and safety standards; and (2) that defects, when they rarely do occur, are being addressed and resolved in a timely and responsive manner by manufacturers. Consequently, "reasonable" consumer protection as mandated by the 1974 Act, as amended, has been achieved under the HUD standards, and that the program's continuing prioritization – and expansion – of Subpart I mandates is baseless.

Yet, HUD continues to expand and intensify costly Subpart I activity while -- flush with cash from its 156 % label fee increase in 2014 – it creates more "make-work" functions for the program contractor, including, among other things: (1) its baseless mandate for "monthly" (rather than "periodic") Subpart I paperwork reviews overseen by the contractor; and (2) IPIA Subpart I concurrences for non-conformances and related contractor reviews – within a Subpart I system that the Oregon State Administrative Agency (SAA), in a 2002 memorandum provided to the MHCC, emphasized "does little to assist homeowners with everyday problems" and is "a costly and cumbersome process for manufacturers ... which produces few timely results."

Seventeen years after the enactment of the 2000 reform law, there is a profound and growing disconnect between the facts demonstrating the superior performance of post-2000 law HUD Code manufactured homes and the direction of the HUD program, with ever more costly, time-consuming and unnecessary paperwork and red-tape (and corresponding focus on minutiae), all redounding to the benefit of its entrenched, 40-year, revenue-driven, "make-work" "monitoring" contractor. The key changes made to the law in 2000 based on the recommendations of the National Commission – i.e., nationwide installation regulation and dispute resolution – have drastically lowered consumer complaint levels and have created an environment where the costly, harsh and arbitrary mandates of Subpart I can and should be significantly curtailed pursuant to EO 13777 to reduce costs and related regulatory compliance burdens for manufacturers.

4. Federalization of Installation

The Department, pursuant to EO 13777, should halt – and reject -- current and ongoing regulatory activity by the federal program to force states with state-law manufactured home installation standards and programs to comply with and adopt federal installation mandates.

Coupled with dispute resolution, the installation provisions of the 2000 reform law were adopted to close significant gaps in the original National Manufactured Housing Construction and Safety Standards Act of 1974, as construed by HUD. Although the industry has always supported sound consumer protection and the safe and proper installation of manufactured homes (which had been at the root of the overwhelming majority of consumer complaints prior to the 2000 law), HUD determined, soon after the enactment of the original 1974 federal manufactured housing law, that it would not address the installation of manufactured homes, because that law did not include specific authorization for such standards.

Recognizing, however, that proper installation is crucial: (1) to the proper performance of a manufactured home; (2) to the value of that home to its owner and consumer finance providers; and (3) to public and government acceptance of manufactured homes as legitimate "housing," rather than "trailers," the industry, consumers and other stakeholders worked, for nearly 12 years, to develop the installation provisions that were ultimately included in the 2000 reform law.

The result was a statutory structure, based on the 1994 recommendations of the National Commission on Manufactured Housing, which authorized any state that wished to do so (i.e., a "complying" state), to establish (or continue) a state-law installation program and state-law installation standards, so long as those requirements provided protection that met or exceeded baseline federal standards to be developed by the Manufactured Housing Consensus Committee and adopted by HUD. HUD, by contrast, was authorized to regulate installation only in non-complying (i.e., "default") states that failed to adopt a state-law installation program within five years of enactment of the 2000 law.

This structure was consistent with the nearly-universal view of program stakeholders that varying soils and other installation-related conditions in different geographical areas made states the best and most appropriate party to regulate the siting of manufactured homes. The 2000 reform law, consequently, allows states to take the lead role in the regulation of installation, with HUD assuming that duty only in default states that fail to adopt and implement a conforming state-law program.

What the 2000 reform law does not do, however -- again recognizing, as it does, the unique competence and ability of the states and state authorities to determine proper installation systems and techniques within their own borders – is authorize or direct HUD to substitute its judgment for that of state authorities regarding the specific details and elements of any given state installation standard. Put differently, the 2000 law allows HUD to determine whether a state-law installation program and state-law installation standards as an integrated "whole" provide consumers with a level of protection equal-to-or-greater-than the HUD standards for default states at the time of the initial acceptance of those programs, but does not provide back-door authority for HUD to micro-

manage state-law programs and/or standards or over-ride state judgments regarding the need for -- or content of -- any specific installation requirement.

As early as 2004, MHARR voiced concern that HUD, contrary to the structure, language and intent of the 2000 reform law, was committed to "totally federaliz[ing] installation regulation ... under its control." And, in fact, HUD has consistently sought to undermine the law's clear division of federal-state responsibility and its preference for state regulation of installation (including an express reservation of state installation authority added to the preemption section of the law), beginning with its separation of the baseline federal installation standards and program from the preemptive Part 3280 Federal Manufactured Housing Construction and Safety Standards, thus giving rise to the "re-codification" of installation, which MHARR vigorously opposed.

Now, HUD – through a double-edged process – is attempting to effectively federalize manufactured home installation regulation in all fifty states and thereby nullify the federal-state partnership that lies at the core of the HUD program as envisaged by Congress. In one part of this process, HUD (both directly and via a non-accountable installation contractor) is attempting to use the State Plan approval and re-certification process to over-ride and replace – or compel state officials to revise, modify and replace – state-adopted installation standards in complying states, based upon the "equal or greater protection" language of the 2000 law. In the second part of this process, HUD has asserted – for the first time since the inception of installation regulation under the 2000 reform law – that new HUD interpretations of the federal installation standards for default states are binding, not only in those default states, but in states with compliant state-law installation standards and programs. Pursuant to this scheme to undermine state authority as specifically incorporated within the 2000 reform law, HUD has proposed – and presented to the MHCC – a supposed "Interpretative Bulletin" that, in fact, would substantively modify provisions of the federal installation standards for default states regarding manufactured home foundations in freezing climates.[34]

MHARR has directly and strenuously objected to both of these actions as a blatant abuse of HUD's authority and has called for both actions to be halted.[35] HUD's intentional distortion and misapplication of the installation mandate of the 2000 reform law – seeking to undermine, restrict and ultimately abolish the legitimate role and authority of the states as established by Congress,[36] will result in significant harm for the industry and consumers, and impose needless and excessive regulatory compliance costs. Accordingly, both elements of this effort to negate state installation authority should be terminated pursuant to EO 13777.

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[34] See, proposed Interpretative Bulletin I-1-17.

[35] See, Attachment 3 hereto, MHARR December 9, 2016 comments regarding proposed Interpretative Bulletin I-1-17. See also, Attachment 4 hereto, MHARR April 14, 2016 correspondence to Pamela Danner, manufactured housing program administrator.

[36] The importance of preserving state authority as a counterweight to excessive or unreasonable federal regulation, was addressed by House of Representatives Majority Leader Kevin McCarthy, in an article published June 1, 2017: "[S]ome parts of Washington have gathered up power for decades while simultaneously shedding accountability. States, which have always been more accountable to the people, were reduced to implementers of federal policy. *** People have more power when states have more power because states are, by their nature, closer and more responsive to the people." See, Majority Leader Kevin McCarthy, "Washington's Power Shift: How Congress is Enacting Trump's Call to Drain the Swamp."

5. 2010 Interpretive Rule Regarding Matters Subject to MHCC Review

The Manufactured Housing Consensus Committee, as recommended by the National Commission on Manufactured Housing, was established by Congress as the centerpiece program reform of the 2000 law. The MHCC was designed to have presumptive authority to review and comment on virtually all HUD actions affecting the federal standards and enforcement regulations, and their interpretation, and to develop its own standards and enforcement proposals.[37] The 2000 law thus includes specific statutory mandates as to what types of matters that must be brought before the MHCC (i.e., proposed new or revised standards or enforcement regulations, interpretations, and changes to enforcement-related policies and practices) and when those matters must be brought to the MHCC (i.e., in advance, or be deemed "void" under section 604(b)(6)). It also establishes specific substantive (i.e., section 604(e)) and procedural requirements (i.e., section 604(a)) for MHCC consideration of those matters, as well as actions the Secretary must take with regard to MHCC recommendations (i.e., sections 604(a)(5) and 604(b)(3)-(4)), which can only become operative with the approval of the Secretary.

HUD, however, has attempted to severely limit its substantive role of the MHCC through an unduly narrow interpretation of the 2000 reform law. First, in a May 7, 2004 opinion letter, HUD interpreted the 2000 law to limit the review and comment authority of the MHCC solely to the federal standards and those enforcement regulations that "seek to assure compliance with the construction and safety standards." Thus, by unilateral interpretation of the 2000 law, HUD emasculated the statutory authority of the MHCC to consider and address crucial program matters such as regulations related to the program user fee, payments to the states, program budgeting, use of contractors and use of separate and independent contractors, among others, together with a host of other decisions, policies and practices affecting the cost and availability of manufactured housing, but not constituting a formal standard, regulation or Interpretive Bulletin.

Subsequently, on February 5, 2010, HUD issued an "interpretive rule," without public comment, which effectively divested the MHCC of nearly all its authority under section 604(b)(6) of the 2000 law to review and comment on a wide range of HUD actions involving enforcement policies and practices that do not fall under the formal Administrative Procedure Act (APA) definition of a "rule."[38]

Through these two related actions, HUD has effectively excluded from MHCC consensus review and comment significant program decisions concerning enforcement, inspections and monitoring (such as its entire program of expanded in-plant regulation and the delegation of de facto governmental authority to its program monitoring contractor) which substantially impact the cost and affordability of manufactured housing for consumers – contrary to the letter of the 2000 law and to the ultimate detriment of consumers and other program stakeholders.

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[37] This expansive view of the authority and jurisdiction of the MHCC was embraced by all the program stakeholder groups represented on the MHCC (see, February 17, 2004 MHCC letter to HUD Secretary Alphonso Jackson, paragraph 2 and related August 11, 2004 MHCC Resolution) and the entire manufactured housing industry (see, June 1, 2004, Coalition to Advance Manufactured Housing, "Analysis of HUD's Interpretation of the Role and Authority of the Manufactured Housing Consensus Committee" generally and at pp.7-8).

[38] See, 75 Federal Register No. 24, February 5, 2010, "Federal Manufactured Home Construction and Safety Standards and Other Orders: HUD Statements That Are Subject to Consensus Committee Processes."

HUD has claimed, in support of these actions, that "as a private advisory body not composed of federal employees, the MHCC does not have HUD's responsibilities for public safety and consumer protection." Thus, according to HUD, "the Department must ... remain free of the MHCC process to make program decisions that would not be considered rules under the Administrative Procedure Act." This issue, however, was fully addressed during the legislative process leading to the 2000 law, and is precisely why the MHCC issues recommendations that do not gain the force of law unless they are approved by the Secretary and promulgated through notice and comment rulemaking.

Since the power of the MHCC is statutorily confined to recommendations, the law is very broad in identifying the types of HUD actions that must be brought to the MHCC for review and comment. In addition to standards, enforcement regulations and interpretations of both, as addressed by sections 604(a) and 604(b) respectively, the "catchall" section of the 2000 reform law, 604(b)(6), was designed to ensure that virtually all quasi-legislative actions of the Department -- as contrasted with quasi-judicial enforcement activities -- whether characterized as a "rule" or not, to establish or change existing standards, regulations and inspection, monitoring and enforcement policies or practices, would be subject to review, consideration and comment, prior to implementation, by the MHCC. This section, which deems any such action "void" without prior MHCC review, was specifically included in the law – and broadly stated -- as a remedy for past abuses where major changes to enforcement procedures and the construction of the standards were developed behind closed doors and implemented without rulemaking or other safeguards.

The 2000 reform law, consequently, addresses the claims made in HUD's 2004 opinion letter by limiting the power of the MHCC to recommendations, not by severely limiting the actions subject to MHCC review as HUD claims. Moreover, to construe section 604(b)(6) to apply only to formal rules – as in HUD's 2010 "interpretive rule" -- makes no sense, because such rules are, by definition, already subject to rulemaking and public comment anyway under the Administrative Procedure Act ("APA"). Further, such a construction, effectively construing section 604(b)(6) to simply be a restatement of sections 551 and 553 of the APA, violates basic cannons of statutory construction. Given that Congress, in enacting the 2000 law, is presumed to have been aware of the relevant, pre-existing APA sections, such a construction: (1) improperly renders section 604(b)(6) mere surplusage; (2) fails to give (the common and ordinary) meaning to every word and provision of the 2000 law; and (3) fails to broadly and liberally interpret a clearly remedial provision.

Both the plain language of the relevant provisions and the structure of section 604 show that section 604(b)(6) was designed to ensure an opportunity for MHCC consensus comment and review or comment. HUD, accordingly, has misconstrued the law and unlawfully limited the role of the MHCC as envisaged by Congress.

As a result, HUD's February 5, 2010 "Interpretive Rule," which unlawfully negates section 604(b)(6) of the 2000 reform law, is a regulatory action that should be repealed pursuant to EO 13777.

6. HUD's Exclusion of Collective Industry Representation On the MHCC Diminishes and Dilutes the MHCC's Regulatory Recommendations to the Secretary

Because of its crucial role within the HUD regulatory structure under the 2000 reform law, it is essential that the MHCC allow for the voting participation and the full, fair and free expression of the views, concerns and interests of all program stakeholders. As the National Commission stated, "The consensus collaborative process ... is a critical component of the Commission's mechanism for change. A balance of all interests on the consensus committee guarantees the integrity of the standards." (Emphasis added). This is particularly important for HUD Code manufacturers, which are the primary focus of – and bear the highest direct costs under -- both the federal standards and HUD's established regulatory structure. A de facto HUD ban on collective industry representation on the MHCC since 2009, however, has kept the Committee bereft of the institutional knowledge, know-how, perspective and memory that such representation would provide during Committee debates, thereby diminishing the MHCC process and denying industry members full and proper representation on the MHCC.

When the MHCC was organized in 2002, HUD correctly and properly appointed, among seven "producer" category representatives, one full-time staff employee each from the industry's two national trade organizations (MHARR and the Manufactured Housing Institute) in order to ensure that the Committee would have the benefit of the industry's collective perspective and viewpoint. HUD, though, for nearly a decade, has barred collective industry representatives from voting membership on the MHCC based – ostensibly -- on a June 18, 2010 Presidential Memorandum barring registered federal lobbyists from voting membership on federal advisory committees. Under an extension of this policy, HUD has also refused to appoint otherwise qualified, non-lobbyist full-time staff employees from the two collective national industry organizations to the MHCC (including a full-time MHARR staff employee who has submitted repeated applications), with the ability to provide essential knowledge, expertise, know-how and institutional memory on behalf of the industry, while other interest groups on the MHCC have continually been represented by multiple collective representatives, including full-time national association staff.

There is, however, no legal basis for this discriminatory ban on collective MHCC representation for the principal regulated parties under the HUD program. First, 2011 guidance from the Office of Management and Budget ("OMB") implementing the 2010 Presidential Memorandum clearly demonstrates that HUD's exclusion of non-lobbyist employees and officials from the MHCC is invalid and unlawful. Specifically, the OMB guidance states: "Q2: Does the policy restrict the appointment of individuals who are themselves not federally registered lobbyists but are employed by organizations that engage in lobbying activities? A2: No, the policy established by [Presidential] Memorandum applies only to federally registered lobbyists and does not apply to non-lobbyists employed by organizations that lobby." (Emphasis added).[39]

Second, and more importantly, OMB issued "revised guidance" in 2014 clearly stating that the lobbyist ban does not apply to persons serving on an advisory committee in a "representative capacity," as is the case with the MHCC. That revised guidance provides, "The lobbyist ban does

[39] See, 76 Federal Register, No. 193, October 5, 2011 at pp. 61756-7.

not apply to lobbyists who are appointed in a 'representative capacity,' meaning that they are appointed for the express purpose of providing a committee with the views of a non-governmental entity, a recognizable group of persons or non-governmental entity (an industry sector, labor unions, or environmental groups, etc.), or a state or local government."[40]

HUD's unlawful ban, moreover, has severely impacted the representation of the industry on the MHCC, depriving it of the benefits of the collective knowledge, know-how, expertise and institutional memory that it has assembled in Washington, D.C. to advance the industry's collective views and positions on standards and regulatory issues, while ensuring that the MHCC functions in full compliance with law. Although HUD has appointed representatives of individual industry businesses to the MHCC, those businesses are regulated by HUD and face potential regulatory backlash and retribution. In addition, individual company representatives are inevitably affected by company-specific concerns, as contrasted with collective industry representatives, who have a duty to act in accordance with broader industry interests.

Thus, industry businesses and most particularly smaller businesses which, for years, have entrusted such functions to collective representatives, have a right – equal to any other MHCC interest group – to be represented on a collective basis. Consequently, in order to restore the effective representation of industry producers and to restore the balance of the MHCC required by the 2000 law, HUD should: (1) publicly confirm that collective industry MHCC representation is permissible and proper under applicable law; (2) publicly confirm that candidates representing collective national industry interests are eligible to apply for voting MHCC membership; and (3) appoint one or more such full-time staff employee collective industry representatives to the MHCC for terms beginning in 2018.

7. Formaldehyde Warning Notice[41]

Although HUD-regulated manufactured homes utilize the same construction materials as site-built and other types of homes and, unlike site-built and other types of homes, have been subject to stringent and effective formaldehyde emissions standards since 1984,[42] the HUD standards include a discriminatory requirement that each manufactured home (including model homes at retailer locations) "prominently" display a red formaldehyde "Health Notice."[43] This notice requirement has been maintained by HUD for over three decades, despite the fact that: (1) the substantive HUD formaldehyde emissions standards have been successful in eliminating the vast majority of formaldehyde-related complaints by homeowners; and (2) the red formaldehyde "Health Notice" negatively impacts the marketability of manufactured homes despite the fact that both manufactured and site-built homes are constructed of exactly the same materials. With HUD

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[40] See, 79 Federal Register, No. 156, August 13, 2014 at p. 47482. MHARR has provided HUD with a copy of this OMB guidance, but the Department has failed to change its position on this matter during the tenure of the current career administrator.

[41] See, 24 C.F.R. 3280.309.

[42] See, 24 C.F.R. 3280.308.

[43] See, 24 C.F.R. 3280.309(a). By regulation, the "Important Health Notice" is required to state, in part: "Some of the building materials used in this home emit formaldehyde. Eye, nose and throat irritation, headache, nausea and a variety of asthma-like symptoms, including shortness of breath, have been reported as a result of formaldehyde exposure. Elderly persons and young children, as well as anyone with a history of asthma, allergies, or lung problems may be at greater risk. Research is continuing on the possible long-term effects of exposure to formaldehyde."

statistics indicating minimal levels of formaldehyde-related consumer complaints in federally-regulated manufactured homes, there is no longer any basis or justification for the health notice mandated by the HUD standards, and the regulation requiring that notice for manufactured homes should be repealed.

Under the HUD manufactured housing formaldehyde emissions standards – in effect since 1984[44]-- "plywood materials" utilized in manufactured homes may "not emit formaldehyde in excess of 0.2 parts per million (ppm) as measured by [an] air chamber test method" specified elsewhere in the HUD standards. Similarly, formaldehyde emissions from "particleboard materials" utilized in manufactured homes may not exceed 0.3 ppm, as measured by the same testing methodology. Together, these standards -- developed by HUD to balance consumer protection and the affordability of manufactured housing as required by both the original 1974 manufactured housing law and the 2000 reform law -- have reduced the number of formaldehyde-related complaints regarding HUD manufactured homes to de minimus levels, as shown by HUD's own program statistics, while preserving their fundamental affordability.[45]

Moreover, in December 2016, the U.S. Environmental Protection Agency (EPA) adopted a final rule that would further reduce the permissible formaldehyde emission from plywood, particleboard and medium-density fiberboard used in all types of residential construction. While this rule is currently under review at EPA pursuant to Executive Order 13777, and its implementation has been deferred pending that review, HUD, under, the Formaldehyde Emissions Standards for Composite Wood Products Act,[46] would be required to amend its own manufactured housing formaldehyde emissions standards to "reflect" any ultimate formaldehyde emissions standard implemented by EPA, within 180 days after its promulgation. Accordingly, if and when such EPA standards are ultimately implemented, composite wood materials used in all homes – including manufactured homes – would have to meet more stringent formaldehyde emissions criteria, applicable to a wider array of composite wood products, than are currently in place. This would have the inevitable effect of further reducing the already de minimus number of formaldehyde-related complaints involving HUD-regulated manufactured homes, and would further undermine any basis for retaining the HUD formaldehyde "health notice." Indeed, HUD itself presented a "working draft" of a proposed rule to the MHCC at its October 25-27, 2016 meeting that would eliminate this formaldehyde "Health Notice."

HUD therefore, should confirm, pursuant to EO 13777, that the "Formaldehyde Health Notice" required by 24 C.F.R. 3280.309 will be repealed, and should expedite that process to bring about such a repeal prior to the end of 2017.

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[44] See, 24 C.F.R. 3280.308.

[45] Thus, HUD's Ninth Report to Congress on the Manufactured Housing Program (October 1996) shows that in 1991 – seven years after the implementation of the HUD formaldehyde standards – formaldehyde-related complaints from homeowners constituted just 1.3% of the specifically-categorized complaints reported (i.e., just 38 of 2,896 complaints). By 1994, that figure had decreased to just 1% (i.e., 35 of 3,478 reported complaints), even though at that time, the nation's manufactured housing stock included a much larger number of pre-1984 -- and, therefore, pre-formaldehyde standards – units than it does today. Indeed, according to a 2012 market study conducted by the Foremost Insurance Group, only 6% of the manufactured homes in use at that time were purchased prior to the implementation of HUD's formaldehyde emissions standards in 1984, and that number would be even further reduced today.

[46] See, 15 U.S.C. 2697.

8. Compliance with Appointed Administrator Mandate

Section 620(a)(1)(C) of the 2000 law directs HUD to "provid[e] ... funding for a non-career administrator within the Department to administer the manufactured housing program." Congress directed the appointment of a non-career program Administrator not only to increase the accountability and transparency of the federal program, but also to act as a full-time advocate for manufactured housing, to "facilitat[e] the acceptance of the quality, durability, safety and affordability of manufactured housing within the Department." Since 2004, however, the manufactured housing program has not had a non-career administrator, while HUD has consistently refused pleas from program stakeholders to comply with this critical reform.

Without an appointed administrator, the HUD program today remains what it has always been since the inception of federal regulation in 1976, a "trailer" program, focused on "improving" presumptively deficient manufactured housing (even though the industry today is producing its best, highest quality homes), instead of increasing the availability and utilization of manufactured housing as a superior source of affordable, non-subsidized home ownership, as directed by Congress in the 2000 law. This program "culture" views ever more onerous, burdensome and costly regulation, with no proven benefits for consumers, as the ultimate objective of the program.

This negative program culture harms the public image of manufactured housing, negatively affecting sales, appreciation, financing, zoning, placement and a host of other matters to the detriment of both the industry and consumers. Moreover, at present, with career-level program management, the manufactured housing program is -- and remains -- cut-off from mainstream policy-making within HUD. This isolates manufactured housing from initiatives that could benefit the industry and consumers, allows continuing discrimination against manufactured housing and its consumers within HUD and elsewhere within the government, and leaves manufactured housing in perpetual "second-class" status at HUD.

HUD has maintained since 2004 that the 2000 reform law "contains no express or implied requirement for the Secretary to appoint a non-career administrator." However, this represents a fundamental misreading of the 2000 law.

Section 620(a) of the Act, as amended by the 2000 law, states that the Secretary of HUD "may -- (1) establish and collect from manufactured home manufacturers a reasonable fee ... to offset the expenses incurred by the Secretary in connection with carrying out the responsibilities of the Secretary under this title, including ... (A) conducting inspections and monitoring ... [and] (C) providing the funding for a non-career administrator within the Department to administer the manufactured housing program." (Emphasis added).

By the plain wording of this section, it is the establishment of the program user fee that is subject to the qualifier "may" and is, therefore, permissive. Once that fee is established, however -- as it has been for decades by regulation -- it is to be used to offset expenses incurred in carrying out the Secretary's "responsibilities" as delineated in section 620(a)(1)(A-G). As a matter of black-letter statutory construction, giving each word of the 2000 law its plain, ordinary and common meaning, a congressionally prescribed "responsibility" of a federal official is mandatory, not permissive or discretionary. If HUD's construction of section 620(a)(1) were correct, its "responsibility" to "conduc[t] inspections and monitoring" of manufactured homes, their

production and their compliance with the federal standards under section 620(a)(1)(A) would be just as discretionary as its "responsibility" under section 620(a)(1)(C), but HUD has never made any such claim or assertion over the entire 36-year history of the program -- nor would it. Thus, construing section 620(a)(1) consistently, as a whole, the Secretary's responsibility to appoint a non-career administrator for the program is every bit as mandatory as the responsibility to conduct inspections and monitoring in order to enforce the federal standards.

As part of its EO 13777 review of the HUD program, therefore, HUD should acknowledge the mandatory nature of the appointed administrator directive and take action (at the very least) to reassign the current administrator – "parachuted" into the program from outside by the Obama Administration in 2014 -- and appoint a qualified non-career administrator, with direct knowledge of the manufactured housing industry, in order to complete the full and proper implementation of all program reforms incorporated in the 2000 reform law, facilitate the acceptance, availability and utilization of HUD-regulated manufactured housing, as provided by that law, and fundamentally modify the program – given the industry's achievement of the safety, quality and durability benchmarks established by Congress in the original 1974 federal law -- to eliminate arbitrary, costly and unnecessary regulatory mandates that needlessly impair the affordability of manufactured housing and needlessly exclude lower-income consumers from the housing market.

9. Competitive Program Contracting

The HUD manufactured housing program has had the same monitoring contractor (i.e., the same continuing entity, with the same personnel, albeit under different names – initially the "National Conference of States on Building Codes and Standards" then "Housing and Building Technology," and now the "Institute for Building Technology and Safety") since the inception of federal regulation in 1976. Although the monitoring function contract is subject, officially, to competitive bidding, the contract is a de facto sole source procurement. Because the federal program is unique within the residential construction industry and no other entity has ever served as the monitoring contractor, no other organization has directly comparable experience. Thus, solicitations for the contract have been based on award factors that track the experience and performance of the existing contractor, effectively preventing any other bidder from competing for the contract. Moreover, the one time that another organization did submit a bid, its lower-priced offer was subject to a second round of analysis that ultimately deemed the incumbent contractor's proposal best for HUD, based on its years of direct program experience.

As it has been structured by the program since the inception of federal regulation four decades ago, the monitoring contract is not only fatally-flawed in its process – i.e., its failure to generate full and fair competition as required by applicable law, resulting in a 40-year de facto sole source contract that, based on MHARR research does not and has not existed anywhere else in the federal government for a pseudo-regulatory contractor – but is also substantively flawed, in that it creates a distinct financial incentive for the contractor to find fault with manufactured homes (regardless of whether any fault actually exists) and to pursue the expansion and extension of regulatory and pseudo-regulatory mandates in order to increase revenues.

Beyond these fatal structural flaws, without new ideas and new thinking, the program effectively, remains frozen in the 1970's and has not evolved along with the industry. This is one

of the primary reasons that the federal program, government at all levels and other organizations and entities continue to view and treat manufactured homes as "trailers," causing untold difficulties for the industry and consumers, including financing, zoning, placement and other issues. The 2000 law, moreover, was designed to assure a balance between reasonable consumer protection and affordability. But the HUD program and the entrenched incumbent contractor have a history of continually ratcheting-up regulation, with more detailed, intricate and costly procedures, inspections, record-keeping, reports and red-tape, despite the fact that consumer complaints regarding manufactured homes, as shown by HUD's own data, are minimal. This is a result, in part, of an enforcement and contracting structure that provides an incentive for the monitoring contractor to find fault with manufactured homes.

For the manufactured housing industry to recover and advance substantially from the decline of the past two decades, this cycle must be broken and the federal program must be brought into full compliance with the objectives and purposes of the 2000 law. It is thus essential that the program ensure that there is full and open competition for the monitoring contract. Accordingly, the current monitoring contract should be terminated for the convenience of the government and re-solicited pursuant to new award criteria that do not penalize or ward off new bidders without direct program experience, and a structure that does not provide a financial incentive for excessive or punitive regulation.

III. CONCLUSION

In accordance with the foregoing, HUD should either repeal or modify the elements of the federal manufactured housing program detailed above pursuant to EO 13777 in order to maintain consumer protections mandated by applicable law, while eliminating unnecessary regulatory burdens and compliance costs that needlessly increase the cost of HUD-regulated manufactured housing, needlessly exclude lower-income Americans from the benefits of homeownership, and needlessly impair the growth and evolution of the manufactured housing industry, thereby inhibiting job growth within a uniquely domestic industry.

Sincerely,

Mark Weiss
President and CEO

cc: Hon. Dr. Ben Carson
Hon. Mick Mulvaney
Hon. Gary Cohn (Chairman, National Economic Council)
Mr. Rick Dearborn (White House Deputy Chief of Staff for Policy)
Manufactured Housing Industry Manufacturers, Retailers and Communities