



BRIAN TAYLOR
STATE FIRE MARSHAL

April 21, 2026

Mr. Eamon Kromka
Genesis Custom Construction
808 Arendell St.
Morehead City, NC 28557

RE: 2018 NC Administrative Code and Policies (NCACP), Section 204.5.1 Contractor responsibilities

Mr. Kromka:

This letter is in response to your request for a formal interpretation from the Office of State Fire Marshal (“OSFM”) dated 11/10/25 and received by OSFM the same day. Clarifying information on the request received during the extensive OSFM investigation is also included. Requests are addressed below in the order in which they are posed.

Referred to relevant parts of the email received on 4/20/26 to clarify the request:

“When reroofing exposes unsafe or noncompliant structural conditions, what does the North Carolina State Building Code require the licensed contractor to do?”

Remarks:

Attachment A comprises of the request for formal interpretation as well as all supporting information submitted with the request.

Code Analysis: 2018 NCACP, Section 204.5.1 requires contractors to conform to the 2018 North Carolina State Building Code for all work performed on buildings and structures included within the scope of the 2018 North Carolina State Building Code as defined in N.C.G.S. 143-138(a) and (b).

....

204.5.1 Contractor responsibilities. It shall be the duty of every person who contracts for the installation or repair of a building or services system to comply with state or local rules and regulations concerning licensing. It shall be the contractor’s responsibility to conform to this code and the technical codes for all installations or repairs of a building or service system. Violations and penalties of these provisions are listed in Sections 204.12 through 204.14 of this code. Additional requirements can be found in General Statutes 87-1 through 87-14.

....

OFFICE OF STATE FIRE MARSHAL

1202 MAIL SERVICE CENTER | RALEIGH NC 27699 -1202 | TEL 919.647.0000 | FAX 866.851.6508 | NCOSFM.GOV



§ 143-138. North Carolina State Building Code.

(a) Preparation and Adoption. - The Building Code Council and Residential Code Council may prepare and adopt, in accordance with the provisions of this Article, a North Carolina State Building Code. The Building Code Council shall oversee codes applicable to commercial or multi-family construction and contained in Code volumes, as specified in subdivisions (1) through (9) of this subsection, that apply to commercial and multi-family construction. The Residential Code Council shall oversee codes applicable to residential construction and contained in Code volumes, as specified in subdivisions (1) through (10) of this subsection, that apply to residential construction. Before the adoption of any volume of the Code, or any part of the Code, the responsible Council shall hold at least one public hearing. A notice of the public hearing shall be published in the North Carolina Register at least 15 days before the date of the hearing. Notwithstanding G.S. 150B-2(8a)h., any volume, or any part, of the North Carolina State Building Code as adopted by the Building Code Council or Residential Code Council is a rule within the meaning of G.S. 150B-2(8a) and shall be adopted in accordance with the procedural requirements of Article 2A of Chapter 150B of the General Statutes. For the purposes of this Article, "North Carolina State Building Code" or "Code" shall collectively refer to all Code volumes, as revised or amended, prepared and adopted by the Building Code Council or Residential Code Council pursuant to this Article. The North Carolina State Building Code shall consist of the following Code volumes:

- (1) North Carolina Administrative Code and Policies.
- (2) North Carolina Building Code.
- (3) North Carolina Electrical Code.
- (4) North Carolina Energy Conservation Code.
- (5) North Carolina Existing Building Code.
- (6) North Carolina Fire Code.
- (7) North Carolina Fuel Gas Code.
- (8) North Carolina Mechanical Code.
- (9) North Carolina Plumbing Code.
- (10) North Carolina Residential Code.

....

(b) Contents of the Code. - The North Carolina State Building Code, as adopted by the Building Code Council or Residential Code Council, may include reasonable and suitable classifications of buildings and structures, both as to use and occupancy; general building restrictions as to location, height, and floor areas; rules for the lighting and ventilation of buildings and structures; requirements concerning means of egress from buildings and structures; requirements concerning means of ingress in buildings and structures; rules governing construction and precautions to be taken during construction; rules as to permissible materials, loads, and stresses; rules governing chimneys, heating appliances, elevators, and other facilities connected with the buildings and structures; rules governing plumbing, heating, air



conditioning for the purpose of comfort cooling by the lowering of temperature, and electrical systems; and such other reasonable rules pertaining to the construction of buildings and structures and the installation of particular facilities therein as may be found reasonably necessary for the protection of the occupants of the building or structure, its neighbors, and members of the public at large.

Conclusions: All contractors performing work are required to follow the North Carolina State Building Code for buildings and structures within the scope of the North Carolina State Building Code as defined in 2018 NCACP, Section 204.5.1 and NCGS 143-138(a) and (b). A construction contract between the owner and the contractor defines the scope of work. The North Carolina State Building Code itself does not require a contractor to fix unanticipated conditions that are beyond the scope of work that the owner and contractor originally agreed to. If the owner does not wish to expand the scope of the project to include additional work, that is their choice. If a contractor proceeds with work not in compliance with the North Carolina State Building Code, they are in violation of various state regulations and laws and could be subjected to misconduct.

Sincerely,

David Rittlinger, PE, LEED AP
Division Chief – Codes & Interpretations
North Carolina Office of State Fire Marshal

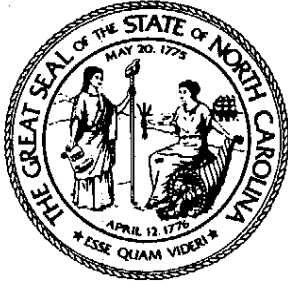
cc: Nathan Childs, NCDOJ, counsel for NC Building Code Council, nchilds@ncdoj.gov
Nicki Shaffer, NCDOJ, counsel for NC Residential Code Council, wshaffer@ncdoj.gov
Kyle Heuser, NCOSFM, Assistant General Counsel, kyle.heuser@ncdoi.gov
Pak Yip, NCOSFM, Chief Code Consultant, pak.yip@ncdoi.gov



ATTACHMENT A

(see attached pdf)





**APPENDIX E
 APPEALS
 NORTH CAROLINA
 BUILDING CODE COUNCIL
 1429 Rock Quarry Road, Suite 105
 Raleigh, North Carolina 27610
 (919) 647-0008
 david.rittlinger@ncdoi.gov**

APPEAL TO NCDOI/NCBCC Hearing Date _____ / _____ / _____

GS 153A-374, GS 160A-434
 Formal Interpretation by NCDOI X
 Appeal of Local Decision to NCDOI _____

GS 143-140, GS 143-141
 Appeal of Local Decision to NCBCC _____
 Appeal of NCDOI Decision to NCBCC _____

APPELLANT Eamon Kromka PHONE (252) 499 - 4999 x _____
 REPRESENTING Genesis Custom Construction
 ADDRESS 809 Arendell St.
 CITY Morehead City STATE NC ZIP 28557
 E-MAIL info@genesismailbox.com FAX (_____) _____ - _____

North Carolina State Building Code, Volume NCRC 2018 - Section Section 1 & chapter 9
NCEBC 2018 Text

REQUEST ONE: [X] Formal Interpretation by NCDOI [] Appeal of Local Decision to NCBCC
 [] Appeal of Local Decision to NCDOI [] Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

After a tornado damaged the home, work was performed including a full roof replacement at the Horton Residence (Atlantic, NC). Unrated plywood and structurally deficient/damaged materials were discovered beneath the roof covering. The insurer's representatives cited NCEBC §602.1 among others, and informal emails from a local inspector to argue that such existing materials could remain or be replaced "like for like". Genesis corrected the unsafe conditions to meet NCRC §R908.2 and NCEBC §706.2 & §606.1, and now seeks clarification to ensure uniform interpretation statewide.

REASON:

SEE FORMAL REQUEST LETTER & EXHIBITS **ATTACHED**

Signature Eamon Kromka

APPEAL TO NCDOI/NCBCC
 DATE: 11/10/2025 FORM 3/14/17

202.9 Appeals

202.9.1 Engineering Division. A written technical interpretation shall be provided as specified in Section 203.2.1.2. Any person may appeal in writing an order, decision, or determination pertaining to the code or any state building law by filing written notice with the Commissioner of Insurance or his designee within ten (10) days after the order, decision, or determination. A copy of the appeal shall be furnished to each party.

(General Statutes 143-140, 153A-374 and 160A-434)

203.2.1 Interpretations

203.2.1.1 Informal Interpretations. The Engineering Division shall provide informal interpretations on code related matters either by e-mail, letter or telephone. These informal interpretations may be accepted by the local code enforcement official or party requesting the interpretation. Either party may request a formal interpretation of the code.

203.2.1.2 Formal Interpretations. Any person may request in writing a formal interpretation of the code. The request shall be addressed to the Chief Code Consultant for the Department of Insurance. The request shall be specific and shall reference the code sections in question. All formal interpretations shall be in writing. A formal interpretation shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. Formal interpretations determined to be of a general nature may be posted on the Department website. (General Statute 143-140)

203.2.2 Appeals. Any person may appeal in writing an order, decision, or determination of a code enforcement official pertaining to the code or any state building law. The appeal shall be addressed to the Chief Engineer for the Department of Insurance by filing written notice within ten (10) days after the order, decision, or determination. The appeal shall contain the type and size of the building in question, the location of the building, and shall reference the code sections in question. The decision shall be in writing and shall set forth the facts found. The decision rendered shall be based on the technical provisions of the code, public health and safety and shall be construed liberally to those ends. A decision shall be binding on all parties unless appealed to the Building Code Council as specified in Section 201.9.2. A copy of the appeal and written decision shall be furnished to each party. (General Statutes 153A-374 and 160A-434)

202.9.2 Building Code Council. The Building Code Council shall hear appeals from the decisions of State enforcement agencies relating to any matter related to the code. Any person wishing to appeal a decision of a State enforcement agency to the Building Code Council shall give written notice of appeal as follows:

202.9.2.1 Twenty one (21) copies including an original of the Notice of Appeal shall be filed with the Building Code Council c/o NC Department of Insurance, Engineering Division, 325 North Salisbury Street, Room 5_44, Raleigh, NC 27603 and one (1) copy shall be filed with the State enforcement agency from which the appeal is taken.

202.9.2.2 The Notice of Appeal shall be received no later than thirty (30) days from the date of the decision of the State enforcement agency.

202.9.2.3 The Notice of Appeal shall be legibly printed, typewritten or copied and shall contain the following:

- (1) Name, address of the party or parties requesting the appeal.
- (2) The name of the State enforcement agency, the date of the decision from which the appeal is taken, and a copy of the written decision received from the enforcement agency.
- (3) The decision from which the appeal is taken shall be set forth in full in the Notice of Appeal or a copy of the decision shall be attached to all copies of the Notice of Appeal.
- (4) The contentions and allegations of fact must be set forth in full in a clear and concise manner with reference to the sections of the code in controversy.
- (5) The original Notice of Appeal shall be signed by the party or parties filing appeal.
- (6) The Notice of Appeal shall be received by the first day of the month prior to the Building Code Council's quarterly scheduled meeting in order to be placed on the agenda for that meeting. The Chairman may schedule a special meeting to hear an appeal.

202.9.2.4 Upon the proper filing of the Notice of Appeal, the Building Code Council Secretary shall forward one (1) copy of the Notice of Appeal to each member of the Building Code Council. The Chairman may appoint a Hearing Committee to hear appeals. The Secretary shall send notice in writing to the party or parties requesting an appeal and to the Building Code Council Hearing Committee members at least fifteen (15) days prior to the Hearing Committee meeting. A written decision of the Hearing Committee meeting shall be provided to all Building Code Council Members. The actions of the Hearing Committee shall be final, unless appealed to the full Building Code Council in writing within 30 days of the Hearing Committee's action. If a Hearing Committee consists of at least seven Council members, it will constitute a quorum of the full Council. Further appeals shall be as specified in Section 202.9.3.

202.9.2.5 The Building Code Council shall, upon a motion of the State enforcement agency or on its own motion, dismiss appeals for the following reasons:

- (1) Not pursued by the appellant or withdrawn;
- (2) Appeal not filed in accordance with these rules; or
- (3) Lack of jurisdiction.

202.9.2.6 When the Building Code Council finds that a State enforcement agency was in error in its interpretation of the code, the Building Code Council shall remand the case to the agency with instructions to take such actions as the Building Code Council directs. When the Building Code Council finds on appeal that materials or methods of construction proposed are equivalent to those required by the code, the Building Code Council shall remand the case to the State enforcement agency with instructions to permit the use of such materials or methods of construction. The Building Code Council shall immediately initiate procedures for amending the code to permit the use of such materials or methods of construction.

202.9.2.7 The Building Code Council shall provide a written decision setting forth the findings of fact and the Building Code Council's conclusions to each party or parties filing the appeal and to the State enforcement agency from which the appeal was taken.

202.9.3 Superior Court. Whenever any person desires to appeal a decision of the Building Code Council or a decision of a State or local enforcement agency, he may appeal either to the Wake County Superior Court or the Superior Court of the county in which the proposed building is to be situated in accordance with the provisions of Chapter 150B of the General Statutes.
(General Statute 143-141(d))

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Oct. 30, 2025

To: North Carolina Department of Insurance
Engineering & Codes Division
1202 Mail Service Center
Raleigh, NC 27699-1202

Subject: Request for Formal Clarification – Interaction of NCRC §102.7 and NCEBC Provisions; Contractor Duties When Unsafe Conditions Are Discovered During Reroofing (Horton Residence)

1) Introduction and Purpose

Genesis Custom Construction is a licensed North Carolina General Contractor. We respectfully request a formal clarification under NCGS §143-139(b) regarding (i) the interaction between the **North Carolina Residential Code (NCRC)** and the **North Carolina Existing Building Code (NCEBC)** on reroofing of existing one- and two-family dwellings, and (ii) the contractor's duty to act when unsafe or noncompliant conditions are discovered after a roof covering removal.

We further request guidance to prevent misuse of informal opinions intended to limit code-compliant work scopes, particularly where insurers or their hired agents selectively cite **NCRC §102.7** and **NCEBC §302.3 & §602.1** to retain unsafe, unapproved, and non compliant components.

2) Procedural Background and Claim Context

On January 9, 2024, a tornado struck the Horton property (176 Salter Dr., Atlantic, NC), damaging many components of the building envelope to include: roof, siding, soffit/fascia, and the electrical service mast/meter base, among other items. Mr. Horton's wind Insurance Carrier (NCJUA) acknowledged insurance coverage and approved a roof replacement with limited siding repairs. Mr. Horton retained Genesis, in the capacity of a licensed General Contractor, to inspect the damages, present an appropriate and compliant work scope, and to then repair the property accordingly.

During scoping, Genesis determined the damaged outer layer of existing aluminum siding was discontinued and was not repairable per current manufacturer guidance. It was also noted that the damaged aluminum siding, along with many other components of the affected building envelope were also coated with lead-based or lead-containing paint, triggering **EPA 40 CFR Part 745 – RRP Rule** compliance. Genesis immediately notified material interested parties, obtained accredited testing, retained an NC-licensed lead project designer, and bid the regulated work with lead

certified firms/contractors. A full package (labs, plans, itemized work scopes, and estimates, and supporting documentation) was provided to NCJUA, establishing complete context for a safe, code-compliant restoration path.

Genesis then proceeded with the much needed compliant reroofing operation, during which several damages and structural deficiencies were discovered. These discoveries involved previous installations of structural roof system components, with noncompliant materials, damaged, dangerous, and unsafe conditions. Immediately upon discovery, conditions were documented, and promptly communicated with the material interested parties. Genesis then, in the interest of all parties, performed prompt corrective action in accordance with code and manufacturer standards, ensuring the safety and integrity of the structural roof system.

Rather than authorization of the well documented work scope, NCJUA engaging a forensic engineering firm, **Accident Reconstruction Analysis, PLLC.**, and then invoked appraisal provisions of Mr. Horton's insurance policy, naming Mr. Harrison Jones as its chosen appraiser. The process shifted away from a fair and reasonable investigation into a prolonged technical dispute dominated by insurer-selected participants who advanced narrow interpretations of the Building Codes, while discounting or ignoring contractor duties, safety, and regulatory compliance surrounding many aspects of the project.

3) Code Framework – How the NCRC and NCEBC Work Together

- **NCRC §102.7 (Existing Structures):** Serves as an **administrative bridge** directing users to the NCEBC for repair/alteration processes on existing dwellings. It **does not transfer jurisdiction** or negate technical requirements in the NCRC or approved industry and manufacturer standards.
- **NCEBC (Chs. 1–7):** Provides **procedural/administrative** pathways for repairs and alterations (e.g., Level 1 Alteration) and evaluation requirements when damage or unsafe conditions are present. It also mirrors sections of the NCRC related to safety and structural compliance.
- **NCRC (Ch.8, Ch. 9; Ch. 45 coastal/high-wind):** Provides the **technical standards** for roof design, structural compliance,, reroofing, materials, flashing, fastening, and high-wind construction for one- and two-family dwellings.

Practical application: For a full roof system replacement on a dwelling, the **NCRC controls the technical installation standards** (e.g., **Chapter 8 & 9**, and **Chapter 45 high-wind zones**) while the **NCEBC supplements** with process and additional safety requirements where applicable. The codes operate **in tandem**; the NCEBC itself therefore does not authorize retention of noncompliant materials where the NCRC or other controlling documents prescribe current performance/installation/safety standards.

3) Defining Repairs, Alterations, and Code Thresholds

As visible within the previously noted reports and correspondence from NCJUA's appraiser and forensic engineer, the opposing parties continue to characterize the necessary reroofing work as a *repair* under the North Carolina Existing Building Code (NCEBC). This classification, however, is inaccurate and materially affects the applicable code compliance requirements.

By treating the project as a "repair," they attempt to restrict the scope of work to maintenance-level provisions—essentially preserving pre-existing conditions rather than meeting current standards. In contrast, the nature of the work performed—a full roof covering removal, replacement, and associated structural restoration—meets the definition of an *alteration*, which further mandates compliance with current building code thresholds for safety, gravity load capacity, and wind design.

To clarify this distinction, the following definitions from the NCEBC are provided:

[A]ALTERATION. Any construction or renovation to an existing structure other than a repair or addition. Alterations are classified as Level 1, Level 2 and Level 3.

[A]REPAIR. The restoration or renewal of any part of an existing building for the purpose of its maintenance or to correct damage.

[BS]REROOFING. The process of recovering or replacing an existing roof covering. See "Roof recover" and "Roof replacement."

[BS]ROOF REPAIR. Restoration or renewal of any part of an existing roof for the purposes of its maintenance.

[BS]ROOF REPLACEMENT. The process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering.

[BS]SUBSTANTIAL STRUCTURAL DAMAGE. A condition where one or both of the following apply:

1. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 33 percent from its predamage condition.

2. The capacity of any vertical component carrying gravity load, or any group of such components, that supports more than 30 percent of the total area of the structure's floor(s) and roof(s) has been reduced more than 20 percent from its predamage condition and the remaining capacity of such affected elements, with respect to all dead and live loads, is less than 75 percent of that required by this code for new buildings of similar structure, purpose and location."

A full roof replacement and associated gravity-load component restoration by definition, exceeds a repair scope and constitutes an alteration requiring compliance with current standards. In 2021, Genesis previously requested the department's clarification regarding a similar matter.

NCDOI Clarification – Bill Kirk, P.E. (2021)

Mr. Kirk was asked to clarify the difference between a repair and an alteration. Mr. Kirk responded: *"Note that 'repair is limited to work on the item and does not include complete or substantial replacement' of the item."*

Mr. Kirk also referenced to the official code commentary on the definition of "Repair"

"❖ As indicated in Section 105.2.2, the repair of an item typically does not require a permit. This definition makes it clear: repair is limited to work on the item and does not include complete or substantial replacement or other new work. Note that the definition deals with both repair as it relates to maintenance and repairs as they relate to fixing damage inflicted on a building for various reasons. More specifically, the replacement of stairs due to daily wear and tear is related to the maintenance of a building; whereas a wall hit by a forklift or damage as a result of an earthquake would be considered damage as it relates to the definition."

Mr. Kirk went on to clarify: *"Yes, substantial replacement would be an alteration."*

Following Mr. Kirk's clarification, classification depends on the scope and extent of replacement, not the intent of the work. NCDOI consistently holds that a full roof replacement is not a repair because it involves removal and reinstallation of gravity load-carrying components which may include (sheathing, rafters, trusses) that affect structural performance. Based on the groundwork listed thus far, it would be factual to consider that:

Repairs: limited to localized work maintaining original capacity; not subject to new code standards.

Alterations: substantial replacement/modification requiring evaluation under current NCRC/NCEBC.

This means, A full roof replacement requires changes to gravity-load components and structural performance, requiring compliance with updated safety and load standards—especially in coastal, high-wind regions.

Why It Matters: This interpretation rebuts insurer arguments minimizing compliance, ensuring structures restored under alteration classification meet modern safety requirements.

4) Dangerous/Unsafe Conditions – NCEBC Chapter 6 Duties

The NCEBC is an adoption of Appendix J of the 2018 IRC. Several relevant definitions from the Existing Building code are referenced below:

Definition of Dangerous Condition – 2018 IRC Appendix J Reference: *“DANGEROUS. Where the stresses in any member; the condition of the building, or any of its components or elements or attachments; or other condition that results in an overload exceeding 150 percent of the stress allowed for the member or material in this code.”*

Official Code Commentary from the 2018 IRC Appendix J:

❖ *“Although this term is recognized in general terms as a situation that is unsafe, perilous or likely to cause injury or death, for the purposes of this appendix it is much more narrow in scope. It is limited to a structural condition where the structural member or material is subjected to a load significantly higher than that which it is designed to support.”*

This definition establishes a measurable threshold for identifying structural danger, emphasizing that once a building component is overstressed or compromised beyond 150 percent of its designed load capacity, it qualifies as a dangerous condition requiring immediate correction under NCEBC §606.1.

Clarification on Field Safety Determinations

Once a roof covering system has been removed and structural components are exposed, the licensed contractor bears the immediate, non-delegable responsibility to assess and eliminate unsafe or dangerous conditions. This duty is grounded in **NCEBC §606.1**, which mandates that *“Regardless of the extent of structural or nonstructural damage, dangerous conditions shall be eliminated. Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the International Building Code for new buildings of similar structure, purpose and location.”* Likewise, **NCRC §R908.2** and **NCEBC §706.2** unilaterally require that: *“the structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation.”*

The official code commentary to §R908.2 reinforces this principle, stating:

❖ *A fundamental requirement throughout the code is the recognition of the impact of any new repair or replacement work on the structural system. If a new roof covering system is installed, the structural members of the roof and any additional structural members that carry roof loads must be reviewed for their ability to support the loads that will be imposed during the installation process. This includes the weight of the new roof covering materials as well as any installation equipment that is placed on the roof.”*

The provisions of **NCRC §R908.2** which are mirrored in the NCEBC chapter on Reroofing **NCEBC §706.2** leave no provision for unrated or non compliant material used in a structural building capacity.

Under **NCGS §87-11** and **NCGS §160D-1110**, licensed general contractors are responsible for ensuring all construction activity complies with the State Building Code and for protecting life and property during construction. Once a roof has been opened and the building envelope exposed to the elements, the contractor cannot defer corrective measures to an insurer, adjuster, or appraisal panel—none of whom have statutory authority to interpret or enforce building codes. Their opinions do not alter the contractor’s legal duties.

This duty is further grounded in **NCGS §160D-1111** (permits and inspections authority, including duty to correct unsafe work), **NCGS §160D-1129** (enforcement of unsafe building provisions), and **21 NCAC 50.0402** (professional standards of practice for general contractors), all of which emphasize that contractors must ensure compliance and cannot delegate code or safety obligations to third parties.

While the local code official holds enforcement authority to issue formal unsafe-building declarations under **NCACP §204.10**, such determinations occur only after inspection. The contractor’s immediate field judgment is therefore critical to eliminate hazards, prevent loss, and maintain site safety per **OSHA 29 CFR 1926.501** and **NCEBC §115.1** (Unsafe Structures).

In practice, especially within coastal high-wind and storm-prone zones like Carteret County, partially dismantled or temporarily tarped structures cannot be left for extended periods while awaiting insurer or municipal determination. Such delays expose both the contractor and property owner to foreseeable damage and liability. Accordingly, the Code places the primary responsibility for immediate hazard mitigation upon the professional license holder performing the work.

Therefore, the Department’s clarification is requested to confirm that the licensed contractor and/or retained design professional has the legal authority and duty to determine when a dangerous or unsafe condition exists in the field, act to correct it immediately, and document such actions for post-inspection review.

5) Reroofing Scope & Additional Implications

This section integrates the code hierarchy, quoting key provisions and demonstrating how the Residential and Existing Building Codes function together. Improper application of **NCEBC §602.1** undermines **NCEBC §706.2’s** & **NCRC §R908.2’s** mandatory performance requirement. When §602.1 is misused to justify retention of existing materials without verifying their rated capacity, it directly conflicts with §R908.2’s mandate that structural components **shall be capable** of supporting design and installation loads. This misapplication diminishes structural safety, weakens compliance integrity, and exposes property owners to risk—further underscoring that reroofing must be governed by the Residential Code’s technical standards and intent to ensure safe, code-compliant installations.

NCRC §R908 serves as the chapter governing reroofing procedures within the Residential Code. While it provides direction for reroofing, its scope is limited and must be applied in conjunction with the broader provisions of **Chapter 9, Chapter 8, and others**, which define material, fastening, flashing, and installation requirements for complete roof systems. Accordingly, roof sheathing inspection and replacement are common and expected steps in any reroofing process. The forthcoming 2024 IRC (not yet adopted in North Carolina) expands §R908.3 to clarify that replacement of up to 15 percent of the total roof deck is not considered structural work—indicating that limited sheathing replacement is a recognized and expected aspect of reroofing, and that as currently adopted under the 2018 code, Sheathing is recognized as a “structural element”.

NCRC §R908.2 – Structural and construction loads. “The structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation of the roof covering system.” The phrase “**shall be capable**” is particularly significant—it establishes an objective performance standard requiring that structural roof components possess verifiable capacity through recognized rating, testing, or certification. This language leaves no room for subjective interpretation, opinion, or assumption of adequacy. Only sheathing and framing members that are rated or certified for span and load compliance can satisfy this requirement.

NCRC & IRC §R908.3 - Roof replacement “Roof replacement shall include the removal of existing layers of roof coverings down to the roof deck.”

The official IRC code commentary to §R908.3 goes on to clarify basic requirements for the roof system, stating:

❖ This section requires that all existing layers of the roof covering materials be removed prior to the installation of new roof covering. The base for application of new roofing materials must provide a sound and consistent installation surface. The code will not permit the installation of new roof coverings over existing roof coverings where there is a potential for future problems with the roof’s effectiveness. The exception permits an adhered ice barrier membrane to remain in place. In roof-removal situations where an existing ice barrier membrane is adhered to the existing roof deck, it is oftentimes difficult, if not impossible, to remove the existing layer without damaging or replacing the roof deck. This exception is intended to account for this situation by allowing the existing adhered ice barrier membrane to remain in place and be covered with a new ice barrier membrane as required in Section R905.1.2 followed by the installation of the new primary roof covering material.

NCRC & IRC §R905.2.1 – Sheathing requirements. “Asphalt shingles shall be fastened to solidly sheathed decks.” This reinforces that compliance extends to the substrate itself—solid, structurally sound sheathing is a prerequisite for any code-compliant asphalt shingle roof system.

The official IRC code commentary to §R905.2.1 then defines “Solid Sheathing”, stating:

❖ The code requires a solid roof surface for the installation of asphalt shingles. Section R803 regulates solid sheathing.

This official commentary forces code compliance on a reroofing job to comply with the broader requirements of Section R803 which demand compliance related to roof sheathing.

NCRC & IRC §R803.2 - Wood structural panel sheathing.

“R803.2.1 Identification and grade. Wood structural panels shall conform to DOC PS 1, DOC PS 2, CSA 0437 or CSA 0325, and shall be identified for grade, bond classification and performance category by a grade mark or certificate of inspection issued by an approved agency. Wood structural panels shall comply with the grades specified in Table R503.2.1.1(1).”

“R803.2.2 Allowable spans. The maximum allowable spans for wood structural panel roof sheathing shall not exceed the values set forth in Table R503.2.1.1(1), or APA E30.”

“R803.2.3 Installation. Wood structural panel used as roof sheathing shall be installed with joints staggered or not staggered in accordance with Table R602.3(1), APA E30 for wood roof framing or with Table R804.3 for cold-formed steel roof framing. Wood structural panel roof sheathing in accordance with Table R503.2.1.1(1) shall not cantilever more than 9 inches (229 mm) beyond the gable endwall unless supported by gable overhang framing.”

The requirements of R803 in unison with the previously applied NCRC Chapter 9 and NCEBC provisions, along with their official commentary, require reroofing project to now further comply with specific parts of Chapters 5 & 6.

“NCRC & IRC §R503.2.1 Identification and grade. “Wood structural panel sheathing used for structural purposes shall conform to DOC PS 1, DOC PS 2, CSA 0437 or CSA 0325. Panels shall be identified for grade, bond classification and Performance Category by a grade mark or certificate of inspection issued by an approved agency. The Performance Category value shall be used as the “nominal panel thickness” or “panel thickness” wherever referenced in this code”

NCRC & IRC §R503.2.1.1(1) - TABLE of allowed spans and ratings for rated sheathing.

APA E30 requires all structural panels to bear a recognized grade stamp indicating conformance with PS-1 or PS-2. Non-stamped panels cannot be verified as structural-rated sheathing and are therefore noncompliant with NCRC §R803.2.1.

NCRC & IRC §R602.3(1) -Design and Construction, provides a similar reference as each of the previous listings.

In addition to the all previously mentioned code requirements, reroofing jobs located in coastal high wind zones require additional compliance measures located in the NCRC Ch. 45.

NCRC Chapter 45 – High-wind zone requirements related to roofing.

“R4506.8 Roof sheathing attachment. The roof sheathing panel edges shall be blocked and nailed at the end two rafter or truss spaces. See Figure R4506.8.”

R4506.8 Figure states: “NOTE 2.. If Building width exceeds 40 Feet or height is more than 2 stories, Use 10d nails instead of 8d nails for attachment of roof sheathing. 3. All structural panels” “NOTE 3. All structural sheathing panels must meet minimum thickness”

NCEBC Appendix C (‘Guidelines for the Wind Retrofit of Existing Buildings’) of the North Carolina Existing Building Code is listed as “Deleted” in the State’s 2018 adoption of the NCEBC and therefore is not a mandatory compliance document under the State code. Reference of the Appendix C provisions should be considered a guideline for voluntary best practice by contractors in any high wind zone.

Local enforcement reminder: The Carteret County building permit application states: *“All work performed shall comply with the North Carolina State Building code....and all other regulations, rules and ordinances as applicable. Misinformation, lack of information, or statements made in error could result in revocation of all permits and subject the owner/agent to litigation in the process.”*

Municipalities within Carteret County vary in their language related to code adoption and regulation, but most appear to administer regulation consistent with North Carolina General Statute § 160D-1110 *“A building permit shall be in writing and shall contain a provision that the work done shall comply with the North Carolina State Building Code and all other applicable State and local laws.”*

Together, these provisions, along with other governing manufacturer requirements and industry standards, establish that the roof system, including decking, framing and underlayments, flashings, among other items, must meet current code standards once replacement begins. Flashing integration, underlayment, fasteners, and structural capacity **must** comply with NCRC specifications. Narrow interpretations of specific sections of the **NCEBC cannot be used to retain components** that fail those standards and present a compliance issue.

6) Historical Context – APA Structural Ratings (Why “Previously Approved” Claims Fail)

APA performance standards for structural-use panels (**PRP-108**, later **PS-1/PS-2**) were incorporated into U.S. model codes beginning in the mid-1980s and subsequently adopted into the **North Carolina Building Code**. For decades, roof sheathing has been required to bear an APA rating stamp indicating span/load compliance. As such, later-installed, non-rated panels **were never “previously approved”** and cannot be preserved via **NCEBC §§302.3 or 602.1**.

Non-APA-rated plywood lacks the verified structural performance characteristics necessary to qualify as a load-carrying or span-rated roof sheathing product. Unlike APA-certified structural panels, which undergo standardized testing for modulus of rupture, elasticity, shear strength, and fastener withdrawal resistance, non-rated

plywood provides no validated data supporting its ability to carry live or dead loads. It therefore cannot be assumed to meet the performance criteria of a structural-use panel.

Because **NCRC §R908.2** requires that *“the structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation,”* any panel that cannot demonstrate compliance with an approved standard (such as APA PS-1 or PS-2) inherently fails to satisfy code requirements. These noncompliant materials represent a latent structural deficiency and are considered unsafe under **NCEBC Chapter 6**, as they do not provide reliable load resistance or diaphragm performance under design wind pressures.

In the Horton property, field inspection revealed roof sheathing panels without APA grade stamps or span ratings, indicating they were non-structural and noncompliant. APA formalized its performance-rated panel system through **PRP-108** in 1966, later superseded by **APA PS-1 (for plywood)** and **APA PS-2 (for OSB)**, which have been continuously incorporated into the North Carolina Building Code since publication. As a result, any plywood or sheathing product manufactured or installed after these dates without an APA or equivalent rating stamp cannot be assumed compliant or structural under any modern building code framework. Retaining such panels would directly contravene the code’s intent to ensure that the structural roof system can resist the required design loads. Accordingly, replacement of all non-rated sheathing is not only justified but **mandated** under the governing code provisions.

This position is further supported by the North Carolina Department of Insurance’s formal interpretation dated April 25, 2018 (**“Engineered Wood Structural Products,” 2018 NCRC §§R502, R602, R802**), which states that alternate or engineered wood products must be *“properly tested and evaluated and shown to be equivalent to those materials prescriptively included in the technical codes,”* with published span and load tables and approved evaluation reports. Non-rated plywood lacks such testing and evaluation and therefore cannot be considered equivalent or code-compliant as a structural sheathing material.

7) Conduct of Opposing Appraiser and Engineer – Conflicts with Professional and Safety Obligations

Both **Harrison Jones** (the opposing appraiser and a licensed NC General Contractor) and **Adam Wright** (the insurer’s forensic engineer) have exhibited conduct inconsistent with their professional obligations under North Carolina law and industry ethics. As licensed professionals, both are bound by ethical and statutory duties to prioritize **public and building safety** above all else.

Mr. Jones, though a NC licensed contractor, is serving in a third-party appraisal capacity that legally requires him to remain *competent and disinterested*. By using his contractor license to dispute legitimate code-compliance items and promote positions that minimize or ignore safety-based requirements, he may be overstepping his authority and compromising his neutrality and competence. This conduct not only violates the spirit of his appraisal role but raises serious questions regarding his competence and impartiality under both professional licensing and policy standards.

Similarly, Mr. Wright’s engineering analysis and selective interpretation of the Building Code appear designed to support insurer objectives rather than uphold engineering ethics or building safety. As a professional engineer, his first duty under **21 NCAC 56.0701** and **NCEES Model Rules** is to safeguard life, health, and property. Biased or misleading representations of code requirements—particularly those that downplay structural dangers and unsafe conditions—constitute a failure to meet these professional obligations.

The Department should recognize that such misuse of professional credentials by appraisers and engineers to justify unsafe or noncompliant work scopes undermines public trust, distorts the appraisal process, and places both the property owner and contractor at undue risk.

8) Informal Interpretation Reliance – Why It Is Non-Binding and Problematic

An **informal email** between the insurance company’s chosen appraiser and a local building official has been cited in an attempt to justify retaining existing materials under **NCEBC §§602.1**. This reliance is improper and inconsistent with North Carolina law and policy for the following reasons:

1. **Code officials are expressly prohibited from issuing informal or case-specific interpretations.** Under **NCGS §143-139(b)**, only the **North Carolina Building Code Council** has statutory authority to render formal, binding interpretations. The **North Carolina Administrative Code and Policies (NCACP)** further restricts local building officials from providing informal or advisory code rulings outside of a formal process. When a code official issues such informal commentary—particularly through personal email—it carries no legal authority and cannot alter the obligations of licensed contractors under the Building Code.
2. **The email correspondence conflates multiple code sections and misrepresents their scope.** It incorrectly applies **NCEBC §602.1** (existing materials) and **NCRC §102.7** (administrative reference to the Existing Building Code) to suggest that any material may remain unless condemned by the jurisdiction. This selective reading disregards both **NCEBC Chapter 6** requirements to eliminate dangerous conditions and the technical standards of the applicable **NCRC Chapters**.
3. **Improper influence on claim proceedings.** The insurer’s potential reliance on this informal correspondence to limit scope constitutes a misuse of non-binding commentary to influence insurance claim processes. In practice, such interpretations often serve as persuasive anchors for insurer-hired forensic engineers and appraisers, who may treat them as de facto authority when forming conclusions or defending limited scope positions. These individuals—whose role should be to provide independent, objective assessments—can be improperly swayed by informal statements that lack legal weight, leading to biased reports and skewed insurance claim outcomes.
4. **Policy consequence.** Allowing insurers or their consultants to rely on private correspondence from a local official to override state building standards undermines uniform code enforcement and creates systemic risk to property owners, contractors, and the public.

Requested clarification: The Department should affirm that any informal or email-based code opinions by local officials are expressly non-binding, cannot be used to determine compliance, clarify the intended role of building officials, and reaffirm that formal interpretations must follow the procedures outlined in **NCGS §143-139(b)** through the Department of Insurance or Building Code Council.

9) Contractor Liability, Timing, and Weather Exposure

When unsafe or noncompliant conditions are discovered mid-project, the contractor must act to eliminate the hazard. This duty arises directly from **NCGS §87-11**, which holds licensed contractors responsible for code-compliant construction, and from **NCEBC §606.1**, mandating elimination of dangerous conditions regardless of the extent of damage. Contractors are also bound by **NCEBC §115.1** (Unsafe Structures) and **OSHA 29 CFR 1926.501**, which collectively impose a continuing obligation to maintain safety and protect life and property on active job sites.

In practice, building permits may be exempt, inspections delayed, or inspections not required; meanwhile, the structure cannot remain open or marginally tarped—especially in coastal high-wind environments where additional exposure can escalate into a life-safety and structural risk. Delayed action introduces **foreseeable tort liability** and **occupant hazard**, since a contractor’s duty to mitigate loss and protect life is immediate under both statutory and code authority. Insurer-driven delays and indecision often create prolonged exposure periods in which

contractors—acting in good faith—are forced to choose between violating the Code by leaving a building in a dangerous state or proceeding without insurer approval to fulfill their legal and ethical duties.

This situation places the contractor at the intersection of **statutory duty** and **civil liability**: under tort principles of negligence and duty of care, a contractor aware of a dangerous condition who fails to act could be held liable for subsequent damages. Conversely, insurers who obstruct timely corrective measures or deny authorization may bear derivative liability for resulting losses. These dynamics highlight the critical importance of recognizing the contractor’s independent duty to mitigate hazards immediately when discovered.

The resulting conditions heighten the risk of **secondary property damage, worker injury, and subrogation disputes**, placing both the contractor and owner in jeopardy. Clarification is needed to ensure that contractors who follow the Building Code and act to mitigate further loss are shielded from post-event liability or insurer retaliation. The Department’s affirmation that compliance-driven actions constitute lawful and required conduct will help safeguard life, property, and the integrity of the state’s construction and insurance systems.

10) Consolidated Requests for Clarification

Genesis respectfully requests that the Department issue written guidance confirming that:

1. **NCRC §102.7** functions as an administrative cross-reference to the NCEBC and does **not** authorize retention of unsafe or noncompliant materials.
 2. **NCEBC §602.1** applies only to **previously approved and safe** materials and cannot be used to justify retaining components that fail current **NCRC** technical standards or create unsafe conditions. Materials that are **unapproved or uncertified**—such as non-APA-rated plywood—lack the verified span and load capacity required for structural use. Their inclusion in a roof system introduces a clear safety risk and conflicts with **NCRC §R908.2** and **NCEBC §706.2** and **§606.1**, which together require that roof structural components support design and installation loads and that dangerous conditions be eliminated. In practical terms, such unapproved materials constitute a latent hazard—posing both structural and legal exposure if not replaced. Their continued use conflicts with the Building Code’s intent to ensure structural integrity and life safety.
 3. Upon exposure of unsafe or deficient conditions during reroofing or construction, correction is required under **NCEBC Chapter 6** and the applicable **NCRC Chapter 9/Chapter 45** provisions, irrespective of any insurer or appraisal delay.
 4. Informal or email-based code statements from local building officials have **no binding authority** under **NCGS §143-139(b)** and cannot be used by insurers, appraisers, or forensic engineers to interpret code or limit repair scopes.
 5. Define the professional roles legally authorized to determine field code compliance and safety—specifically, **licensed general contractors, licensed engineers, and code officials** acting under formal authority. Confirm that insurance adjusters, appraisers, or other third-party claim participants hold **no authority** to interpret or override the Building Code.
 6. Affirm that when unsafe or noncompliant conditions are revealed during reroofing, contractors acting in good faith to bring the structure into compliance are performing their lawful duty under **NCGS §§87-11** and **160D-1110**, and such actions should not be construed as optional or subject to insurer approval.
-

11) Exhibits and Cross-References

The following exhibits and references are submitted in support of this formal clarification request. Each document cited below directly corresponds to code provisions, professional obligations, and factual observations referenced throughout this report.

Exhibit A – Informal Email Correspondence (Non-Binding)

Informal email exchange between Harrison Jones (NC Licensed General Contractor / Appraiser) and a Carteret County Building Inspector concerning the retention of existing materials under NCEBC §602.1. Provided solely to illustrate the improper use of informal correspondence to interpret code provisions.

Note: Under NCGS §143-139(b), only the North Carolina Building Code Council may issue formal and binding interpretations; therefore, informal emails are not authoritative.

Exhibit B – Engineering Report: Accident Reconstruction Analysis, PLLC

Title: Structural Roof Evaluation – Horton Residence, 176 Salter Dr., Atlantic, NC (April 2024). Referenced to demonstrate selective code interpretation and incomplete analysis of structural sheathing under NCEBC §602.1 and NCRC §R908.2.

Exhibit C – Lead Compliance and EPA RRP Documentation

(1) EPA 40 CFR Part 745 – Renovation, Repair, and Painting (RRP) Rule (available at <https://www.epa.gov/lead/lead-regulations>); (2) Accredited laboratory test results confirming presence of lead-based coatings; (3) NC-Licensed Lead Project Design Plan; (4) EPA Renovate Right homeowner guide. Collectively establishes that regulated containment and removal procedures were required and followed. (available at <https://www.epa.gov/sites/default/files/documents/renovaterightbrochure.pdf>)

Exhibit D – Historical APA Structural Panel Standards available at <https://www.apawood.org/>

1. APA PRP-108 (1966) – Performance Standard for Structural-Use Panels. 2. DOC PS-1 – Structural Plywood and DOC PS-2 – Performance Standard for OSB. 3. APA E30 – Design and Construction Guide: Residential & Commercial. These documents confirm that since the early-1980s, structural roof sheathing has been required to bear a grade stamp or certificate of inspection from an approved agency. Unstamped or non-rated plywood therefore cannot be considered previously approved or structurally compliant under the North Carolina Building Code.

Exhibit E – Relevant NCRC / NCEBC Provisions Available at <https://codes.iccsafe.org/>

(As adopted in the 2018 North Carolina State Building Code). NCRC §R803.2.1 Identification and Grade; NCRC §R803.2.3 Installation; NCRC §R905.2.1 Sheathing Requirements (Solid Deck); NCRC §R908.2 Structural and Construction Loads; NCRC §R908.3 Roof Replacement; NCRC Ch. 45 §R4506.8 High-Wind Roof Sheathing Attachment; NCEBC §606.1 Elimination of Dangerous Conditions; NCEBC §706.2 Reroofing Performance Requirements. These collectively require that roof structural components be rated, safe, and capable of supporting design and installation loads, and that dangerous or non-compliant conditions be corrected immediately.

Exhibit F – NCDOT Formal Interpretation (April 25, 2018)

Issued by the North Carolina Department of Insurance – Engineering & Codes Division. Title: Formal Interpretation – Engineered Wood Structural Products (2018 NCRC §§R502, R602, R802). Confirms that any alternate or engineered wood product must be properly tested and evaluated and shown to be equivalent to those materials prescriptively included in the technical codes. Non-rated or untested plywood therefore cannot be deemed equivalent or code-compliant.

Exhibit F-1 – NCDOT Clarification by Bill Kirk, P.E. (2021)

Informal clarification provided by Bill Kirk, P.E., North Carolina Department of Insurance, Engineering & Codes Division, addressing the distinction between Repair and Alteration under the North Carolina Existing Building Code.

Mr. Kirk confirmed that:

“Repair is limited to work on the item and does not include complete or substantial replacement of the item,”

and further referenced official code commentary emphasizing that substantial replacement constitutes an alteration requiring compliance with current code standards.

This clarification, while not a formal interpretation under NCGS § 143-139(b), is recognized within industry correspondence and enforcement practice as the Department’s authoritative technical position distinguishing repairs from alterations.

Exhibit G – Statutory and Regulatory Citations (Reference) Available at <https://codes.iccsafe.org/>

NCGS §87-11 – Contractor’s Responsibility for Code Compliance; NCGS §143-139(b) – Authority for Formal Interpretations; NCGS §§160D-1110, -1111, -1129 – Permitting and Unsafe-Building Enforcement; 21 NCAC 50.0402 – Standards of Practice for General Contractors; 29 CFR 1926.501 – OSHA Fall-Protection / Worksite Safety; NCACP §204.10 – Unsafe Buildings Enforcement.

Together, these provisions establish the contractor’s non-delegable duty to ensure safety and code compliance during all phases of construction.

(Genesis Custom Construction can furnish complete copies of all referenced exhibits and supporting documents upon request.)

**Respectfully submitted,
Genesis Custom Construction**



Eamon Kromka, Licensed General Contractor

Exhibit A

From: Tobbie Bowden <Tobbie.Bowden@carteretcountync.gov>
Subject: RE: Existing Dwelling Repair/Replacement of Damage
Date: October 8, 2025 at 8:48:59 AM EDT
To: Harrison Jones <harrisonjones@earthlink.net>

From: Harrison Jones <harrisonjones@earthlink.net>
Sent: Tuesday, October 7, 2025 11:26 PM
To: Tobbie Bowden <Tobbie.Bowden@carteretcountync.gov>
Subject: Existing Dwelling Repair/Replacement of Damage

CAUTION: This email originated from outside of the organization. Do NOT click links or open attachments unless you recognize the sender and know the content is safe.

Ms. Bowden,
Carteret County Building Codes Administrator

Thank you for meeting with me to review the code requirements for making repairs to an existing dwelling in Carteret County.

I provided you 96 photographs of the Horton residence located at 176 Salter Drive, Atlantic NC along with excerpts from the NC Residential Code, the NC Existing Building Code, and the International Building Code which we reviewed in person as well as referenced your code books.

We discussed Carteret County's inspection department's historical and current position on roof replacement and making repairs to an existing dwelling, specifically the residence at 176 Salter Drive, Atlantic.

To recap, my questions are shown below. Please review and answer them as appropriate.

1. For the reroofing and repairs needed due to the damages reviewed at 176 Salter Drive, is the 2018 NC Existing Building Code the applicable and required standard?

- ANSWER: **Yes, 102.7 of the NC Residential Code refers to the NC Existing Building Code.**

2. Or, is there another code book that mandates the roof replacement/repairs?

- ANSWER: **No, 102.7 of the NC Residential Code Refers to the NC Existing Building Code.**

3. NC Existing Building Code - Section 302.3 under General Provisions states: "Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe." Considering the wind damages reviewed, is this code reference applicable for the project at 176 Salter Drive?

- ANSWER: **Yes**

4. Is it correct that full shingle replacement is governed by "Chapter 7 - Alterations Level 1 - Section 706 Reroofing" of the NC Existing Building Code?

- ANSWER: **Yes**

5. Is full shingle replacement (reroofing) treated as new construction under the current code?

- ANSWER: **No**

6. Can the shingles (roof covering) at 176 Salter Drive be removed and replaced with like for like material according to the NC Existing Building Code?

- ANSWER: **Yes**

7. If some portion of the roof sheathing/decking needs repaired (due to rot for example), does the code allow "like for like" materials to accomplish the repairs?

- ANSWER: **Yes**

8. Can the aluminum siding be repaired, removed/replaced without requiring the remaining portion of the dwelling to be brought up to the current NC Residential Code?

- ANSWER: **Yes**

9. Historically has the Carteret County Building Inspection Department required an existing residence to be brought up to the current residential code when the roof covering and/or siding is damaged and needs to be repaired or replaced?

- ANSWER: **No**

10. My understanding is any damage repairs cannot make the dwelling any less structurally sound than existed at the time the damage occurred. In other words, the repairs cannot cause the existing residence condition to be weaker or less resilient. Carteret Building Inspections would require any current damage repairs to meet the standard of construction (Like for Like) that existed in the residence at the time of damage.

- ANSWER: **Yes, that is correct.**

11. The Carteret County inspection department does require damaged components to be repaired so that the repair is as structurally sound as existed at the time the damage occurred. For example, you can scab onto a broken or split rafter with another equal to framing member. The Carteret County Code Official may require this to be approved by an engineer to confirm the repairs is sufficient so as to not weaken the preexisting (structure) condition.

- ANSWER: **Yes**


12. In summary, based on the 96 photographs I provided you; would Carteret County inspections require 176 Salter Drive (roof sheathing, roof framing, wall framing, wall sheathing, wall insulation, attic insulation) to be brought up to the current NC Residential Code?

- ANSWER No, **you are not required to bring the resident up to the current NC Residential Code.**

I appreciate your time and effort to help clarify the requirements for repairing an existing dwelling.

Respectfully,
Harrison Jones, (M) 919-971-1994
Restoration Associates, Inc.



Mrs. Tobbie Bowden
Building Code Administrator
Carteret County Government
tobbie.bowden@carteretcountync.gov
3820 Bridges Street | Morehead City, NC 28557
O: 252-728-8545 Ext. 4514
D: 252-515-3578
Web: carteretcountync.gov

10/08/2025

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Exhibit B

Accident Reconstruction Analysis, PLLC

***REPORT ON WINDSTORM DAMAGE TO RESIDENCE AT
176 SALTER ROAD IN ATLANTIC, NORTH CAROLINA
INSURED: PAUL HORTON
CLAIM #: CLB-00093930***

To:

***NC INSURANCE UNDERWRITING ASSOCIATION
Post Office Box 8009
Cary, North Carolina 27512
Attention: Chris DiFilippo***

From:

***ACCIDENT RECONSTRUCTION ANALYSIS, PLLC
5801 Lease Lane
Raleigh, NC 27617
North Carolina P.E. Firm License # P-1578***

Prepared by: Adam M. Wright, P.E.

August 23, 2024

Introduction

Personnel of Accident Reconstruction Analysis, PLLC (ARA) were retained to investigate wind damage to the residence belonging to Paul Horton, located at 176 Salter Road in Atlantic, North Carolina. According to verbal reports from insurance personnel, the property owner filed an insurance claim for damage related to a windstorm or tornado in the area. The purpose of ARA's investigation was to document the conditions at the property, determine the extent of damage to the property, and to determine the cause/causes of any damage observed.

Inspection Notes and Observations

ARA personnel performed an inspection of the residence on 8/6/2024. ARA personnel were met at the property by the owner, the owner's contractor and the independent adjuster. The conditions at the property were documented with photographs, field notes, and measurements. Additionally, ARA personnel reviewed the following documents as part of their investigation:

- First Notice of Loss, dated 1/10/2024
- Independent adjuster photo report, dated 1/15/2024
- Independent adjuster final report, dated 1/22/2024
- ITEL Siding Evaluation Report, dated 2/20/2024
- Email exchange with Quality Aluminum, dated 3/26/2024
- Coastal Environmental and Inspections, LLC lead paint assessments, dated 5/10/2024
- Enviro Assessments East, Inc. proposal, dated 5/31/2024
- Precision Environmental Lead Paint Abatement Specifications, dated 6/10/2024
- Retro Environmental Lead Remediation Estimate, dated 6/18/2024
- Genesis Custom Construction invoices and estimates, dated 7/2/2024
- Genesis Custom Construction repair estimate, dated 7/2/2024
- Carteret County Property Record Card, inquiry date 8/20/2024

The Horton residence was a wood frame structure, built on brick masonry piers. The majority of the exterior elevations was covered with aluminum siding. The roof of the residence was covered with architectural-style asphalt shingles. According to Carteret County records, the residence was originally

constructed in 1903 and purchased by the current owner in 2021. For the purpose of this report, the front elevation of the residence is that elevation which faces Fulcher Street. The front elevation of the residence faces most nearly south. The reported date of loss was 1/9/2024. The following was observed at the residence:

EXTERIOR:

General: The majority of the exterior elevations of the residence was covered with horizontally-oriented aluminum siding. This siding had an approximate 8” vertical exposure between laps and extended outward approximate 1/2” at each lap. In some areas where the siding was missing, it was apparent that the original exterior siding was horizontally-oriented wood lap siding which had been painted. The paint on the wood lap siding was peeling and cracking in all of the areas observed. The majority of the exterior trim on the residence such as corner trim, fascia, window wraps and door wraps consisted of bent light gage metal. These trim components also appeared to have been bent aluminum. The soffit material was observed to be a vinyl in some areas where it was accessible. The original exterior building components under these trim sections were wood trim wherever they were visible. The majority of the windows on the residence were single hung wood window units. There were typically aluminum storm windows installed on the outside of the original wood windows. There were ornamental shutters attached to the exterior siding adjacent to most of the windows. The majority of the residence was two stories in height. There was an L-shaped covered porch on the front elevation of the residence. There were downspouts draining from the gutters on the front porch roof. There were no other gutters present on the eaves of the roof other than the front porch roof.

At the time of ARA’s inspection, there were some areas of apparent damage to the exterior elevations related to the wind event on the date of loss to be indexed in the sections below. In general, the finished exterior siding was fair condition, likely consistent with its age. There were numerous areas

which had been cut, dented or scraped which did not appear to have been attributable to the storm on the date of loss for this claim. There were numerous abandoned fastener holes through the aluminum siding which had supported past utility connections or other features. There were some areas of surface roughness or inconsistency on the aluminum siding. However, there were no areas where the paint or coating on the aluminum siding was peeling or failing to the point of flaking off. In the areas where the metal trim or siding had been removed, the paint on the underlying wood trim or siding was typically peeling and chipping.

Front elevation: This elevation includes those portions of the residence which face Fulcher Street. For the purpose of this report, it also includes the portions of the residence which face Salter Road and include the front porch roof. The front porch was an L-shaped porch with a roof covering all of it. The porch ceiling consisted of painted wood paneling. The porch ceiling paint was failing in some areas. The porch roof shingles had been replaced since the date of loss pertaining to this claim. The wall siding immediately above the roof-wall intersection was dented and displaced outward from its originally installed location. This appeared to have been related to the replacement of the headwall flashing which was likely performed with the roof installation. There was no siding damaged on this elevation directly from the effects of the wind event on the date of loss.

The shutters on the second level walls of this elevation had been detached, apparently related to the recent roof replacement project. There was a missing piece of metal fascia trim on the second level roof near the inside corner of the eave. The soffit material was not affected by the removal of this piece of fascia. There was also a missing piece of metal fascia trim on the rake of the right roof facet. The soffit material on this rake was also missing along the majority of its length. The soffit material on the cornice nearest the right elevation was displaced slightly but remained installed.

Right elevation: This elevation of the residence suffered damage due to a tree limb falling onto the main electrical supply, damaging the main electrical supply and weather head. At the time of ARA's inspection, the damage to the electrical supply had been repaired. However, there were some areas of affected siding and corner trim in the area of the mast head which appeared to have been related to the windstorm on the date of loss. These damaged portions of siding consisted of 3 individual pieces near the right rear corner of the residence. The metal corner trim at the right rear corner of the residence was apparently damaged. There was a piece of metal fascia trim and some soffit material that was missing on the rear eave near the corner shared with the rear elevation. There was also a storm window with a cracked pane of glass on the second level center window on this elevation. There was no indication of damage to the original wood window.

There were multiple areas of scrapes, scratches and abandoned fastener holes in the aluminum siding on this elevation. Although some of these scratches may have been related to the windstorm on the date of loss, it was more likely that these were related to conditions which preceded the date of loss. Aside from the area near the right rear corner, there were no areas of siding or trim on this elevation which appeared to have been directly damaged by effects from the windstorm on the date of loss.

Rear elevation: There was an area of siding on this elevation missing or damaged near the peak of the gable near the corner shared with the right elevation. This appeared to have been limited to 5 partial length pieces of aluminum siding. There were no other areas of affected siding which appeared to have been related to the windstorm on this elevation. The wall siding immediately above the roof-wall intersection of the first story roof over the utility room was dented and displaced outward from its originally installed location. This appeared to have been related to the replacement of the headwall flashing which was likely performed as part of the recent roof replacement project. There was an area of fascia and soffit material missing on the rear eave near the corner shared with the left elevation. There

was a dented piece of aluminum siding immediately below the missing fascia and soffit. Publicly available real estate listing photos indicated that these components were missing when the residence was last listed for sale, likely in 2021.

Left elevation: There were multiple areas of scrapes, scratches and abandoned fastener holes in the aluminum siding on this elevation. There were no areas of apparent damage on this elevation to the siding, trim or other components related to the windstorm on the date of loss.

Detached carport and garage: There was a detached carport and garage structure immediately to the rear of the residence. According to verbal reports from the owner and his contractor, there is no damage to this detached structure being claimed as related to the windstorm on the date of loss. There was no damage observed ARA personnel to the carport or garage

ROOF: The second level roof of the residence was primarily a gable concept with facets facing all 4 directions. There were also first level roofs on the front porch and the above the rear utility room which were shed roof concepts. There were typically cornice returns on the bottom of the rakes of the roof. The roof on the cornice returns typically consisted of exposed plywood. At the time of ARA's inspection, the roof was covered with architectural-style asphalt shingles. According to verbal reports from the owner, the roof covering had been replaced since the date of loss for this claim. According to independent adjuster's photographs, the roof on the date of loss was covered with 3-tab asphalt shingles.

The independent adjuster's photographs indicated that there were multiple missing or creased shingle tabs on the second level roof facets after the windstorm on the date of loss. The most affected facets were those facing south and west. There were also some shingle tabs missing or creased on the lower rear facet. There were no shingle tabs observed to have been missing or creased on the front porch roofs. There was no damage observed to the cornice returns, chimney or other roof components aside from the roof shingles which was related to the windstorm event.

As part of the roof replacement project performed since the date of loss, there were some components replaced outside of what appeared to have been present at the time of loss. The chimney flashing had been replaced with copper step flashing and counter flashing. The headwall flashing on the first story roofs had been replaced with what appeared to have been new stainless steel or comparable flashing material. Where the headwall flashing had been replaced, the wall siding was typically bent and displaced from its originally installed condition. There were 2 anchor points observed to have installed near the ridge of the roof. When observed from the attic and interior of the residence, it appeared that there was new plywood roof decking installed on top of the roof rafter and purlin system. The original 3-tab shingles were replaced with architectural-style asphalt shingles

INTERIOR: The interior finishes in the residence typically consisted of hardwood flooring on the floors. On the first level, the walls and ceilings were typically covered with some type of gypsum wallboard with the joints covered with some type of small trim board. On the second level, the walls and ceilings were typically covered with wood paneling. On both levels, there were some areas where the wall finish material had been removed to expose the wood framing. On the exterior walls observed, there was no insulation present in the wall cavities. It was also apparent that the original wood lap siding was installed directly onto the vertical wood framing components, with no exterior sheathing present.

At the time of ARA's inspection, there was no interior water staining or other damage observed which appeared to have been related to the windstorm on the date of loss. There were some areas of interior finishes which had been removed and were in the process of being repaired. According to verbal reports from the owner, none of the interior finishes being repaired were related to the windstorm on the date of loss.

ATTIC: The attic of the residence was accessed by a set of concealed stairs in the ceiling of an upstairs bedroom. The central HVAC air handler was located in the attic. The roof framing for the second level

roof was observed in the attic. The roof framing primarily consisted of 2"x4" (actual) wood rafters spaced 24" on centers. There were solid wood 1"x wood purlins (or spaced sheathing) attached to the top of these rafters. Plywood roof sheathing which appeared to have been newer than the roof framing was attached to the top of the 1"x purlins.

At the time of ARA's inspection, there was some indication of past water intrusion on the chimney. However, there was no indication that this water intrusion was related to the windstorm on the date of loss. There were no other areas of water damage, impact damage or other types of damage to the roof framing which may have been related to the windstorm on the date of loss.

Weather Data

ARA personnel researched weather data for Atlantic, North Carolina for the date of loss of 1/9/2024. ARA personnel used the National Weather Service website as a resource. According to these sources, the following data was obtained for 1/9/2024:

- NWS reported that on 1/9/2024, there was 1.6 inches of rain measured at the KMHX airport station.
- NWS reported that on 1/9/2024, a maximum sustained wind speed of 40 mph out of the south and a maximum gust wind of 69 mph out of the south were measured at the KMHX airport station.

Copies of the weather data researched are provided with this report for review.

Discussion

ARA personnel reviewed publicly available real estate listing photographs from the last time the residence was listed for sale. Based on these photographs, the missing pieces of fascia and soffit on the rear elevation were missing prior to the date of loss for this matter.

The owner's repair contractor's repair estimate includes scope items to abate all surfaces on the exterior of the residence which contain lead-based paint. Current federal Environmental Protection Agency (EPA) guidelines state that

“Lead abatement projects are designed to permanently eliminate existing lead-based paint hazards. They may be ordered by a state or local government in response to a lead-poisoned child or other reason, or may be undertaken voluntarily at any time.”

ARA personnel are unaware of any building code, state mandate or federal mandate which requires surfaces with lead-based paint to be abated on this project. None of the abatement testing, design or estimate documents state that abatement is required to be performed at the Horton residence. However, there are state and federal requirements for tradesmen performing renovation, repair and painting (RRP) work to homes with lead-based paint to be trained and certified in best practices. It appears that the aluminum siding with lead-based paint was manipulated without RRP protocols taking place as part of the roof replacement.

Roof flashings at wall-roof intersections were typically replaced as part of the roof replacement performed by the owner’s contractor. ARA personnel have not observed any indication that the existing roof flashings were damaged as part of the storm event or that that were deteriorated in a manner which would have prevented re-installation. The 2018 NC Residential Building Code includes the following provisions as it pertains to Reroofing:

R908.5 Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Any existing flashings, edgings, outlets, vents or similar devices that are a part of the assembly shall be replaced where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.

The chimney flashing was replaced with copper counter flashing. ARA personnel are unaware of what the original flashing material was at the time of the date of loss.

According to the owner’s contractor’s repair estimate, it appears that the original plywood roof sheathing was removed and replaced as part of the roof replacement project. The contractor documented the removal of the roof covering and replacement of the roof sheathing in the CompanyCam.com project

photograph file. In these photographs, there were no widespread areas of wood rot or deterioration to the roof sheathing. Thickness measurements appeared to indicate that the roof sheathing was approximately 1/2" thick plywood. The 2018 Existing Building Code states in Chapter 6 - REPAIRS:

602.1 Existing building materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *code official* to render the building or structure unsafe or *dangerous* as defined in Chapter 2.

At the time of this report, ARA personnel are unaware of any order by the code official or other authority to prohibit the use of the existing roof sheathing.

Conclusions

The Horton residence located at 176 Salter Road in Atlantic, North Carolina, was affected by a windstorm or tornado in the area on or about the date of loss. There was damage to the exterior cladding and roofing systems of the residence due to the windstorm on the date of loss. ARA personnel observed the following exterior components which were damaged by the windstorm:

- 8 pieces of aluminum siding,
- 3 pieces of metal fascia and
- 2 areas of soffit trim
- 1 piece of corner trim
- 1 storm window pane of glass

The area of missing fascia and soffit trim on the rear elevation appears to have been missing prior to the date of loss. Based on a review of the ITEL siding match report and common building practices, it is the opinion of ARA personnel that the siding and trim can be repaired by replacing the damaged components only without requiring a full re-cladding of the exterior. Since there is no work being performed to the wood original wood lap siding, ARA personnel are unaware of any requirement to for complete lead abatement to be required at this residence. Although lead-based paints are known to be a

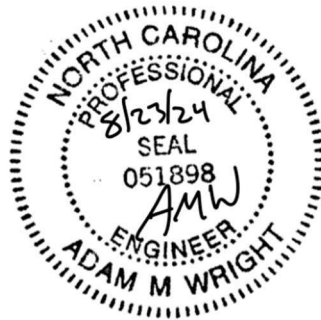
health risk to children, there is no code or legal requirement to perform a complete abatement at the Horton residence.

The replacement of headwall flashing and roof sheathing performed as part of the roof replacement exceed the requirements of applicable building codes for re-roof projects. At the time of this report, ARA personnel have not received any building permit or building department direction that supersedes the building code and requires either the flashings or the sheathing be replaced. Additionally, the roof repair estimate includes many line items which are not typically included in re-roof estimates or invoices, including contractor's overhead and profit. The architectural-style asphalt shingles currently on the roof of the Horton residence are an upgrade from the 3-tab style shingles which were on the roof at the time of loss. All of the damage to the roof covering on the residence was located on the second level roof and the rear shed roof over the utility room. Since there was no direct damage to the front porch roof, ARA personnel are unaware of any reason for the shingles on it to be replaced. Although not replaced with roof shingles, the contractor's repair estimate includes for new roofing to be installed onto the cornice returns. This is despite there being no roof covering on the cornice returns on the date of loss.

Closure

This report only covers what is currently known about the building in question. If further destructive testing, information, or inquiry sheds light on areas that are currently unknown; ARA personnel reserve the right to modify this report based on the new information.

The conclusions and opinions listed in the foregoing report are the opinion of the undersigned.



A handwritten signature in black ink, appearing to read "Adam M. Wright", written over a horizontal line.

Adam M. Wright, P.E.

Below: Front elevation of residence



Below: Front elevation aluminum siding exposure



Below: Front elevation – front porch ceiling paint peeling



Below: Front elevation – missing fascia trim on gable



Below: Right elevation of residence



Below: Right elevation – broken pane of glass on top sash of storm window



Below: Right elevation – aluminum siding lap joint



Below: Right elevation – siding condition below windows



Below: Right elevation – siding surface condition



Below: Right elevation – siding, trim, and electrical mast damaged due to tree limb impact



Below: Right elevation – siding with abandoned fastener holes visible



Below: Right elevation – missing trim at building corner – older cladding layers visible



Below: Right and rear elevations of residence



Below: Rear elevation – damaged siding at peak of gable



Below: Rear elevation of residence



Below: Rear elevation – siding damaged at roof-wall intersection from roofing replacement



Below: Rear elevation – siding with abandoned fastener holes



Below: Rear elevation – fascia and soffit missing



Below: Left elevation of residence



Below: Left elevation – siding scrapes and dents not apparently related to loss



Below: Left elevation – siding general condition – dents and scrapes throughout lower portion



Below: Left elevation – siding and trim condition at porch



Below: Front porch roof – general condition of shingles and siding



Below: Front porch roof – drip edge present



Below: Front porch roof – siding damaged at wall flashing location



Below: Front porch roof –wall siding appears newly installed



Below: Front porch roof – damaged/missing fascia trim



Below: Front porch roof – fascia condition where trim missing



Below: Front porch roof – siding damaged by flashing replacement



Below: Front porch roof – window trim and siding damaged by flashing replacement



Below: Main roof – anchor point added at ridge



Below: Main roof – copper chimney flashing



Below: Interior – upstairs repairs unrelated to loss



Below: Interior – upstairs wall details and general condition



Below: Interior – upstairs window with broken outer pane on upper sash



Below: Interior – upstairs room – no water damage present related to date of loss



Below: Interior – upstairs hallway – paneling removed above porch roof



Below: Interior – upstairs hallway – paneling removed – porch roof framing visible



Below: Attic overall



Below: Attic – Roof farming with spaced and solid decking visible



Below: Attic – roof framing and insulation details at eave



Below: Attic – roof framing with knee braces at rafters visible



Exhibit C (2)

Coastal Environmental and Inspections, LLC

May 10, 2024

CE&I Project #:194-Pb-I-24

Genesis Construction, LLC
Attn: Eamon Kromka
PO Box 625,
Morehead City, NC 28557

Re: 176 Salter Drive, Atlantic, NC 28511; Lead Paint Assessments

On May 2, 2024, Coastal Environmental and Inspections, LLC (CE&I) was contracted to complete a lead paint assessment at the above referenced location. The purpose of these assessments was to determine if lead-based or lead-containing paint are present prior to construction activities. Per the client's request, CE&I completed the assessments of the exterior components that will be a part of the upcoming construction.

The interior and exterior directional reference for the "A" side is determined by facing *Salter Drive* from within and residence and on the outside. The B side, C side, and D side follow clockwise from the A wall orientation.

Lead Paint Assessment:

CE&I utilized a VIKEN (Serial No: 3354) Model Pb200e X-Ray Fluorescence Spectrum (XRF) Analyzer to take lead paint readings from the building components.

Lead Paint Federal Regulations:

The Environmental Protection Agency (EPA) definition of lead-based paint is any coating containing lead greater than or equal to one milligram per square centimeter ($\geq 1.0 \text{ mg/cm}^2$) as measured by the XRF analyzer.

The EPA - Renovation, Repair, and Painting Final Rule (40 CFR 745) requires that renovations, repairs, or painting conducted for compensation must be performed by Certified Firms using Certified Renovators if lead-based paint is identified.

The Occupational Safety and Health Administration (OSHA) defines lead-containing paint as any detectable level of lead when repair, renovation, or demolition work will impact lead coated surfaces.

Lead Paint Results:

Lead-Based Paint – EPA Definition

The following lead-based paint XRF results are reported in milligram per square centimeter (mg/cm^2). The following lists the sample numbers, sample descriptions and locations, and sample results:

Coastal Environmental and Inspections - XRF Readings						
Reading #	Concentration	Units	Result	Location	Color	Component
7	1	mg/cm2	Positive EPA	Exterior	White	Metal Siding
8	3.4	mg/cm2	Positive EPA	Exterior	White	Corner Trim
10	6.1	mg/cm2	Positive EPA	Exterior	White	Wood Siding

Lead-Containing Paint – OSHA Definition

The following lead-containing paint XRF results are reported in milligram per square centimeter (mg/cm^2). The following lists the sample numbers, sample descriptions and locations, and sample results:

Coastal Environmental and Inspections - XRF Readings						
Reading #	Concentration	Units	Result	Location	Color	Component
9	0.5	mg/cm2	Positive OSHA	Exterior	White	Fascia

Conclusions:

Lead-Based Paint

Based on the XRF results, the following components were identified as being coated with lead-based paint, per the EPA definition:

Exterior

- White paint on the metal siding
- White paint on the corner trim
- White paint on the wood siding

Contracted renovation, repair, or painting activities that will impact the above outlined components shall be completed by EPA Lead Certified Firms with Certified Renovators. Lead control measures should utilize “lead safe work practices” as outlined by OSHA.

Lead-Containing Paint

Based on the XRF results, the following component was identified as being coated with lead-containing paint, per the OSHA definition:

Exterior

- White paint on the fascia

Contracted work activities that will impact the above outlined component shall be completed by lead trained personnel utilizing “lead safe work practices” as outlined by OSHA.

If a painted component was not assessed, it must be assumed to be coated with lead-based paint based on the EPA definition. Contracted renovation, repair, or painting activities that impact these components must be performed by Certified Firms using Certified Renovators, when conducted for compensation.

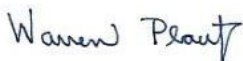
Limitations

No warranty is made with regards to the conclusions and recommendations within this lead assessment report. This report is provided for the exclusive use of the client or owner. It is not intended to be used or relied upon in conjunction with other projects or by third-parties without the written consent of CE&I and the client or owner.

The recommendations are based in general accordance with federal, state, and local regulations and guidelines. Compliance and response actions are the sole responsibility of the client or owner and should be conducted in accordance with all federal, state, and local regulations or guidelines.

Should you have any questions regarding this report, please do not hesitate to contact me.

Thank you,



Warren Plautz, CIEC, Industrial Hygienist

Enclosures: Coastal Environmental and Inspections Table - XRF Readings

Company Viken Detection
Model Pb200i
Type XRF Lead Paint Analyzer
Serial Num. 3354
App Version Pb200i-5.3.1

Coastal Environmental and Inspections - XRF Readings									
Reading #	Concentration	Units	Result	Location	Side	Color	Component	Mode	Analytic Mode
1	1	mg/cm2	Positive	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
2	1	mg/cm2	Positive	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
3	0.9	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
4	0	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
5	0	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
6	0	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
7	1	mg/cm2	Positive EPA	Exterior	A	White	Metal Siding	Action Level	Lead Paint
8	3.4	mg/cm2	Positive EPA	Exterior	C	White	Corner Trim	Action Level	Lead Paint
9	0.5	mg/cm2	Positive OSHA	Exterior	B	White	Fascia	Action Level	Lead Paint
10	6.1	mg/cm2	Positive EPA	Exterior	A	White	Wood Siding	Action Level	Lead Paint
11	1	mg/cm2	Positive	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
12	1	mg/cm2	Positive	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
13	0.9	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
14	0.1	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
15	0	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint
16	0	mg/cm2	Negative	Calibration	N/A	N/A	N/A	Action Level	Lead Paint

Exhibit C (3)

Lead Paint Abatement Specifications-R1

At: 176 Slater Dr.
Atlantic, NC 28511

Prepared for: Coastal Environmental and Inspections, LLC
202 Nantucket Ct.
Wilmington, NC 28412

PEI Project No.: 5251-24-0005-2A

Date: June 10, 2024

Designer Review and Approval: Michael Krupa: _____
NC Lead Designer Certification #: 140047

Reviewed by: E. Glenn Hargrove, CIH: _____

Prepared by:



3802 Cherry Ave.
Wilmington, NC 28403
Tel: (910) 763-3445
Fax: (910) 763-3415

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PART 1 GENERAL

1.1 SUMMARY

Location of Project:

176 Salter Dr.
Atlantic, NC 28511

Client:

Coastal Environmental and Inspections, LLC
202 Nantucket Ct.
Wilmington, NC 28412

Environmental Consultant:

Coastal Environmental and Inspections, LLC
202 Nantucket Ct.
Wilmington, NC 28412

Lead Remediation Contractor:

To be determined

Project Schedule:

To be determined

1.2 REFERENCES

The publications listed below form a part of this Plan to the extent they are referenced. The publications are referred to within the text by the basic designation only.

1.2.1 CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1926.55	Gases, Vapors, Fumes, Dusts, and Mists
29 CFR 1926.57	Ventilation
29 CFR 1926.59	Hazard Communication Standard for Construction
29 CFR 1926.62	Lead Standard for the Construction Industry
29 CFR 1910.134	Respiratory Protection Standard
40 CFR 61	National Emissions Standards for Hazardous Air Pollutants (NESHAPs)
40 CFR 136	Clean Water Act
40 CFR 258	Disposal of Hazardous Materials
40 CFR 260	Hazardous Waste Management System
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Generators
40 CFR 263	Transporters of Hazardous Waste
40 CFR 264	Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
40 CFR 268	Disposal of Hazardous Materials
NC General Statutes G.S. 130A -131.9H and Administrative Rules Governing The Childhood Lead Poisoning Prevention Program	
Article 7 Chapter 110 of the North Carolina General Statutes Child Care Facilities	
U.S. Department of Housing and Urban Development “Guidance for the Evaluation and Control of Lead-Based Hazards in Housing:	

1.2.2 AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z9.2	1979 Fundamentals Governing the Design and Operation of Local Exhaust Systems
ANSI Z88.2	1992 Practice for Respiratory Protection

1.2.3 UNDERWRITERS LABORATORIES, INC. (UL)

UL 586	1990 High Efficiency Particulate Air Filter Units
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1.3 REQUIREMENTS

1.3.1 Description of Work

The work to be conducted is located at:
176 Salter Dr.
Atlantic, NC 28511

Lead Based Paint Remediation Plan

This lead remediation project will consist of furnishing all labor, material, equipment, licenses and permits required to conduct exterior lead paint remediation associated with the following components at the above referenced residence (Components listed include both lead based paint (over 1.0 mg/cm²) and lead containing paint (over 0.0 mg/cm²) :

- Exterior
 - White painted metal siding
 - White painted wood siding
 - White painted corner trim

All work involving lead painted components shall take place utilizing lead safe work practices as described in OSHA 29 CFR 1926.62.

All work shall be conducted in accordance with the final approved remediation plan.

All work shall take place within lead control areas.

- For exterior work, the areas within fifteen (15) feet of the work areas shall be designated as lead control areas and appropriate barricade tape and warning signs shall be erected at the work area perimeters.

AT NO TIME SHALL PERSONS OTHER THAN REMEDIATION PERSONNEL, AND THE ENVIRONMENTAL CONSULTANT'S PERSONNEL BE ALLOWED WITHIN DESIGNATED WORK AREAS.

The work described in this plan describes the enclosure, removal or stabilization of surfaces coated with lead based paint. The affected components are referenced above. The lead containing or coated components shall be handled so that they do not present a hazard to remediation personnel, contractors, building inhabitants, any future visitors to the building, nor the environment. Area personnel, surrounding residences, and materials shall be protected from contamination during the remediation process.

The plan describes the procedures and equipment required to protect remediation personnel, the residence, and the environment from contamination. Work shall be performed in accordance with 29 CFR 1926.62, and the other references listed in Section 1.2 of this Plan.

1.3.2 Definitions

Action Level – Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period. As used in this section, “30 Micrograms per cubic meter of air” refers to the action level.

Area Monitoring- Sampling of lead concentrations, within the lead control area and regulated area that is representative of the airborne lead concentrations which may reach the breathing zone of personnel potentially exposed to lead.

Certified Industrial Hygienist- An industrial hygienist certified by the Board For Global EHS Credentialing

Decontamination Unit- Rooms within the lead control area equipped with separate storage facilities for clean protective work clothing and equipment, shower, and dirty room.

Employee Exposure- The concentration of airborne lead to which an employee would be exposed if the employee were not wearing respiratory protection equipment.

HEPA filter- A High Efficiency Particulate Air filter capable of removing particulate having a mass median diameter of 0.3 micron with a minimum efficiency of 99.7 percent.

Time Weighted Average (TWA)-The average employee exposure during an 8-hour work shift.

Lead- Metallic lead, inorganic lead compounds, and organic lead soaps.

Lead Containment-An enclosed area or structure to prevent the spread of lead dust, paint chips, or debris of lead containing paint removal operations. The lead containing area is isolated by physical boundaries to prevent unauthorized entry of personnel.

Lead Control Area- Area physically roped or partitioned off around an enclosed lead containment to limit unauthorized entry of personnel.

Permissible Exposure Limit (PEL)-The highest level of employee exposure allowed by law as measured by an 8-hour time-weighted average. The PEL for lead is 50 micrograms per cubic meter (50ug/m³) of air; but shall not exceed 400 micrograms per workday.

Personal Monitoring- Sampling of lead concentrations within the breathing zone of an employee to determine the 8-hour time weighted average concentration in accordance with 29CFR 1926.62. Samples shall be representative of the employee's work tasks. The breathing zone shall be considered an area within 12 inches of the nose or mouth of an employee.

1.3.3 Title of Materials

All materials resulting from the remediation/repair work described in the Plan except as otherwise specified, shall become the property of the Remediation Contractor, and shall be disposed of according to the References and guidelines contained in this Plan.

1.3.4 Protection of Existing Work to Remain

The Remediation Contractor shall perform removal and remediation work without damage or contamination to the property. Where such work is damaged or contaminated, it shall be restored to its original condition or equivalent.

1.3.5. Medical Requirements

Medical Examinations: Before remediation personnel are allowed to work in contaminated areas, there shall be an appropriate medical examination in accordance with 29 CFR 1926.62 and in accordance with State and Local regulations. Such examinations shall be given at least every six (6) months to employees engaged in lead-related work who are exposed above the Action Level for 30 days or more per year. The employer shall provide medical examinations at least every two (2) months for each employee whose last blood lead level was at or above 40 ug/100g of blood. The continued exposure and/or medical surveillance of employees with elevated blood lead levels shall be in accordance with 29 CFR 1926.62.

Medical Records: The Remediation Contractor for shall retain the employee exposure and air monitoring records for at least 40 years, or for the duration of employment plus 30 years, whichever is longer. The Remediation Contractor shall assure that the employee's medical surveillance records are retained for the same period. These records shall be available for inspection and copying by the employee, the Assistant Secretary of Labor or the Occupational Safety and Health Administration, authorized representatives of the employee, and by the employee's physician upon the written request of the employee or former employee.

1.3.6 Training

All personnel employed by the Remediation Contractor who are involved in lead remediation work shall be adequately trained by technically qualified personnel. Training shall include: (1) pertinent regulations (29 CFR 1926.62), (2) medical surveillance, (3) health effects of lead and associated metals, (4) worker safety, hygiene, and decontamination (5) work procedures, as described in 29 CFR 1926.62, and (6) personnel and respiratory protection equipment. The training program shall be repeated at least annually for each employee.

Subcontractor's supervisors who may perform replacement procedures on components coated with or containing lead must have, at a minimum, EPA Renovation, Repair and Painting (RRP) training.

Proof of training for remediation contractors and their sub-contractors shall be submitted within 5 days of award of the project

1.3.7. Permits and Notifications

Disposal Permit: The disposal site chosen for this project shall be approved to receive lead-containing wastes by the State of North Carolina. A copy of the landfill permit shall be part of the Lead-Paint Remediation Plan (LPRP). Uniform Hazardous Waste Manifest forms, or equivalent forms, shall be completed by the Remediation Contractor and shall become part of the LPRP.

1.3.8 Rental Equipment Notification

If rental equipment is to be used during the removal, handling, transportation or disposal of lead-based paint, the Remediation Contractor shall notify the rental agency in writing concerning the intended use of the equipment. The Owner shall be furnished a copy of the written notification.

1.3.9 Hazardous Waste Management Plan

The Remediation Contractor shall submit a Hazardous Waste Management Plan (HWMP) that shall comply with applicable federal, state, and local hazardous waste regulations. The HWMP shall include:

1. A listing of on-site hazardous wastes (HW)
2. Estimated quantities of HW to be generated
3. Names, qualifications, and contacts for HW contractors
4. Copies of all HW permits and EPA ID numbers
5. Contingency plans for spill prevention, containment and cleanup
6. Names and qualifications of on-site HW personnel

1.3.10 Health and Safety Compliance

In addition to the procedures included in this Plan, the Remediation Contractor shall comply with (1) all laws, ordinances, rules, and regulations of federal, state, regional, and local authorities regarding the handling, storage, transportation, and disposal of lead-containing materials, (2) 29 CFR 1910.134, (3) 29 CFR 1926.55, and (4) 29 CFR 1926.62. The Remediation Contractor shall submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. The most stringent requirements shall apply should a conflict arise.

The Remediation Contractor shall:

- * Comply with OSHA rules, and shall disconnect electrical service when wet removal is performed, and use GFCI's in all circuits
- * Comply with OSHA confined space entry requirements
- * Comply with OSHA Blood Borne Pathogen rules
- * Comply with the OSHA Hazards Communication Program requirements for the construction, including supplying the Owner with copies of all SDS's
- * Prepare both fire and medical emergency plans.

- * Comply with NC General Statutes G.S. 130A -131.9H and Administrative Rules Governing The Childhood Lead Poisoning Prevention Program
- * Comply with Article 7 Chapter 110 of the North Carolina General Statutes Child Care Facilities
- * Comply with all requirement of Child Development and Early Education statutes.

Remediation personnel shall be informed of the contents of the required compliance plans, and given the required training, prior to beginning work.

1.3.11 Respiratory Protection Program

The remediation Contractor shall have an established Respiratory Protection Program that complies with 29 CFR 1910.134, and ANSI Z88.2; and shall only use respiratory protective equipment certified by NIOSH.

1.3.12 Air Monitoring Laboratory

All air samples shall be obtained by a trained air-sampling technician or Industrial Hygienist.

The contractor shall follow all OSHA requirements in regard to proper respiratory protection and personnel air monitoring requirements.

1.3.13 Sample Analysis Laboratory

Analytical protocols for airborne lead shall be in accordance with the latest published NIOSH Methods of Analysis.

1.3.14 Air Monitoring Results

The analytical results for air samples for the presence of lead shall be reviewed by an air-sampling technician or Industrial Hygienist. The Air Sampling Technician or Industrial Hygienist shall notify the Owner and the Remediation Contractor immediately of any air sampling results over 30 micrograms per cubic meter. Copies of the analytical results shall be provided to the Owner within three (3) days of their availability.

1.3.15 Landfill

The Remediation Contractor shall submit written, detailed delivery tickets to the Owner within three (3) working days after delivery of the lead-containing waste, or as soon as possible. The delivery tickets shall be prepared, signed and dated by the agent of the landfill and/or transporting company, and shall certify the amount of lead-containing material delivered to the landfill.

1.3.16 Multi-employer Work Sites

An Remediation Contractor performing work requiring the establishment of a regulated area shall inform other employers on the site of the involvement of the work with lead-based paint; of the existence of and requirements pertaining to regulated areas; and the measures being taken to ensure that employees of other employers are not exposed to lead.

Employers of employees who are subject to potential exposure to lead on a multi-employer work site shall take measures to protect their employees; including removing the employees from an area until conditions are corrected, and a clearance is obtained; or performing an initial exposure assessment.

PART 2 EXECUTION

2.1 EQUIPMENT

The term Equipment refers to the personal protective equipment to be worn by remediation workers and other project-related personnel when they are in the Lead Control Area.

The Remediation Contractor shall provide the Owner's Representative with two complete sets of personal protective

equipment per workday, as defined by this Plan, for entry into the Lead Control Area to make inspections. Protective clothing, respirators, and other protective equipment shall be worn by all personnel for the following activities or when entering the following locations: (1) when in contact with lead-paint that is in poor condition (chalky or peeling) during work area preparations; (2) when lead-containing materials are to be disturbed; (3) when making modifications to contaminated areas; (4) when in lead-paint remediation or contaminated areas.

2.1.1 RESPIRATORS

Approval: The Remediation Contractor shall only supply remediation workers and other project-related personnel with respirators approved by NIOSH.

Respirator Use: The type of respirator chosen by the Remediation Contractor shall be in accordance with the respirator selection criteria prescribed in 29 CFR 1910-134. Respirators shall be cleaned and disinfected after each use, and stored in a clean and sanitary location.

Respirators and protective clothing shall no longer be required after the Lead Control Area has passed both the final visual inspection and the clearance sampling, and has been accepted as clean by a North Carolina Accredited Lead Inspector and/or Risk Assessor.

2.1.2 Special Clothing

Employees shall be provided with, and required to wear, whole-body fire retardant disposable clothing, head-cover, gloves, and foot coverings during the entire course of the remediation and cleanup. Disposable plastic or rubber gloves shall be provided, and worn, to protect the employee's hands. Cloth gloves may be worn inside the protective gloves for comfort, but shall not be used alone. Tape shall be used to secure sleeves at the wrists and to secure foot coverings at the ankles. Disposable work clothing may be provided to be worn under the disposable coveralls and foot coverings.

2.1.3 Other Protective Equipment

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2.1.4. Eye Protection

The Remediation Contractor shall provide goggles to employees and project-related personnel engaged in lead-paint remediation when the use of full-face respirators is not required.

An eyewash station shall be available at the perimeter of the Lead Control Area and readily accessible to the remediation workers.

2.1.5 Decontamination Area

The Remediation Contractor shall establish an eye/hand-wash station for workers performing lead based paint procedures. In addition the Remediation Contractor shall establish a designated change-out area for workers to change and dispose contaminated coveralls. The change-out area shall consist of a minimum of 1 layer of 6-mil poly covering the floor area and shall be of sufficient size to accommodate all workers who shall utilize the area during change-out/decontamination procedures.

Street Clothing and shoes shall be kept in the change-out area. Workers while still wearing respirators, shall vacuum and then remove lead-contaminated disposable protective clothing at the boundary of the Lead Control Area, and seal these in impermeable, labeled bags or containers for disposal. Disposable protective clothing shall not be removed in the change-out area. Workers shall not wear lead-contaminated work clothing between work and home. When feasible, the eye/hand-wash station shall be located between the work area and the change-out area

Employee procedures for entering the Lead Control Area, and decontamination procedures, shall be as prescribed in 29 CFR 2916.62

2.1.6 HVAC Systems

The Remediation Contractor shall shut down, lockout, and isolate, as applicable, HVAC systems and components that supply, exhaust, or pass through the Lead Control Area. All respirable-air intakes, vents, and seams in such systems that are reasonably subject to contamination shall be sealed with two layers of 6-mil polyethylene prior to beginning remediation. This may not apply on areas where whole component removal is required.

2.1.7 Caution Signs and Labels

Approved lead hazard warning signs shall be erected at all approaches to the Lead Control Area as prescribed in 29 CFR 1926.62:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

Signs shall be posted at such a distance from the restricted area that employees may read the signs and take the necessary protective steps before entering the area. The Remediation Contractor shall provide lead hazard warning labels and affix them to all lead-containing materials, scrap, waste, and other products contaminated with lead, including the dumpster. These labels shall include the Remediation Contractor's name, the contract title, and the contract number.

PART 3 PROCEDURES

3.1 WORK PROCEDURES

3.1.1 Lead Control Area

The Remediation Contractor shall provide a designated lead control area around the remediation operations. The exterior areas of abatement shall be considered the lead control area.

The remediation Contractor shall employ engineering controls, good work practices, and state-of-the-art procedures to the extent necessary to ensure that neither personnel nor the environment are exposed to unacceptable levels of lead or other heavy metals.

3.1.2 Containment of Lead-Based Paint/Removal/Enclosure/Stabilization procedures

Exterior:

The entire perimeter of the residence shall be designated as a lead control area and barricade tape and warning signs shall be affixed around the entire perimeter of the structure.

6-mil poly shall be placed on the ground at the perimeter of the residence where component removal or stabilization is taking place and extend out from the residence ten (10) feet (as obstacles allow) in order to contain lead paint chips and debris.

If the constant wind speed is over 10 miles per hour at the work site, exterior remediation shall not be performed without the use of containment or other effective windscreen. The objective shall be to conform to the NESHAP requirements of No Visible Emissions.

If wind speed does not exceed 10 MPH, a containment shall not be required for the exterior portion of the project since the remediation is an open-air removal. Precautions shall be taken to prevent visible emissions. Such precautions shall include the use of engineering controls and wind screens where applicable.

The following procedures shall be conducted for each component listed below:

Exterior components

- Siding
 - Option 1: Remove loose and peeling paint from exterior siding coated with lead based paint or lead containing paint. Stabilize with a layer of non-lead containing coatings.
 - Option 2: Conduct a whole component removal of exterior siding coated with lead based paint or lead containing paint.
 - Option 3: Conduct a thorough paint removal of the exterior siding coated with lead based paint or lead containing paint.
 - Option 4: Enclose the exterior siding within a permanent airtight barrier (i.e., vinyl, metal or wood sheathing caulked at all perimeter areas). (If the sidings are to be enclosed, lead warning signs must be installed behind the new enclosure every two (2) feet. This can be accomplished with warning tape or signage installed in a checkerboard pattern).
- Corner trim
 - Option 1: Remove loose and peeling paint from the corner trim coated with lead based paint or lead containing paint. Stabilize with a layer of non-lead containing coatings.
 - Option 2: Conduct a whole component removal of the corner trim coated with lead based paint or lead containing paint.

Following the completion of all work, the entire area shall be visibly inspected for dust, paint chips and debris. ALL surfaces at the exterior of the residence shall be cleaned utilizing HEPA vacuum and wet wiping methods. *This includes but is not limited to all exterior porch floors, window sills and wells (if exposed) within the work areas.* All paint chips and debris at the exterior perimeter of the work areas shall be decontaminated.

If the paint stabilization option is utilized, all scraped paint shall be collected and shall be held within an appropriate container prior to determination of final disposal via TCLP analysis.

Following removal procedures, the ground coverings shall be disposed of with the remainder of the lead waste prior to determination of final disposal via TCLP analysis.

3.1.3 Removal Techniques for Lead-based Paint

All Remediation of Lead Poisoning Hazards must be completed in accordance with all applicable NC Laws, Rules, and Regulations. The following methods of lead-based paint Remediation are prohibited by law:

1. stripping paint on site with methylene chloride based solutions;
2. torch or flame burning;
3. heating paint with a heat gun above 1100 degrees Fahrenheit;
4. covering with new paint, or wallpaper unless all readily accessible lead based paint has been removed;
5. uncontrolled abrasive blasting;
6. uncontrolled water blasting; or
7. dry scraping, unless used in conjunction with heat guns or around electrical outlets.

The Remediation Contractor may use any of the following methods of remediation: Hand scraping with a local HEPA vacuum or power tools with a HEPA filtered vacuum as an integral part of the tool, and wet scraping.

Following remediation, all remediated surfaces shall be HEPA-vacuumed and wet-wiped with a solution of soapy water.

3.1.4 Site Inspection

While performing lead-paint remediation, the Remediation Contractor shall be subject to on-site inspections by the Industrial Hygienist and a North Carolina Accredited Lead Inspector/Risk Assessor. If any inspection finds the remediation work to be in violation of the specifications in this Plan, the Owner may issue a stop-work order immediately, to be in effect until the status of the violation is resolved. The resulting standby time and expenses

required to resolve the violation shall be at the expense of the Remediation Contractor.

3.2 AIR MONITORING PROCEDURES

3.2.1 Responsibilities

Monitoring of airborne concentrations of lead shall be performed in accordance with NIOSH Methods of Analysis and the requirements of this Plan

3.2.2 Air Monitoring Strategy

During Remediation: The Permissible Exposure Limit (PEL) for employee exposure shall be 50 micrograms per cubic meter of air, calculated as an 8-hour TWA. However, the maximum employee exposure shall be 400 micrograms per work shift. That is, the PEL is 400 ug divided by the number of hours worked in that shift. The PEL shall allow for the Protection Factor provided by the type of respiratory protection in use.

Personal monitoring during the initial employee exposure to airborne lead shall be conducted to establish the Reference TWA.

The air monitoring during remediation shall consist of at least one personal sample collected on each of two workers during each 8-hour work shift.

In lieu of daily personnel monitoring, the Remediation Contractor may submit a current, relevant negative exposure assessment.

3.2.3 Air Sample Analysis

The concentration of total airborne lead shall be determined by Atomic Absorption Spectrometry in accordance with the latest published NIOSH Methods of Analysis, and in accordance with the analytical precision requirements of 29 CFR 1926.62.

3.2.4 Reporting of Results

Air samples shall be analyzed, and the results reviewed in a timely manner that avoids the potential for unknown over-exposures. Copies of all sampling reports shall be submitted to the Remediation Contractor within three (3) working days of their receipt, and shall include the following information:

- | | |
|---------------------------|---------------------------------------|
| (1) Project Description | (7) Collection/Analysis Dates |
| (2) Sample Number | (8) Name of Air Monitoring Technician |
| (3) Name of Employee/SSN | (9) Pump Start and Stop Times |
| (4) Location/Task Sampled | (10) Type of Respirator |
| (5) TWA Results (ug/m3) | (11) Signature of Analyst |
| (6) Analytical Method | |

3.3 CLEARANCE SAMPLING

3.3.1 Clearance sampling strategy

After final Cleanup: Clearance monitoring shall be performed after the Lead Control Area has been cleaned and has passed a final visual inspection.

1. Sampling shall be conducted according to the remediation plan. Any deviation to the written plan must be submitted of the owner in the form of a remediation modification.
2. Visual inspection shall verify that no paint chips of any type are visible adjacent to exterior work areas.
3. Surface wipe samples obtained on porch floors shall indicate a residual lead concentration of less than 40 µg per square foot

4. Surface wipe samples obtained on window sills shall indicate a residual lead concentration of less than 100µg per square foot.
5. Surface wipe samples obtained on window wells (troughs) shall indicate a residual lead concentration of less than 100µg/square foot
6. Acceptable criteria for soil samples are as follows:
 - 400 ppm for high contact areas (play areas)
 - 1,200 ppm for other residential yard areas (non-play areas)

Visible lead paint chips shall be unacceptable. Lead concentrations exceeding these levels shall be unacceptable. If lead concentrations are unacceptable, the Remediation Contractor shall repeat the final clean-up process and visual inspection, and shall be financially responsible for the collection new clearance samples.

The barriers or boundaries surrounding the Lead Control Area may be removed after satisfactory completion of the clearance sampling approval from the North Carolina Accredited Lead Inspector and/or Risk Assessor.

Final project clearance sampling shall be conducted by a Certified North Carolina Lead Inspector/Risk Assessor.

3.4 CLEANUP AND DISPOSAL PROCEDURES

3.4.1 Cleanup Procedures

The Remediation Contractor shall keep surfaces in the Lead Control Area free of accumulations of lead-paint dust. Special attention shall be given to restricting the spread of dust and debris; and contained wastes shall be restricted to an assigned holding area, as designated by the Owner. When the lead-paint remediation is complete, all remaining lead-containing debris shall be removed from the work-site and final cleanup shall be initiated. The Remediation Contractor shall clean all surfaces in the work area with a HEPA vacuum and then wash the surfaces with a dilute aqueous solution of tri-sodium phosphate. The use of compressed air shall not be permitted for cleaning purposes.

Remediated surfaces shall be considered clean, and the Lead Control Area acceptable for unrestricted entry, if lead dust levels within containment within levels listed in section 3.2.2 (Air Monitoring Strategy – After Final Cleanup). The work area must be clean and dry prior to clearance sampling. If the work area has to be re-cleaned, it shall be dry before again performing clearance sampling.

The Lead Control Area shall be maintained around the work area until clearance sampling has been completed and the area has been certified by the North Carolina Accredited Lead Inspector and/or Risk Assessor as clean and acceptable for entry.

3.4.2 Disposal Procedures

Representative samples of all waste, scrap, and debris shall be collected and analyzed by the EPA's Toxicity Characteristic Leaching Potential procedure (TCLP). Those materials failing the TCLP criteria shall be disposed of as hazardous wastes.

Components removed utilizing whole component removal may be disposed of as construction debris. Following completion of the remediation work, the Remediation Contractor shall collect lead-containing waste, scrap, debris, bags, containers, equipment, lead-contaminated clothing and all other items that may release airborne lead particulate, and place such items in double-bags of 6-mil plastic. These bags shall then be placed in approved waste drums or a waste hauler for temporary storage.

All bags or containers of lead-containing waste and miscellaneous debris shall be properly sealed, and a lead hazard-warning label affixed to each bag or container. The labels must include the Remediation Contractor's name, the contract title, and the contract number.

The Remediation Contractor shall arrange for the hauling and the disposal of lead-containing waste. Lead-containing waste must be transported in an enclosed dumpster or truck, which must have proper hazard warning labels attached.

These labels shall include the Remediation Contractor's name, the contract title, and the contract number. Employees shall wear half-face, negative air, air-purifying respirators, as a minimum, and protective clothing when handling bags or drums of lead-containing waste.

The lead-containing waste shall be taken to the designated landfill and disposal shall be in accordance with 40 CFR 61 and 136, 49 CFR 261-268, and all federal, regional, state, and local regulations. Sealed drums shall be removed from the truck or dumpster and placed in drums and the entire drum buried. Uncontaminated containers may be cleaned and reused.

All debris, paint chips, and dust with the exception of construction debris, shall be considered a hazardous waste unless proven otherwise by TCLP testing. If TCLP analysis reveals concentrations equal or greater than 5ppm, the materials shall be disposed in an approved hazardous waste facility.

3.4.3 Waste Water Monitoring

All contaminated water produced during the remediation, including shower water, shall be filtered using a high efficiency filter having a maximum effective pore size of 5 microns to remove the lead-paint particles. After filtering, all contaminated water shall be contained and tested for heavy metal contaminants prior to discharge into the sanitary sewer system. Disposal of all contaminated water shall be in accordance with EPA regulations and the requirements of the local water sanitation district.

PART 4 Occupant protection plan

Basis

The Environmental Protection Agency (EPA) regulations 40 CFR 745 Subpart L, Subsection .227 (e)(5) requires a written Occupant Protection Plan (OPP) for all lead abatement projects. Additionally, the North Carolina Lead-Based Paint Hazard Management Program (LHMP) Rule, 10A NCAC 41C .0800 requires the OPP to be "on site" at all lead-based paint abatement projects.

The OPP must be completed before the abatement project begins, and shall be unique to each residential dwelling and/or child-occupied facility. The OPP must address what measures and management procedures will be taken to protect the occupants from exposure to lead-based paint hazards.

The NC LHMP Rule further defines the OPP by allowing the certified lead supervisor to prepare an OPP when there are fewer than five dwellings. When five or more dwellings are involved, a certified lead designer must prepare the OPP. This OPP has been prepared by a certified North Carolina Lead Project Designer. Refer to the Cover Sheet of this document for name and signature of the certified Lead Project Designer.

Occupant Protection Plan General Requirements

- A. The contractor or operator controlling the project is responsible for notifying the occupants about the lead-based paint abatement project in accordance with the pre-renovation education requirements outlined in this document and elsewhere.
- B. If the occupants leave the dwelling during abatement, there must be a contingency plan (refer to Section 4.3) if clearance fails and the occupants cannot reenter the dwelling OR if occupants need access to the residence while work is ongoing.
- C. For interior lead abatement, it is preferred that occupants vacate the residence as necessary for the duration of interior lead abatement activities until satisfactory visual inspections and laboratory results are received. Arrangements should be made to temporarily house displaced occupants at a hotel or other accommodations for the duration of the work at the residence. If the occupants remain in the dwelling during abatement and a breach in containment occurs, measures must be taken to address the situation and protect the occupants. No work shall be conducted in areas where occupants are present, including high traffic corridors used by the contractor to access the work areas, transport tools or equipment, remove debris or building materials, or otherwise potentially track debris.
- D. The occupants' personal belongings inside/outside of the dwelling must be protected.

- E. Special needs for blind or handicapped occupants must be addressed.
- F. An emergency escape plan for the occupants who remain in the dwelling during abatement must be prepared.
- G. The occupants' pets located inside/outside the dwelling must be protected.
- H. Playground equipment, outdoor furniture, etc., must be protected.
- I. Soil in gardens and children's play areas must be protected.
- J. The contractor must keep neighborhood children, pets, or other animals from entering the abatement area.
- K. The OPP shall include the preparer's signature and certification number (refer to cover sheet).

Resident Protection and Worksite Preparation

- A. In accordance with LHMP Rules, as published within the [Health Hazards Control Unit: Guidance for Lead-Based Paint Abatement Work Practices](#), the Resident Protection and Worksite Preparation information from Chapter 8 of the Housing and Urban Development (HUD) [Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Second Edition, July 2012](#), shall apply to this abatement project. These requirements shall apply to the residents of the dwelling.
- B. The lead abatement contractor shall provide pre-renovation education about lead-based paint hazards prior to conducting work at the dwelling. Notification to the occupants shall also be provided by the Owner, Certified Lead Inspector/Risk Assessor, or the lead abatement contractor. Documentation of this pre-renovation education must be maintained. This may be conducted by the project manager, qualified person, or Owner, but such proxies do not relieve the contractor of said responsibility for recordkeeping.
- C. The lead abatement contractor is responsible for protecting the residents' belongings from becoming contaminated with leaded dust and for preventing leaded dust from migrating beyond the work area. The contractor may also be required to provide pre-cleaning before worksite containment if the paint is severely deteriorated and paint chips or dust or debris are present.
- D. All paint chips present on the ground or floor must be removed before plastic sheeting or other impermeable material is laid down.
- E. Containment measures must be designed to prevent the release of leaded dust, which can be spread by workers' shoes or by airborne dust. Use of appropriate PPE is required.
- F. Plastic sheeting used to protect floors or ground must be taped or otherwise secured to the walls of the dwelling to ensure containment of contaminants.
- G. All damaged substrates must be repaired or replaced before the site can be prepared for encapsulation and/or enclosure.
- H. No debris, plastic sheeting or impermeable materials may be left outside the dwelling overnight, or in any area where a passerby or a child could come in contact with these materials. Signage and barrier tape shall be left up.
- I. Residents should not remain in a dwelling when lead-based paint abatement is performed. If residents must remain inside the dwelling for reasons associated with a serious health condition while work is being conducted or must return to the dwelling in the evenings for similar reasons, then a dust sample shall be collected and analyzed. The dust sample shall be collected at the end of each workday from the living area at greatest risk of contamination and analyzed as soon as possible. Reoccupation should not occur prior to passing dust wipe samples in accordance with the Contingency Plan section, Item D, below. Refer to the Occupant Relocation Plan section, below, for further discussion regarding occupancy.
- J. Restrict access to the work area until clearance results are obtained and verified.
- K. The contractor shall conduct a daily cleanup of the work area. The project manager/qualified person may also perform daily visual examinations to ensure that dust, debris, and residue do not exist outside of the work area and that the contained area has been cleaned up adequately by the daily cleanup.
- L. Workers performing paint-disturbing work should use lead-safe work practices in accordance with Chapter 11 of the HUD guidelines and 40 CFR 745. Overall, this means that workers must never use prohibited paint-removal practices, should work wet to dampen dust spread, and should clean up thoroughly after the work. During paint-disturbing work, painted surfaces should be wetted with a fine mist of water or water mixed with a surfactant before scraping or sanding to reduce generation of airborne paint dust, followed by HEPA vacuuming.
- M. Protect the exterior environment, both on and off the subject property, from contamination, and protect adjacent homes from contamination.

Contingency Plan

Elevated Clearance Results

Receipt of elevated concentrations of lead in any of the collected wipe or soil clearance samples, the following procedures shall be implemented:

- A. The project manager/qualified person and the lead abatement supervisor, at a minimum, shall investigate and evaluate the engineering controls of the work area(s) to determine if a potential source for the high lead concentrations exists.
- B. After the integrity of the work area(s) is inspected, the contractor shall re-clean the work area(s) utilizing appropriate methods (i.e., wet-wiping, HEPA-vacuuming, removing additional soil, etc.) in preparation of further clearance testing by the Certified Lead Inspector/Risk Assessor.
- C. The decision as to the timing of the re-cleaning activity shall be made by the Certified Lead Inspector/Risk Assessor in consultation with the building owner and the lead abatement contractor.
- D. Re-occupancy shall not be permitted in any area where lead wipe or soil analysis reveals results greater than the established Lead Clearance Action Levels established by HUD as indicated below:
 1. Wipe Samples:
 - Interior Floors: <10 $\mu\text{g}/\text{ft}^2$
 - Porch Floors: <40 $\mu\text{g}/\text{ft}^2$
 - Window Sills: <100 $\mu\text{g}/\text{ft}^2$
 - Window Troughs: <100 $\mu\text{g}/\text{ft}^2$
 2. Soil Samples:
 - Play Areas: <400 $\mu\text{g}/\text{ft}^2$
 - Non-Play Areas: <1,200 $\mu\text{g}/\text{ft}^2$
 - Replacement Soils: <200 $\mu\text{g}/\text{ft}^2$

Breaches in Containment

- A. If vertical containments are utilized for lead abatement work associated with interior residential work, the following plan shall be implemented.
- B. Following a breach in an interior containment, a thorough investigation shall be performed by the project manager/qualified person and the lead abatement contractor's supervisor to determine the cause of the breach, potential contamination resulting from the breach, and corrective actions to be implemented.
- C. Any occupants within a unit where a breach in containment occurs shall be evacuated from the unit until appropriate investigation, cleanup activities, dust clearance sampling can be performed, and satisfactory results of the clearance samples are achieved.
- D. Regardless of the nature or severity of the breach in containment, corrective actions including appropriate cleanup, occupant evacuation, containment repairs/adjustments, dust wipe sampling, and associated investigations must be performed. At no time shall corrective action only include repair to the containment without investigation and dust sampling.
- E. Residents displaced by a breach in containment may require relocation as described in the Section below.

Occupant Relocation Plan

- A. Temporary relocation of residents/occupants is generally recommended when work is undertaken that will disturb painted surfaces known or suspected to contain lead-based paint and the work will occur throughout much of the dwelling over several days. Temporary relocation is clearly necessary if residents cannot have safe access to bathrooms, sleeping areas, and kitchen facilities (or alternative eating arrangements) during non-work hours.
- B. Safe access includes the absence of other significant safety, health, or environmental hazards in addition to lead hazards (i.e., toxic fumes, on-site disposal of hazardous waste, or exposed electrical wiring).
- C. There are several exceptions and options that may be considered in deciding whether it is necessary for residents to temporarily relocate and, if so, for how long and whether furniture and other belongings must be moved.

1. **Work is a Small Area:** If the amount of paint being disturbed is below HUD's *de minimis* threshold for HUD-assisted projects, or EPA's minor repair and maintenance work threshold for unassisted projects, special measures to protect residents from exposure to lead dust are not required. However, basic precautions are strongly recommended. These include: never using prohibited paint removal practices, and cleaning the work area thoroughly after the work is completed. Also, If a child under age 6 resides in or accesses the unit or area, keep residents out of the work area until after final cleanup/clearance testing.
 2. **Work is Only on the Outside:** Residents and their belongings may remain inside the dwelling if the work is only on the exterior and building openings (windows, doors, vents) within 20 feet of disturbed paint surfaces are tightly closed or sealed and cleaned afterward, and an entryway is provided that is free of dust-lead hazards, soil-lead hazards, and debris.
 3. **Work and Clearance Take Only One Day:** If the work, final cleanup, and clearance can be achieved (i.e., results of dust sampling received from the laboratory and found to be acceptable) in one work day, residents need to be out of the work area or the unit only for that day and can return with full access to the unit at the end of the day.
 4. **Work Area is Limited and Work is Short Duration:** Relocation is usually not necessary or is necessary only for workday hours if the work: takes less than five days; is being conducted in only one or two rooms; and if exclusion from those rooms does not preclude safe ingress and egress to the unit and safe access to kitchen) or alternative eating arrangements), bathroom, and sleeping areas. Furniture and other belongings can be moved out of the workrooms, or covered and sealed with protective sheeting and tape.
 5. **Exception for Elderly Residents:** Because of the added difficulties that may accompany the relocation of elderly residents, it is acceptable to make special exceptions to normal relocation policy for them. This exception, however, is acceptable only for work to be done in housing for the elderly, such as retirement communities or in units where children under the age of 6 will not be present or visit. Such areas would still be subject to clearance examination requirements.
- D. In the event that a clearance failure, breach in work area containment, or other factor prevent the resident(s) from returning to the dwelling as planned, other accommodations, such as hotel rental, shall be provided at no cost to the resident. Arrangements for these accommodations shall be as agreed upon by the Owner, the resident, and the lead abatement contractor, as applicable.



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

July 18, 2023

Michael J Krupa III
62 Butterfly Dr
Clayton, NC 27527

Dear Mr. Krupa:

You have successfully passed the North Carolina Lead Designer Certification examination. Based on these results, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the examination requirement and are eligible for lead certification as a(n) DESIGNER. Your assigned Designer certification number is 140074, which is reflected on your enclosed North Carolina Lead Certification card. The State requires that all persons conducting regulated lead-based paint activities be certified and have their identification card on-site.

Accredited refresher training must be completed at least every 24 months from the date of the last accredited training course **AND** within twelve months prior to applying for certification. The HHCU strongly recommends that individuals note the date of certification expiration and ensure all refresher training meets the above requirements.

Your North Carolina Designer certification will expire on JULY 31, 2024. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Designer after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to July 31, 2024. If you should perform lead-based paint activities as a(n) Designer without a valid North Carolina certification, you will be in violation of State regulations and may be cited for noncompliance.

If you have any questions, please contact our office at (919) 707-5954.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5505 Six Forks Road, Building 1, Raleigh, NC 27609
MAILING ADDRESS: 1912 Mail Service Center, Raleigh, NC 27699-1912
www.ncdhhs.gov • TEL: 919-707-5950 • FAX: 919-870-4808



AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

Exhibit F

NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-647-0000

Engineered Wood Structural Products

Code: 2018 NC Residential Code
Sections: R502, R602, and R802

Date: April 25, 2018

Question:

Without an engineered design, can engineered wood structural products be used for floor wall and roof-ceiling framing in lieu of the prescriptive load bearing members addressed by the NC Residential Code (NCRC), Sections R502, R602, and R802?

Answer:

As they are not addressed prescriptively by the code, engineered wood structural members are considered as alternate materials as addressed by the NC Administrative Code and Policies, Section 105 and are subject to acceptance by the local code enforcement official (CEO). It is the general position of the Department of Insurance, Engineering Division that alternate materials may be accepted without an engineered design **when the materials have been properly tested and evaluated and shown to be equivalent to those materials prescriptively included in the technical codes**. The Engineering Division can recommend acceptance of engineered wood structural products as an acceptable alternate to the prescriptive framing members addressed by the NCRC under the following conditions:

1. The material manufacturer provides published tables (similar to the NCRC prescriptive tables) with the allowable sizes, spans, and load conditions of the members; and
2. The products have been **tested and evaluated and are covered by an approved evaluation report** (such as ICC-ESR reports); and
3. The products are used in strict compliance with the “conditions of use” section of the evaluation report; and
4. The products use is for uniformly distributed load conditions (a design is required for a point load condition including the load path to the footing – this would apply to both conventional framing as well as engineered wood products); and
5. The products are not used in lieu of members included in a sealed design (a design is required for a change to a sealed plan altered in any way – this would apply to both conventional framing as well as engineered wood products); and
6. The product use is not in conflict with any code sections that specifically requires a sealed design (example: R802.10.2).

Keywords:

LVL, I-joist, Truss Joist, engineered wood

Exhibit F-1

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Hello Mr. Kirk,

This is Eamon Kromka with Genesis Custom Construction here in Morehead City. I left you a voicemail a few minutes ago in regards to some interpretation on **NC 2018 existing building code dealing with chapter 5**. We do a lot of projects in the area that are Hurricane claim damage work and it is unclear to us and local building officials in various municipalities we work within on how this work should be classified. The real question lies in the classification between repair and alteration. In reading the definition of repair it seems that it includes patching, renewal, reuse of existing restored materials, or replacement of the damaged materials? We often see the use of section **505 Alteration-Level 3 with the 50% area classification**, which allows for much different provisions than the repair classification. Some municipalities in the area require additional upfits to meet current code and some don't. **At what point should we call an item REPAIRED vs. ALTERATION?** In many cases the work required on these type of jobs goes far beyond the "repair" area, and may even extend into non-related but required work. (For an example a home built in the 1950s that was gutted after Florence damage, where now the entire electrical system is exposed and non compliant, non compliant high wind zone tiedown/provision, non compliant plumbing, non compliant safety provisions...)

We hope that the existing code will allow for Alteration level 3 on projects like this, otherwise lots of unsafe and noncompliant items may be left without proper attention from building officials, and contractors performing all this work.

The question then also arises from a labor tax standpoint and the form 589-CI worksheets that we are required to fill out on repairs vs. Capitol improvements.

Any clarification you can provide on this would be most helpful.

Thank you so much,

<image005.png>

From: Kirk, Bill bill.kirk@ncdoi.gov
Subject: RE: [External] Request for Interpretation
Date: January 27, 2021 at 2:31 PM
To: Eamon Kromka info@genesismailbox.com
Cc: Chad Lockey chad@genesismailbox.com

BK

Eamon,

Below are the definitions of Alteration and Repair, descriptions of Repairs, Level 1, Level 2, and Level 3 alterations from the 2018 NC Existing Building Code. Below the repair definition is the 2015 Code and commentary for the definition of "Repair". Note that "repair is limited to work on the item and does not include complete or substantial replacement" of the item. I hope this will be helpful.

[A] **ALTERATION.** Any construction or renovation to an existing structure other than a *repair* or *addition*. Alterations are classified as Level 1, Level 2 and Level 3.

[A] **REPAIR.** The restoration or renewal of any part of an *existing building* for the purpose of its maintenance or to correct damage.

multiple times and transported to different building sites.

[A] **REPAIR.** The reconstruction or renewal of any part of an *existing building* for the purpose of its maintenance or to correct damage.

❖ As indicated in Section 105.2.2, the repair of an item typically does not require a permit. This definition makes it clear: repair is limited to work on the item and does not include complete or substantial replacement or other new work. Note that the definition deals with both repair as it relates to maintenance and repairs as they relate to fixing damage inflicted on a building for various reasons. More specifically, the replacement of stairs due to daily wear and tear is related to the maintenance of a building; whereas a wall hit by a forklift or damage as a result of an earthquake would be considered damage as it relates to the definition.

SECTION 502 REPAIRS

502.1 Scope. *Repairs*, as defined in Chapter 2, include the patching or restoration or replacement of damaged materials, elements, *equipment or fixtures* for the purpose of maintaining such components in good or sound condition with respect to existing loads or performance requirements.

502.2 Application. *Repairs* shall comply with the provisions of Chapter 6.

502.3 Related work. Work on nondamaged components that is necessary for the required *repair* of damaged components shall be considered part of the repair and shall not be subject

shall be considered part of the *repair* and shall not be subject to the provisions of Chapter 7, 8, 9, 10 or 11.

SECTION 503

ALTERATION—LEVEL 1 (RENOVATION)

503.1 Scope. Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

503.2 Application. Level 1 *alterations* shall comply with the provisions of Chapter 7.

SECTION 504

ALTERATION—LEVEL 2 (ALTERATION)

504.1 Scope. Level 2 *alterations* include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

504.2 Application. Level 2 *alterations* shall comply with the provisions of Chapter 7 for Level 1 *alterations* as well as the provisions of Chapter 8.

SECTION 505

ALTERATION—LEVEL 3 (RECONSTRUCTION)

505.1 Scope. Level 3 *alterations* apply where the work area exceeds 50 percent of the *building area* in any 12-month time period.

Exception: *Alterations* limited to displays or showrooms in Group M occupancies.

505.2 Application. Level 3 *alterations* shall comply with the provisions of Chapters 7 and 8 for Level 1 and 2 *alterations*, respectively, as well as the provisions of Chapter 9.

Bill Kirk, PE
Chief Building Code Consultant



From: Kirk, Bill bill.kirk@ncdoi.gov
Subject: RE: [External] Request for Interpretation
Date: January 28, 2021 at 7:45 AM
To: Eamon Kromka info@genesismailbox.com
Cc: Chad Lockey chad@genesismailbox.com

BK

Eamon,

Yes substantial replacement would be an alteration. For clarity on the use of the two different Codes and Code years that I sent in my previous email. The 2015 IBC Codes are the base codes that the 2018 NC codes were developed from. The NC BCC ad-hoc committees adapted that code for use in NC. So **the commentary form the 2015 IBC Code and Commentary is also for the 2018 NC Codes.**

**Bill Kirk, PE
Chief Building Code Consultant**



**N.C. Department of Insurance
Office of State Fire Marshal**
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0025

From: Eamon Kromka <info@genesismailbox.com>
Sent: Wednesday, January 27, 2021 4:23 PM
To: Kirk, Bill <bill.kirk@ncdoi.gov>
Cc: Chad Lockey <chad@genesismailbox.com>
Subject: Re: [External] Request for Interpretation

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Thanks for the input on this Mr. Kirk, would it be safe for us to say that substantial work requiring a permit and substantial replacement of items in that trade should be considered as alteration and not repair? The main concern here is safety, it seems obvious that with this type of work whether it be considered repair or Alternation by local officials, safety requirements should be met. (Example fire protection, safety guarding on high decks that that have noncompliant openings, non compliant dryer vents that pose fire hazards, and other misc. items such as this.)

Substantial work scopes resulting from damage caused by Hurricane almost always require proper permitting, and would seem to fall into the Alteration definition.

Unfortunately the 2018 code makes this vague compared to what you provided from the 2015 code and commentary. Can we take the 2015 code and commentary definition as truth along with proper interpretation from you or are we restricted to the 2018 definitions and local interpretation?

Thanks for your time on this.



April 20, 2024

To Whom It May Concern,

Genesis Waterman LLC, operating under various trade names such as Genesis Custom Construction and Genesis Roofing and Restoration, is a Licensed General contracting company, regulated under NC General Statute 143-139 and NC GS160D-1110 (4b). Genesis is compelled to adhere rigorously to building code, law, governing standard, and regulations across all projects. As a company insured through Federated Mutual Insurance Company for liability, workers' compensation, commercial auto, and inland marine coverage, among other exposures and facets, Genesis must ensure strict compliance with those obligations and provisions.

Federated Mutual Insurance Company mandates that Genesis refrain from executing any repairs, alterations, or restoration projects that do not meet code compliance, manufacturer requirements, or trade standards and obligations without a specific waiver or liability release. Any deviation from this protocol would not only compromise liability but also contravene the Federated insurance policies.

Any failure of Genesis to uphold work standards or compliance with all governing law and regulation would be classified as substandard, defective, or improper workmanship, posing potential liabilities. Such substandard or improper workmanship falls outside the coverage of Genesis's General Liability policy, thereby exponentially heightening exposure to risks for both Genesis and its clients.

Furthermore, it is imperative that Genesis consistently execute all work with precision and excellence, while adhering to stringent standards, not only to mitigate the risks associated with improper or defective workmanship, but also for the safety and wellbeing of its employees and clients. Both Genesis and Federated Insurance are obligated to meticulous compliance, therefore any exceptions are generally non negotiable and would compromise the integrity of our operations.

We appreciate your attention to these critical matters of liability, safety, and adherence to regulatory requirements.

Respectfully,

A handwritten signature in black ink that reads "Drew Wessels".

Drew Wessels
Federated Insurance
Cell: 252-339-9575
Email: dtwessels@fedins.com

**CARTERET COUNTY PLANNING AND DEVELOPMENT DEPARTMENT
APPLICATION FOR BUILDING PERMIT**

Main Office: 3820 Bridges Street Suite B Morehead City, NC 28557 Phone: (252) 728-8545

Western Office: 701 Cedar Point Blvd. Cedar Point, NC 28584 Phone: (252) 222-5833

Email address: permits@carteretcountync.gov

PARCEL ID #: _____ DATE: _____

PROPERTY ADDRESS: _____

OWNER'S NAME: _____ PHONE#: _____ EMAIL: _____

AGENT'S NAME: _____ PHONE #: _____ EMAIL: _____

DESCRIPTION OF WORK: _____

EXISTING STRUCTURES: YES / NO _____ LOT SIZE: _____

CAMA PERMIT: YES / NO # _____ HEATED SF: _____ UNHEATED SF: _____

TYPE OF CONSTRUCTION: _____ NO. OF STORIES: _____ OCCUPANCY TYPE: _____

PROJECT COST: \$ _____ MANUFACTURED HOME (ZONE: _____) EXPOSURE D: YES / NO

#OF BED / BATHROOMS ____ / ____ GAS: YES / NO IF YES, HOW MANY APPLIANCES: ____ POWER COMPANY: _____

NEW SEPTIC: YES / NO NEW WELL: YES / NO ELEVATOR/CARGO LIFT: YES / NO PUBLIC WATER AVAILABLE: YES / NO

SEPTIC OPERATIONS PERMIT # / AUTHORIZATION TO CONSTRUCT #: _____

COMMENTS: _____

OWNER / AGENT SIGNATURE: _____

FOR OFFICIAL USE ONLY

CASE / PERMIT # _____

FIRM ZONE	BASE FLOOD ELEVATION	ELEVATION CERTIFICATE REQUIRED YES / NO	BASE FLOOD ELEVATION REQUIRED

30' CAMA BUFFER REQUIRED: YES / NO

ZONING DISTRICT: _____ MAXIMUM BUILDING HEIGHT _____

SETBACKS: PRINCIPAL STRUCTURE: _____ FRONT _____ REAR _____ SIDE _____ SIDE ON CORNER

ACCESSORY STRUCTURE: _____ FRONT _____ REAR _____ SIDE _____ SIDE ON CORNER

TYPE OF BUSINESS: _____

COMMENTS: _____

Emerald Isle

Bogue

Cape Carteret

Cedar Point

County

Indian Beach

Peletier

The applicant has certified that the information shown on the application, plans and specifications is correct and true to his/her knowledge. All work performed shall comply with the North Carolina State Building Code, Flood Damage Prevention Ordinance of Carteret County and all other regulations, rules and ordinances as applicable. Misinformation, lack of information, or statements made in error could result in revocation of all permits and subject the owner/agent to litigation in the process.

From: [Rittlinger, David B](#)
To: "Anna Choi"; [Eamon Kromka](#)
Cc: [Susan Sullivan](#)
Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation
Date: Tuesday, April 21, 2026 8:27:00 AM
Attachments: [image001.png](#)

Anna,

Good morning.

I hope you are well.

I concur with your conclusion.

All contractors licensed or not performing work requiring building permits or not are required to follow the North Carolina State Building Code per NCGS Chapter 143, Article 9 for buildings and structures within the scope of the North Carolina State Building Code as defined in NCGS 143-138.

https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-138.html

The construction contract between the owner and the contractor defines the scope of work. If the scope of work involves non-compliance with the North Carolina State Building Code and the contractor proceeds with non-complaint work, they are in violation of state law.

Thank you for the prompt and thorough response to this question.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

From: Anna Choi <Anna.Choi@nclbgc.org>
Sent: Monday, April 20, 2026 3:17 PM
To: Rittlinger, David B <david.rittlinger@ncdoi.gov>; Eamon Kromka <info@genesismailbox.com>
Cc: Susan Sullivan <susan@nclbgc.org>
Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

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David,

This seems more to be a best practices/scope of work question and not a building code issue. I do not believe that the building code itself requires a general contractor to fix unanticipated structural conditions that are beyond the scope of work that the contractor and property owner originally agreed to. HOWEVER, I believe best practices would require a licensed GC who discovers unsafe/noncompliant structural conditions to notify the owner (preferably in writing) and ask the owner if he/she wishes to modify the scope of work/amend the contract so that the contractor could fix the structural problems in order for the roofing work to continue.

If the owner does not wish to expand the scope of the project to include repair of the structural conditions, that is their choice. However, the Board would take the position that it would be misconduct if the GC continues to perform roofing work on a structure that the GC knows is not code compliant.

Let me know if you have any follow-up questions.

Anna



Anna Baird Choi

Executive Director and General Counsel

North Carolina Licensing Board for General Contractors

919-571-4183 x210, office

919-788-5341, fax • anna.choi@nclbgc.org

5400 Creedmoor Road, Raleigh, NC 27612

nclbgc.org

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From: Rittlinger, David B <david.rittlinger@ncdoi.gov>

Sent: Monday, April 20, 2026 2:17 PM

To: Eamon Kromka <info@genesismailbox.com>; Anna Choi <Anna.Choi@nclbgc.org>

Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

Anna,

Good afternoon. I hope you are well. Please read below as I believe this is more of a contractor license question than a code question.

When reroofing exposes unsafe or noncompliant structural conditions, what does the North Carolina State Building Code require the licensed contractor to do?

Let me know if you have any questions.

Thank you for any assistance you may be able to provide.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

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From: Rittlinger, David B
Sent: Monday, April 20, 2026 2:05 PM
To: 'Eamon Kromka' <info@genesismailbox.com>
Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

Eamon,

Good afternoon.

A material or system to continue to be used as long as it can be shown that the material or system is not detrimental to the health and public safety by the code official. Most roof replacements do not require permits and so a code official is not involved. The contractor and owner negotiate this compliance process when a code official is not involved, which is most of the time in roof replacements.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

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<https://codes.iccsafe.org/codes/north-carolina>

From: Rittlinger, David B
Sent: Monday, April 20, 2026 1:52 PM
To: 'Eamon Kromka' <info@genesismailbox.com>
Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

Eamon,

Good afternoon.

This is a contractor license question and not a code question.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

Link to free view of 2018 NC Codes
<https://codes.iccsafe.org/codes/north-carolina>

From: Eamon Kromka <info@genesismailbox.com>

Sent: Monday, April 20, 2026 1:00 PM

To: Rittlinger, David B <david.rittlinger@ncdoi.gov>

Subject: Re: [External] Fwd: NCDOI Engineering and Codes Division REQUEST for Clarification/Interpretation

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Mr. Rittlinger,

Thank you for your response, and sorry for my delayed response. I got your voicemail also, but I have been unavailable until today.

Respectfully, Genesis must clarify that this request is not about insurance coverage, valuation, or whether a homeowner may owe costs beyond insurance proceeds. It is a **code-enforcement and life-safety question**. Our original submission expressly requested clarification on the interaction of the NCRC and NCEBC during reroofing, and on the contractor's duty when unsafe or noncompliant conditions are exposed after roof removal.

The issue is straightforward and recurring in the field: once a roof covering or other relevant building assembly is removed and the structural roof system is exposed, a licensed contractor cannot ignore unsafe, noncompliant, or unrated components simply because an insurer, appraiser, or engineer prefers a narrower scope. Our submission explained that contractors are being met with selective reliance on NCRC §102.7 and NCEBC §602.1 to support retention of existing materials, even where dangerous conditions and structural compliance concerns are present.

This is precisely why clarification is needed. The informal Carteret County building inspectors email cited by opposing parties states that NCRC §102.7 refers users to the Existing Building Code, that reroofing is governed by NCEBC Chapter 7, and that the residence is not required to be brought up to the current Residential Code. That position is now being used in active disputes to limit code-compliant work scopes.

Genesis is not asking DOI to decide what insurance should pay. Genesis is asking DOI to answer the code question that contractors, owners, engineers, and local officials are already confronting: when reroofing exposes unsafe or noncompliant structural conditions, what does the North Carolina State Building Code require the licensed contractor to do?

For clarity, the questions presented are:

1. Does NCRC §102.7 function only as an administrative reference to the NCEBC, rather than displacing the technical reroofing and structural requirements of the Residential Code?
2. May NCEBC §602.1 be used to justify retaining unrated, unapproved, or otherwise noncompliant structural roof components?
3. When unsafe or deficient conditions are exposed during reroofing, do NCEBC §606.1, NCEBC §706.2, and NCRC §R908.2 require correction before the roof system is completed?
4. Are informal email opinions from local officials non-binding for purposes of statewide code interpretation under NCGS §143-139(b)?
5. Are contractors who act in good faith to eliminate unsafe or noncompliant conditions are fulfilling their statutory obligations under NCGS §§87-11 and 160D-1110.

This is a matter of statewide importance. If this question is left unanswered, contractors across North Carolina are left in an untenable position: either proceed with corrective work required for safety and code compliance, or defer to insurer-driven scope limitations and risk leaving unsafe conditions in place. That uncertainty affects not only this project, but future projects wherever existing structural deficiencies are uncovered.

Genesis respectfully requests a direct response to the code questions presented. If your office believes any portion of the request should be narrowed for formal interpretation, please identify which specific question or code section should be restated, and we will resubmit immediately. But respectfully, the issue should not be redirected into an insurance-coverage discussion, because that is not the question presented.

Thank you for your time and attention.

Respectfully,

[Redacted signature area]

On Wed, Apr 15, 2026 at 1:11 PM Rittlinger, David B <david.rittlinger@ncdoi.gov> wrote:

Eamon,
Good afternoon.
Please read below email from Friday. I also left you a voice message.
Please kindly respond at your earliest convenience.
Thank you

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

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<https://codes.iccsafe.org/codes/north-carolina>

From: Rittlinger, David B
Sent: Friday, April 10, 2026 1:43 PM
To: Eamon Kromka <info@genesismailbox.com>
Subject: RE: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

Eamon,
Good afternoon. I hope you are well.
I received the attached formal interpretation request on 11/10/25 that I am finally able to look at.

Has this conflict been resolved? If so, do you wish to withdraw the request?
If not, I am having a hard time figuring out what you are asking for a formal interpretation on.

Included in the Introduction and Purpose, the following appears to be some sort of request, but it is unclear to me what you are asking for:

Genesis Custom Construction is a licensed North Carolina General Contractor. We respectfully request a formal clarification under NCGS §143-139(b) regarding (i) the interaction between the North Carolina Residential Code (NCRC) and the North Carolina Existing Building Code (NCEBC) on reroofing of existing one- and two-family dwellings, and (ii) the contractor's duty to act when unsafe or noncompliant conditions are discovered after a roof covering removal.

Of note, what insurance covers versus what the code requires are most often different and thus insurance covers a portion of the cost and the owner covers the rest, as you likely know firsthand. The Appendix E form contains a statement and not a question.

Thank you for any additional information you can provide.
Let me know if you have any questions.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
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919.647.0008

david.rittlinger@ncdoi.gov

Link to free view of 2018 NC Codes
<https://codes.iccsafe.org/codes/north-carolina>

From: Eamon Kromka <info@genesismailbox.com>
Sent: Monday, November 10, 2025 1:24 PM
To: Rittlinger, David B <david.rittlinger@ncdoi.gov>
Cc: Dittman, Daniel E <dan.dittman@ncdoi.gov>; Yip, Pak <pak.yip@ncdoi.gov>; Senada, Hany A <hany.senada@ncdoi.gov>; Key, Robert L <robert.key@ncdoi.gov>; Schooler, Pamela L <pam.schooler@ncdoi.gov>
Subject: Re: [External] Fwd: NCDI Engineering and Codes Division REQUEST for Clarification/Interpretation

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Thank you Mr. Rittlinger,
Please see the attached Appendix E form, and copies of our detailed letter and Exhibits. I understand that this is a complex situation, and that our letter outlines several potential conflicts requiring interpretation. I appreciate your time and involvement and look forward to answering any other questions you may have.

Respectfully,

On Thu, Nov 6, 2025 at 12:17 PM Rittlinger, David B <david.rittlinger@ncdoi.gov> wrote:

Eamon,

Good afternoon. I hope you are well.

Please complete the Appendix E at the link below and return a copy to me via email.

<https://www.ncosfm.gov/appeals-and-formal-interpretations>

Let me know if you have any questions.

David Bruce Rittlinger, PE, LEED AP
Division Chief – Codes and Interpretations



North Carolina
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.647.0008

david.rittlinger@ncdoi.gov

Link to free view of 2018 NC Codes

<https://codes.iccsafe.org/codes/north-carolina>

From: Eamon Kromka <info@genesismailbox.com>

Sent: Thursday, November 6, 2025 11:47 AM

To: Rittlinger, David B <david.rittlinger@ncdoi.gov>; Dittman, Daniel E <dan.dittman@ncdoi.gov>; Yip, Pak <pak.yip@ncdoi.gov>; Senada, Hany A <hany.senada@ncdoi.gov>; Key, Robert L <robert.key@ncdoi.gov>; Schooler, Pamela L <pam.schooler@ncdoi.gov>

Subject: [External] Fwd: NCDOT Engineering and Codes Division REQUEST for Clarification/Interpretation

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Dear Engineering & Codes Division Team,

Genesis Custom Construction respectfully submits the attached **formal request for clarification** under **NCGS §143-139(b)** regarding the interaction between the **North Carolina Residential Code (NCRC)**

and the **North Carolina Existing Building Code (NCEBC)** as they apply to reroofing work on existing dwellings.

This request arises from the **Horton Residence restoration project (Atlantic, NC)**, where conflicting interpretations have been advanced by insurer-retained parties concerning the contractor's duties and applicable code thresholds and technicalities during roof replacement and structural remediation.

To facilitate review, we have summarized the key clarification points below:

Requested Clarifications

- **Code Interaction:** Confirm that NCRC §102.7 functions as an administrative cross-reference to the NCEBC and does not authorize the retention of unsafe or noncompliant materials.
- **Material Compliance:** Clarify that NCEBC §602.1 applies only to previously approved and safe materials, and cannot be used to justify retention of unapproved or unrated components (e.g., non-APA-rated plywood).
- **Unsafe Conditions:** Affirm that when unsafe or deficient conditions are discovered during reroofing, corrective action is required under NCEBC Chapter 6 and relevant NCRC Chapters 9 and 45, regardless of insurer or appraisal delays.
- **Authority and Roles:** Confirm that only licensed contractors, engineers, or code officials acting under formal authority may determine field compliance—while adjusters, appraisers, or insurers lack such authority.
- **Informal Opinions:** Reaffirm that informal or email-based code statements from local officials are non-binding and cannot override formal code provisions or NCDOI interpretations.
- **Contractor Duty:** Clarify that contractors who act in good faith to eliminate unsafe or noncompliant conditions are fulfilling their statutory obligations under NCGS §§87-11 and 160D-1110.

Supporting exhibits include engineering reports, code citations, prior NCDOI clarifications, and documentation establishing the technical and safety context for this request.

We respectfully request written guidance or formal interpretation confirming the above points to ensure uniform code application and enforcement consistency statewide.

Thank you for your time and consideration. Please don't hesitate to contact me should additional information or documentation be required.

Respectfully,

----- Forwarded message -----

From: **Eamon Kromka** <info@genesismailbox.com>

Date: Wed, Nov 5, 2025 at 5:09 PM

Subject: NCDOT Engineering and Codes Division REQUEST for Formal Clarification

To: Ron Hicks <ron@stormpropa.com>, Harrison Jones <harrisonjones@earthlink.net>, <pjhorton7826@gmail.com>

Hello Mr. Horton, Mr. Hicks, and Mr. Jones,

Attached are documents that we are sending off to the NCDOT Engineering and Codes division this afternoon in reference specifically to the work at 176 Salter Dr.

We also intend to submit a formal review and complaint to the NC Board for Engineer licensing regarding Mr. Wright's report.

Please let me know if you have any questions.

Respectfully,