

**North Carolina Department of Labor
Occupational Safety and Health Division**

Raleigh, NC

Field Information System

Operational Procedure Notice 123T

Subject: Special Emphasis Program for Construction Activities

A. Purpose.

This Operational Procedure Notice (OPN) establishes a North Carolina Occupational Safety and Health (OSH) Division special emphasis program (SEP) to decrease fatalities related to the construction industry, specifically North American Industry Classification System (NAICS) sectors 236 - 238. This SEP will also focus on hazards associated with operations that involve tower and mobile cranes.

B. Background.

This SEP was established in Federal Fiscal Year (FFY) 1999 in accordance with N. C. General Statute (NCGS) 95-136.1 - Special Emphasis Inspection Program due to a high rate of construction fatalities in North Carolina. In FFY 1998, construction fatalities accounted for 44.4% of all workplace fatalities in North Carolina. The five counties chosen for the original SEP experienced more than one incident resulting in a construction fatality and accounted for 62.5% of all construction fatalities for that FFY. Each year, the SEP has been updated to include counties that have had more than one incident resulting in a construction fatality. Construction fatalities continue to occur, accounting for 41% of all fatalities in North Carolina in FFY 2010, 31% in FFY 2011, 28% in FFY 2012, 21% in FFY 2013, 43% in FFY 2014, 36% in FFY 2015, 33% in FFY 2016, 34% in FFY 2017, and 49% in FFY 2018. Fatality rates, as reported by the Census of Fatal Occupational Injuries (CFOI), showed that the fatality rate for construction is significantly higher than the overall fatality rate for all industries.

2014 – Overall Fatality Rate (3.1); Construction Fatality Rate (10.8)

2015 – Overall Fatality Rate (3.4); Construction Fatality Rate (10.5)

2016 – Overall Fatality Rate (3.7); Construction Fatality Rate (8.9)

In FFY 2006, additional counties were added to the SEP. These counties were identified as High Activity Counties (HACs) due to the specific county issuing greater than 500 residential construction building permits during the previous calendar year based on U.S. Census Bureau Building Permit Data. HACs remain in the SEP and are updated each year based on the U.S. Census Bureau Permit Data. In FFY 2013, the selection criteria was amended to include any counties that had issued more residential construction building permits than the state average (based on all 100 counties) instead of the 500 residential permits. This was to ensure that OSH Division resources are used in the most efficient manner possible to reduce hazardous activities across the state. In FFY 2018, construction-related fatalities in multiple-fatality counties accounted for 14% of all workplace fatalities, HACs accounted for 14%, and fatalities in non-SEP counties accounted for 18%. The statewide fatality rates for construction were consistently at least twice as high as the overall fatality rate for all industries.

North Carolina also experienced 13 crane-related fatalities between FFY 1998 and FFY 2018 and the industry has suffered multiple fatal crane accidents nationwide. Specifically, tower cranes have come under scrutiny for safe operations because of fatalities and injuries associated with collapses on construction sites.

From FFY 2009 through FFY 2018, the “Big 4” hazards: struck-by, caught-in/between, fall from elevation and electrical/shock, accounted for 90% of all construction fatalities. Construction sites with observed hazards as well as activities that would typically be associated with the “Big 4” hazards will be given priority for immediate inspection.

Additionally, 131 of the 146 construction fatalities in FFY 2009 through FFY 2018 related to the following hazards:

1. 63 falls = 43% (related conditions: scaffold, roof work, ladders, aerial lifts, scissor lifts, forklifts with platforms)
2. 44 struck-bys = 30% (related conditions: motor vehicles, cranes, forklifts, off-road vehicles)
3. 8 caught-in/between = 5% (related conditions: excavations, cranes – mobile and tower, heavy equipment)
4. 16 electrocutions = 11% (related conditions: overhead power lines, evidence of underground power lines)

C. Scope.

Twenty-four (24) counties are included in this SEP for FFY 2019. This includes multiple fatality counties (Forsyth, Guilford, Orange, Mecklenburg, Pitt, Robeson, Wake, and Wilkes), as well as HACs (Alamance, Brunswick, Buncombe, Cabarrus, Chatham, Cumberland, Davidson, Durham, Gaston, Iredell, Johnston, Lincoln, Moore, New Hanover, Onslow, and Union). (See section D. below for the county selection and removal criteria.)

Programmed and unprogrammed construction activity in non-SEP counties is not covered by this SEP (unless the activity includes the operation of tower or mobile cranes as listed below). Compliance Safety and Health Officers (CSHOs) will refer to FOM Chapter XII – Construction for inspection guidance.

This SEP scope will also include hazards associated with the operation of tower and mobile cranes statewide (in SEP and non-SEP counties). This will be an ongoing effort for inspection of mobile cranes, tower cranes and derricks at job or work sites throughout the state. The primary focus will be to increase crane inspection activity, training and outreach efforts, and consultative services in this area.

Mobile cranes include truck-mounted cranes, crawler cranes, locomotive cranes, wheel-mounted cranes and articulating boom cranes. Tower cranes include hammerhead tower cranes, fixed tower cranes, climber tower cranes, luffing boom tower cranes, self-erector tower cranes and mobile tower cranes.

D. Selection and Removal Criteria.

The following criteria will be used to add or delete counties from the SEP.

1. Counties will be added to the SEP when:
 - a. There is more than one incident that resulted in a construction fatality in the previous federal fiscal year. (A county will not be added when a single incident occurs resulting in two or more fatalities.)
 - b. More residential construction permits than the statewide average are issued.

2. Counties that experienced more than one incident resulting in a construction fatality will remain on the SEP list for at least three consecutive federal fiscal years. The Construction SEP committee will conduct an annual review to add or remove counties from the SEP list on or before September 15th of each federal fiscal year. New counties may be added and counties may be recommended to the leadership team for removal if three federal fiscal years have passed and no construction fatalities have occurred in the county for two consecutive federal fiscal years.
3. An HAC will remain on the SEP list for at least one year. The committee will conduct an annual review of U.S. Census Bureau Building Permit Data for the most recent reporting year on or before June 15th of each federal fiscal year. The committee will take the total number of building permits issued and divide it by the total number of counties in North Carolina (100) to obtain an average number of building permits across the state. Any North Carolina county that has more than the statewide average will be listed as an HAC. New counties may be added and counties currently on the list may be recommended to the leadership team for removal if the number of new residential building units has dropped below the state average for the most recent reporting year.
4. The committee will submit their recommendations to the leadership team for approval before the beginning of a new federal fiscal year so that changes can be incorporated in the annual strategic management plan.

E. **Action.**

This OPN provides for special emphasis inspections in accordance with NCGS 95-136.1(b)(3) due to a high rate of construction work-related deaths. Compliance bureau chiefs and district supervisors will ensure that procedures established in this OPN are adhered to when scheduling and conducting inspections related to this OPN.

CSHOs will use the guidance in federal standard interpretation STD 03-11-002 – Compliance Guidance for Residential Construction to address problems unique to residential type construction work. This STD describes and clarifies the fall protection measures that are acceptable in North Carolina for compliance with 29 CFR 1926.501(b)(13) – Residential Construction.

CSHOs will reference CPL 02-01-057 – Compliance Directive for the Cranes and Derricks in Construction Standard for citation guidance when inspecting cranes and derricks used in construction.

F. **Inspection Scheduling.**

Inspections will be scheduled following procedures outlined in FOM Chapter II – Compliance Programming and below, in paragraph H. – Compliance Inspection Activity.

Additionally, on a monthly basis, the Planning, Statistics, and Information Management (PSIM) Bureau will obtain crane construction information from the Federal Aviation Administration website to provide crane construction activity (mobile and tower cranes) data to assist with the location of crane activity for inspection assignment. The information will be distributed to the construction SEP team leader and to the compliance bureau chiefs, who will relay them to the respective district supervisor for assignment. If there is information in these reports that is under the jurisdiction of federal OSHA, PSIM will forward that information to the state plan coordinator for dissemination to the regional OSHA office.

G. **Training and Consultative Activity.**

The Education, Training and Technical Assistance (ETTA) and Consultative Services Bureaus (CSB) will provide training and consultative efforts in support of this SEP. OSH Division personnel will continue to be properly trained in the recognition of hazards associated with construction sites and the operation of cranes.

H. **Compliance Inspection Activity.**

Each district office will conduct inspections in support of this SEP by prioritizing inspection activity in SEP counties.

1. **Inspection activity.**

- a. **Unprogrammed activity in SEP counties.** Any unprogrammed activity including complaints, referrals (for self-referrals, see paragraph H.1.b. below) and fatalities/catastrophes on construction sites in SEP counties begin as partial scope inspections. CSHOs will refer to FOM Chapter XII - Construction for general information regarding construction inspections and will refer to FOM Chapter VIII – Fatality and Catastrophe Investigations and FOM Chapter IX – Complaints, Referrals, and Accidents for additional information regarding inspection scope and possible scope expansion.
- b. **Programmed planned inspections in SEP counties.** Self-referral (drive-by) construction inspections and inspections generated from the U.S. Department of Labor: OSHA Construction Targeting Application inspection site list that occur in counties under this SEP will be classified as programmed planned inspections per the definition of programmed planned inspections found in FOM Chapter II – Compliance Programming, paragraph B.1. – Inspection/Investigation Types. Programmed planned inspections will begin as comprehensive in scope. Since self-referrals in SEP counties are programmed planned inspections, no referral worksheet (Referral Report) will be completed. However, CSHOs must document the circumstances surrounding the self-referral in the narrative.

When a CSHO observes or receives information regarding an active construction site in an SEP county, the CSHO and their supervisor will determine if the site should be immediately inspected. Such determination will be based on, but not limited to, the following criteria:

- i. The resources available for inspecting the site.
 - ii. Observation of potentially hazardous activities related to fall hazards, struck-by hazards, caught in/between hazards, and/or electrical hazards (such as: scaffolding, roofing work, framing, working near power lines, ladder usage, excavations, mobile equipment usage).
 - iii. Stage of construction (such as: substantially complete projects in the finishing “punch list” phase of the project may not be deemed priority for immediate inspection).
- c. **Focused inspections.** CSHOs will follow the guidance in the most current revision of OPN 96 – Focused Inspections, in Construction when conducting

any comprehensive inspection to determine whether or not the scope of the inspection will remain comprehensive or will be reclassified as a focused inspection. This includes inspections that begin as comprehensive (programmed planned) or inspections that begin as partial scope inspections, but are later expanded to comprehensive per guidance in FOM Chapters VIII and IX.

- d. Inspection priority. The compliance bureau chiefs and supervisors should ensure that a higher percentage of the construction sites inspected are in the counties included in this OPN.

Priority will be given to sites with plain sight hazards, crane activity, or the observation of potentially hazardous activities (activities that include the "Big 4": fall hazards, struck-by hazards, caught-in/between hazards, and/or electrical hazards).

I. **Recording and Tracking.**

The OSHA-1 form for construction inspections conducted in the targeted counties covered by this SEP and all crane-related inspections throughout the state as a result of this SEP will be coded as "CONSTRUCTION SEP" under the "Strategic Plan Activity Description" on the "Emphasis/Initiatives" tab.

J. **Applicable Standards.**

All applicable standards including those contained in 29 CFR 1926 – Construction standards, 29 CFR 1910 – General Industry standards and NCGS 95.129(1), commonly referred to as the "General Duty Clause."

K. **Evaluation of Program.**


The bureau chiefs will submit a monthly evaluation report to the assistant director to include the following:

1. East and West Compliance.
 - a. Number of inspections in SEP counties – East.
 - b. Number of inspections in SEP counties – West.
 - c. Number of inspections in HACs statewide.
 - d. Number of construction fatalities statewide.
 - e. Number of construction fatalities in multiple-fatality ("affected") counties.
 - f. Number of construction fatalities in HACs.
 - g. Fatality rates statewide for multiple fatality counties and HACs.
2. Consultative Services.
 - a. Description of outreach efforts implemented for construction.
 - b. Number of consultative construction visits conducted.
 - c. Number of construction hazards abated.
 - d. Number of safety and health programs improved or implemented in construction.


3. Education, Training and Technical Assistance.
 - a. Description of outreach efforts implemented for construction.
 - b. Assessment of the impact of outreach efforts in construction.
 - c. Number of training sessions conducted in construction.
 - d. Number of employers and employees affected in construction.
 - e. Standard promulgation recommendations in construction.
 - f. Number of safety and health programs improved or implemented in construction.
4. Planning, Statistics and Information Management.
 - a. Manage the Performance Indicator Report (PIR) on a monthly basis as it pertains to this OPN.

L. **Effective Date.**

OPN 123S is canceled. This OPN is effective on the date of signature. It will remain in effect until revised or canceled by the director.



Ted Hendrix
SEP Team Leader



Kevin Beauregard
Director



Date of Signature