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**NAVY PUBLIC WORKS CENTER
NORFOLK, VIRGINIA
UTILITIES DEPARTMENT**

STANDARD OPERATING PROCEDURE / JOB HAZARD ANALYSIS

TITLE

TREE TRIMMING FROM BUCKET TRUCK

**PROCEDURE NUMBER
WC 624 HVE 006**

**DISTR:
601A
610
620
WC 624**

SIGNED: _____ (DATE)

APPROVED: _____ (DATE)

SAFETY PROFESSIONAL: _____ (DATE)

MANAGEMENT OFFICIAL: _____ (DATE)

DATE: _____ REVISION DATE: _____

TREE TRIMMING FROM BUCKET TRUCK

Purpose:

Trim trees around energized overhead conductors. The trimming will be accomplished from a bucket truck.

Potential Energy Sources:

1. Energized conductors within close proximity.
2. Deenergized conductors which have not been properly grounded.

Tools and PPE:

Tools: Bucket truck, rubber line hoses, insulating blankets, insulator hoods, chain saw, and cable cutters, chipping machine.

PPE: Rubber insulating gloves, rubber insulating sleeves, Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, ear protection device, safety harness, orange vest, and back brace if required by back injury prevention and control program.

The class of rubber gloves and sleeves will depend on the exposure voltage as per the following: Class 0 - up to 1,000 volts, Class 1 - up to 7,500 volts, Class 2 - up to 17,000 volts, Class 3 - up to 26,500 volts, Class 4 - up to 36,000 volts.

References:

1. PWC Occupational Safety and Health Program Manual, PWCNORVAINST 5100.33E
2. SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck
3. Occupational Safety and Health Standards for General Industry (29 CFR PART 1910): Subpart I, Personnel Protective Equipment; Subpart R, Electrical Power Generation / Transmission / Distribution; Subpart S, Electrical
4. NFPA 70 E, Approach Distances To Exposed Energized Electrical Conductors and Circuit Parts
5. ANSI C2-1987, National Electrical Safety Code
6. SOP# HVE 12, Traffic Control Devices
7. Electrical Transmission and Distribution Safety Manual, P-1060
8. The Lineman's and Cableman's Handbook, 5th ED

Procedures:

1. Set up bucket truck. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger truck for details.
2. Inspect and adjust trimming tools.
3. When operating a bucket truck the following safety rules will be followed.
 - a) Only an authorized person, one with a current government license to operate an aerial lift, will operate the bucket.
TREE TRIMMING FROM BUCKET TRUCK
 - b) Do not use the bucket truck if winds exceed the truck manufacture's specified limit.
 - c) Do not perform energized work in wet weather, unless an emergency.
 - d) Personnel in bucket will wear a safety harness with a lanyard attached to the boom or bucket.
 - e) Do not exceed the bucket's weight limitations.
 - f) Stand firmly on the floor of the bucket with both feet. Do not sit on the bucket's edge or use planks, ladders, or other such devices.

4. Insulate all energized overhead circuits which are within 3 feet of work area. Insulate any deenergized overhead circuits that have not been properly grounded per Lockout and Tagout procedures. Personnel in the bucket shall wear Nomex coveralls, Nomex hood, safety glasses, safety shoes, insulating rubber gloves and sleeves, and hard hat.

5. Trim trees. Personnel in the bucket will wear Nomex coveralls, hard hat, safety shoes, safety glasses, insulating rubber gloves, insulating rubber sleeves, ear protection, and long sleeve shirts. Ground personnel will wear hard hats, work gloves, safety shoes, safety glasses, and orange vests if work is adjacent to a road or in a parking lot. Personnel in the bucket will be alert to chain saw movements. Ground personnel will remain clear of the trimming operation while in progress. Limbs will be lowered with a rope when there is a danger that their free fall will cause property damage or personal injury. Raise and lower tools via a hand line. Do not use axes or hatchets aloft. Tree shall be trimmed to create a 5 to 10 foot clearance from an overhead conductor.

6. Remove insulation from the overhead conductors. The insulation is removed in reverse order of placement. Personnel in the bucket shall wear Nomex coveralls, Nomex hood, safety glasses, safety shoes, insulating rubber gloves and sleeves, and hard hat.

7. Clean up and cut limbs as necessary. Personnel will wear long sleeve shirts, hard hats, safety shoes, work gloves, safety glasses, and orange vests if work is adjacent to a road or in a parking lot. If necessary set up proper traffic control as per SOP# HVE 12, Traffic control devices, to cut limbs with a chain saw or chipping machine if work is adjacent to a road or in a parking lot. Place barricades around clean up area when using chain saws and chipping machines.

8. Secure bucket truck. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck, for details.