EQUIPMENT LIGHTING, MARKING AND CONSPICUITY POLICY

POLICY STATEMENT:
It is the policy of the Ohio Department of Transportation to assure the districts and Central Office maintain a uniform lighting array, equipment lighting, marking and conspicuity. It is ODOT’s policy to maximize safety when vehicles and the work force are in highway construction and maintenance operations.

The policies for equipment lighting are:

1. Equipment lighting and marking will be arrayed in such a way to easily distinguish ODOT vehicles. Distinguishing lighting arrays, particularly on dump trucks, allows the public to quickly identify vehicles parked or working in highway maintenance, snow removal and construction zones.

2. All safety lighting will be flashing lights, amber in color, composed of photo strobes or LED’s or a combination of both. Photo strobes discharge a high intensity flash that can be readily seen. Photo strobes have proven to be reliable and inexpensive to buy. LED systems are low power draw and high longevity, although not as intense or with as wide a field of vision as photo strobes. The amber color lighting is to differentiate between ODOT vehicles and emergency and safety services vehicles (e.g., police, fire, emergency medical) and as required in the Ohio Revised Code. {Ref.: ORC 4513.17 (C)(1)}

3. The specific number of safety lighting devices per piece of equipment and the location of such devices comprises the minimum standard of 360 degrees of visibility on a horizontal plane when a vehicle, associated car or passenger vehicle is used in the maintenance, repair, construction and snow removal activities within highway right-of-ways. The 360 degree horizontal visibility will allow the vehicle safety lighting to be seen regardless of the angle of the vehicle in relation to the direction of the traveling public.

4. Dump truck and ancillary equipment safety lighting will be the responsibility of, and issued from, the Office of Equipment Management which will determine the lighting styles and arrangements. The dump truck lighting will conform to EMS Procedure EIP2022, Dump Truck Lighting. The lighting array used on ODOT dump trucks is the result...
of testing several arrays to determine the pattern which provides a 360 degree lighting pattern. By installing this pattern of lighting, a signature provides a unique 360 lighting pattern provided for the traveling public to easily identify an ODOT dump truck during limited and night time visibility.

5. All other equipment safety lighting will be the responsibility of the districts and will conform to the specifications set forth in this policy. Safety lighting will be positioned on the equipment so as to not interfere with the ability to see standard vehicle lighting.

6. Vehicle marking will be consistent to allow for maximum public awareness. EMS Procedure EIP-2021, Equipment Color, Marking and Identification, is on the OEM intranet website and will be followed to ensure consistent marking of all ODOT equipment.

**AUTHORITY:**
Sections 4513.03 through 4513.18 (Vehicle Lighting), 5501.01, 5501.03, 5501.31 of the Ohio Revised Code.

**REFERENCES:**
- Ohio Manual of Uniform Traffic Control Devices
- Work Zone Traffic Control Standard for ODOT Operations, AS 7A-1
- EMS Guideline EIP-2021
- EMS Guideline EIP-2022
- Federal Motor Vehicle Safety Standard 108

**SCOPE:**
This policy is applicable to all field districts, regions, divisions and offices within the Ohio Department of Transportation. Prime responsibility lies with personnel having charge for the management of equipment in their area, including but not necessarily limited to District Highway Managers, Roadway Service Managers, Equipment Managers and County Managers.
BACKGROUND AND PURPOSE:
This policy provides a set of standards for equipment lighting, marking and identification. This is to ensure a statewide consistent identification of ODOT owned vehicles and equipment to provide a greater margin of safety by providing easy identification. By providing a signature lighting arrangement for dump trucks and a minimum standard for other equipment, this policy will provide a greater margin of safety during snow and ice control and in work zones and provide a professional public image for the traveling public.

DEFINITIONS:
Strobe Light: A warning light consisting of an arc-discharge flash lamp inside an enclosure with an amber lense or filter and a high voltage power supply.

LED: Light Emitting Diode

TRAINING:
Training will be limited to that which is required to properly install and maintain strobe light systems. Training will be provided by the lighting vendor or manufacturer.

FISCAL IMPACT:
Implementation of this policy will have fiscal impact on the district dependent on the safety lighting as required by the Office of Equipment Management (for dump trucks) and the district management for other equipment. The fiscal impact will vary depending on the amount and type of lighting. The cost of safety lighting ranges from $100 to $600 per vehicle and affects approximately 8000 pieces of fleet equipment.