

OSH INFORMATION MEMORANDUM 81-X-54

TO: All OSH Directors, Supervisors, and Compliance Personnel

FROM: William M. Lybrand, Director of OSH

SUBJECT: Approved Wiring and Electrical Equipment for Paint Spray Rooms in Department of Education's Bus Maintenance Shops Throughout the State.

DATE: October 16, 1981

PURPOSE

The purpose of this memorandum is to detail the proper steps the Department of Education can take to ensure compliance with the electrical requirements for their paint spray rooms in each bus maintenance shop throughout the state.

BACKGROUND

Numerous bus maintenance shops of the Department of Education have been subjected to compliance inspections. Most of these shops have been cited for failure to have proper wiring and electrical equipment in the designated hazardous locations of the paint spray rooms. As part of a settlement agreement regarding several of these shops, the Department of Labor agreed to provide technical assistance in finding a permanent solution to this problem.

Interpretation of the Agreed Permanent Solution.

The permanent solution to the wiring and electrical equipment in the paint spray room of each bus maintenance shop agreed upon consists of the following:

1. The existing open front lighting fixtures in the paint rooms of these shops will be replaced with enclosed lighting fixtures (generally enclosed quartz lights will be used). The new fixtures shall be installed at least four (4) feet above the top of the buses so as to be outside the three-foot hazardous location existing above the top of the bus. (In most cases three (3) quartz type lighting fixtures will be suspended from the steel structure on each side of the paint room; but the exact number shall be left to the option of the Department of Education.)
2. In most of these shops, the existing exhaust fan motors in the paint rooms are of the explosion-proof type. Where they are not, such motors must be replaced with an explosion-proof type.
3. Also in most of these shops, the existing starters serving the exhaust fan motors in the paint rooms are of the explosion-proof type and are generally located below the exhaust fans on the same wall. Where they are not of the explosion-proof

- type, such starters must be replaced with an explosion-proof type or moved outside of the paint room.
4. All receptacles in the existing paint rooms which are not of the explosion-proof type must be replaced with an explosion-proof type or removed. Seals must be provided ahead of each receptacle. Where general-purpose type receptacles are installed in sheet-metal boxes, such boxes must be removed or be replaced with one-piece cast metal or plastic boxes approved for hazardous locations. (In general, the Department of Education has decided to provide one (1) explosion-proof type receptacle on each side of the paint room, and blank over the existing casted metal boxes with gasketed covers.)
 5. All lighting switches within the paint room must be replaced with explosion-proof types where they are of the general-purpose type. Seals must be provided ahead of each lighting switch. (In general, there will be one (1) explosion-proof lighting switch on each side of the paint room controlling those lighting fixtures on that side of the room.)
 6. All wiring more than three feet above the top of the bus (outside of the designated hazardous location area) may be of the general-purpose type.
 7. All other electrical equipment, not of the explosion-proof type, must be removed from the paint spray room during actual spraying operation.

ACTION

If all of the above conditions are found to exist in the paint spray room during the course of an OSH inspection in bus maintenance shops, then such paint spray rooms shall be deemed as meeting all of the electrical requirement of Sections 1910.107 and 1910.307 of the OSH standards.

EFFECTIVE DATE

This memorandum is effective upon receipt and will remain in effect until cancelled or superseded.