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9 SEP 1957

WPMGD-N

SUBJECT: Defining Limits of POL Hazardous Areas

TO: Division Engineer
U. S. Army Engineer Division, North Pacific
Portland 9, Oregon

1. In new POL design work, where it becomes necessary to establish limits for extent of classified area at military tank car and at tank truck loading or unloading and other areas, the problem of horizontal and vertical extent of hazardous zone presents a continuing problem. In view of changes that have occurred during the years in the thinking relative to this problem, it is believed desirable to have higher authority review the problem and to establish or re-establish limits for hazardous zone distances.

2. As regards loading racks, in NEC, sub-paragraph 5125 b3, such areas are considered Class 1, Division 2 locations. The areas are defined as extending twenty five feet horizontally from such racks and upward from adjacent ground level to a height of fifteen feet, unless the code enforcing authority, judges otherwise.

3. In API Standard RP-500, first edition, page 8, sub-paragraph 2.3, step 3, refers to "extent of classified areas" as it pertains to "tie-in" between NEC and RP-500.

4. As an example of design on one past truck loading rack project in Alaska, the loading platform floodlights were located twenty five feet above ground and over the platform structure. The floodlights were specified to be weatherproof flood lights. An emergency pump motor stop switch located fifty feet horizontally from the edge of pavement at loading rack was specified to be Class I, Group D.

5. In Crouse-Hinds Bulletin 2655, February 2, 1957, diagram 5 on page 76 gives an interpretation of NEC as applied to bulk storage plants and their loading racks.

6. In view of the important safety considerations involved, the API and NEC publications, and the pressure of economics, it is suggested that CCE review and resolve the problems of extent of classified areas as applied to military liquid fuel installations, with the concerned using

AFAPD-5

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services. establishment of fixed distances necessary at military PCL installations should take into consideration the full impact of realities as they apply to military operations and, based upon that knowledge, the desirability of establishing safe distances which would exceed those applicable to a normal closely controlled and skillfully operated comparable commercial facility. Results of above coordination and resolution of the safety and economic aspects of the problem should then be reduced to a military standard, showing typical layouts, diagrams, and sections marked with horizontal and vertical distances to show areas and/or zones classified Division 1, Division 2, and non-hazardous. The standard should show the above information as it applies to all kinds of petroleum transportation, storage, distribution, and dispensing facilities found on U. S. military installations. As space available limitations will in many instances impose restrictions in application of such a standard, the standard should set forth the processing required when PCL facility siting involves restricting situations.

FOR THE DISTRICT COMMANDER:

003002

cc -> Safety Branch
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H. A. RISEY
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