

CHAPTER 5 SITE OPERATIONS

5-1. Plan Requirements.

a. OB/OD operations will not take place without an approved Work Plan, ESS, and SSHP. The plans prepared for these operations will be reviewed for compliance with Federal, state, and local laws and regulations involving destruction of OE. Plans that are not in continuous use and have not been used within the previous six months will be reviewed prior to the start of any OB/OD operations.

b. All personnel working within the personnel separation distance will comply with the requirements of the Work Plan, SSHP, and ESS.

5-2. Maps. Furnish the following maps.

a. Site map. Furnish an overall map of the site showing the following:

- (1) The OE areas.
- (2) The location of any magazines to be used for the storage of demolition explosives and/or recovered OE.
- (3) The location of any planned or established demolition areas to be used to destroy recovered OE.

b. Quantity-Distance (Q-D) Maps. The Q-D map and the site map may be shown on the same map. Scaled maps, 1-inch equals not more than 400 feet are preferred. A smaller scale is acceptable if distances can be accurately shown. Provide Q-D map(s) for the following areas (it is possible that more than one map will be needed to show everything in sufficient detail).

- (1) Each OE area to be cleared.
- (2) The location of magazines for the storage of demolition explosives and/or recovered OE.

(3) Areas planned or established for the intentional detonation or burning of OE will have a PSD associated with them. Show each area and the PSD around it (an example is shown in figure 5-1). Identify every inhabited building, occupied area, and public (those not supporting the clearance operation) exposure inside the PSD. Describe measures to be taken to eliminate/mitigate risk for exposures within the PSD/PWD (example: evacuation of inhabited buildings, blocking off public highways).

c. Encroaching Q-D's. Some project sites are too small to locate the OB/OD areas so that their PSDs do not encroach on other OE areas (work area, other OB area, or other OD area/pit). Figure 5-2 shows an example of such a case. As shown, the PSD for the OB area

encroaches on the work area. Before OB work can begin, work must stop in this part of the work area and any personnel not directly involved with the OB work must be evacuated from the PSD for the OB area. Similarly, the PSD for the OB area encroaches on the OD area/pit and the PSD for the OD area encroaches on the OB area. In this case, work may not be done in the OB area and the OD area/pit simultaneously. When a PSD encroaches on another OE area, the Work Plan and the ESS must include standard operating procedures for protecting personnel while the work is accomplished in the area with the encroaching PSD.

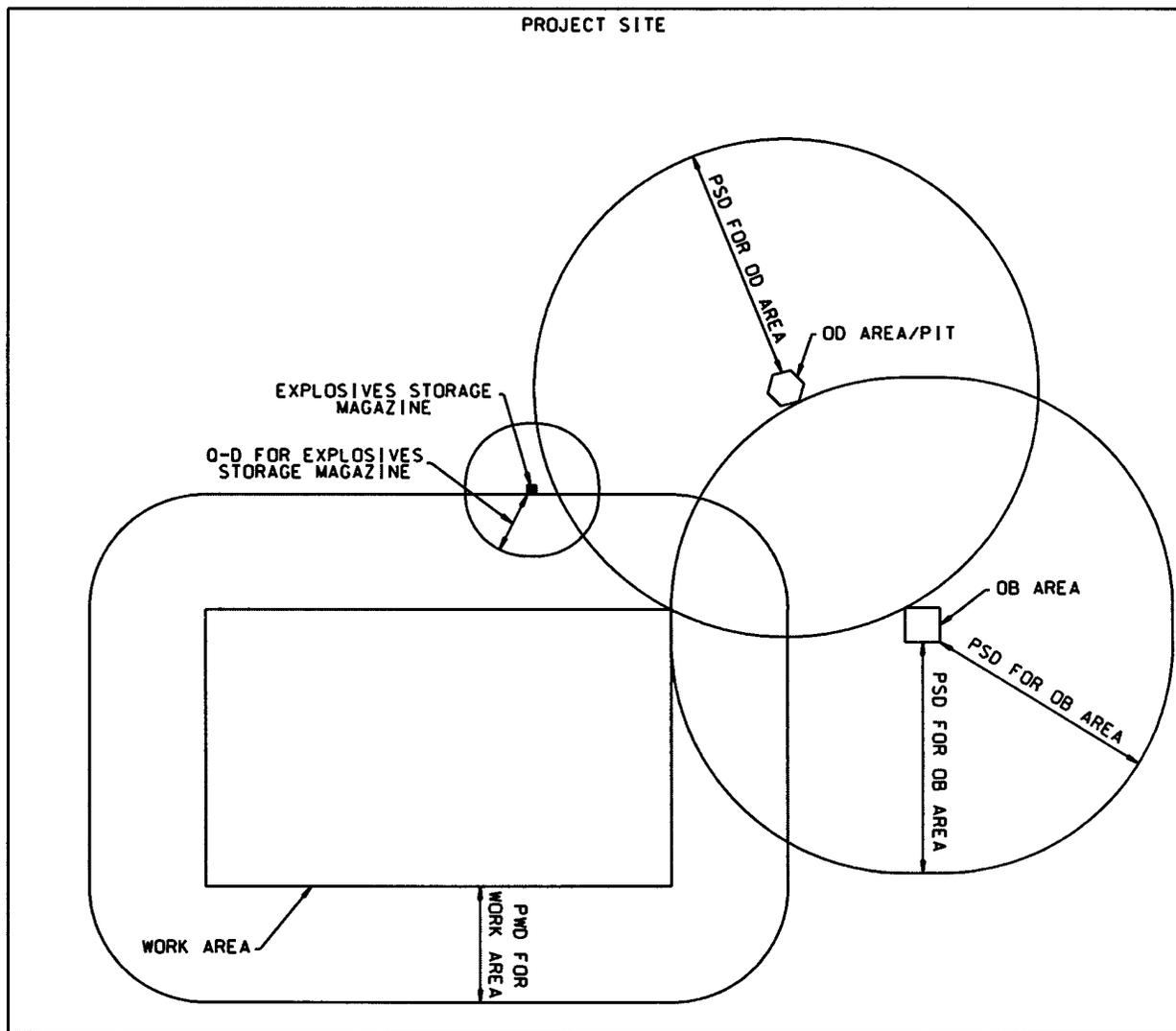


FIGURE 5-1: SAMPLE OF A Q-D MAP FOR A PROJECT SITE

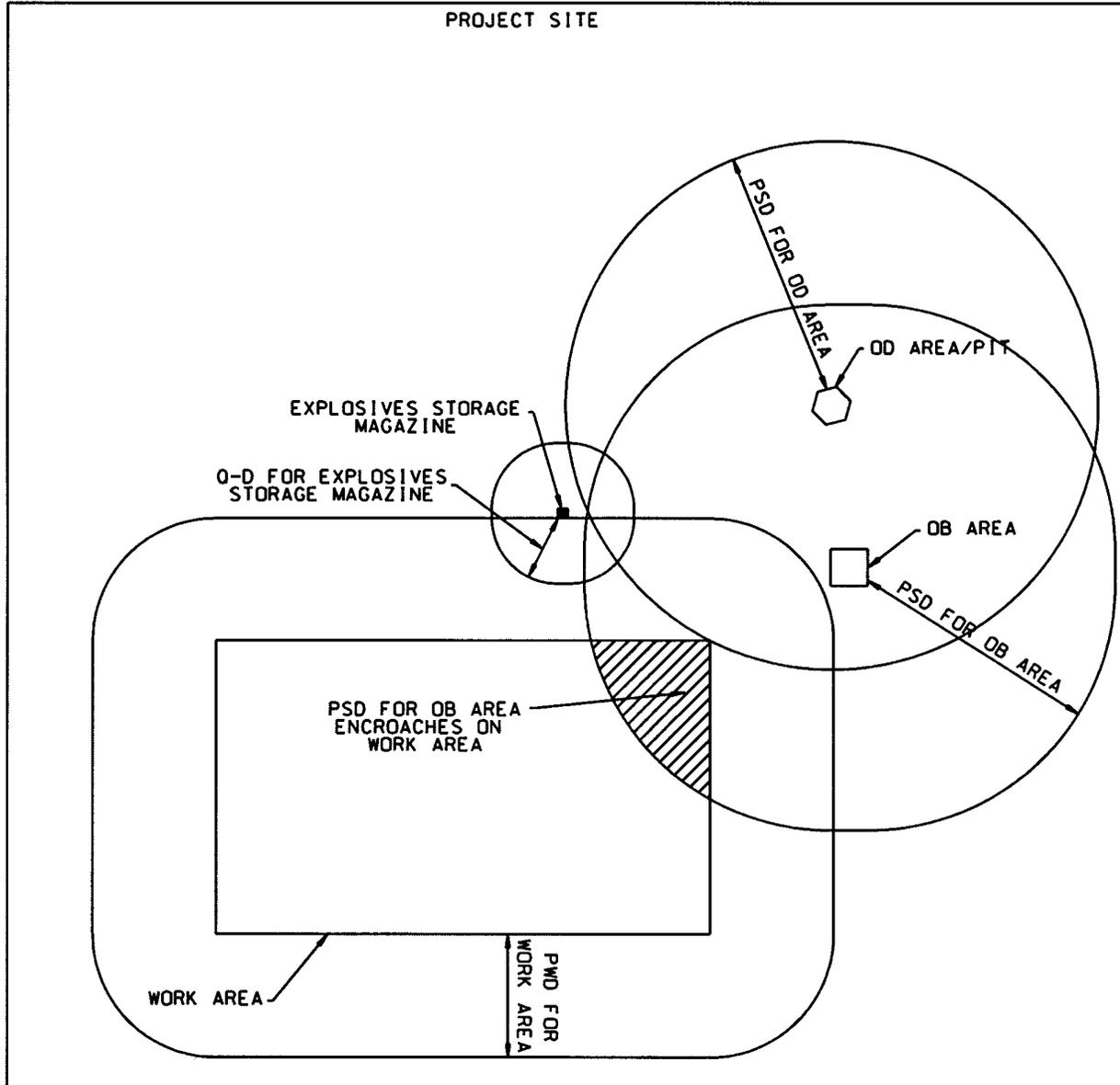


FIGURE 5-2: SAMPLE OF A Q-D MAP FOR A PROJECT SITE WITH ENCROACHING PSD

5-3. Separation Distance Requirements.

a. While ordnance is being prepared for OB/OD operations, only personnel necessary for the OB/OD operation will be allowed within the PSD area. Prior to burning or detonation, all personnel will withdraw from the PSD area. When non-essential personnel must enter the PSD area, all OB/OD operations will cease.

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b. When non-essential personnel must enter the PSD area, the following must be accomplished:

(1) The individual must receive a safety briefing before entering the OB/OD PSD area.

(2) All OB/OD operations must cease.

(3) The individual(s) must be escorted by a UXO-qualified individual at all times while in the OB/OD PSD area.

5-4. Hours of Operation. OB/OD operations are prohibited between sunset and dawn.

5-5. Weather Restrictions. OB/OD operations will not be conducted in inclement weather. Weather conditions affect both the location and timing of OB/OD operations. The optimum wind speed for an OB/OD operation is 4 to 15 mph, because winds at these speeds tend not to change direction and, as a result, dissipate smoke relatively rapidly. OB/OD operations are never conducted during sand, snow, or electrical storms strong enough to produce static electricity, which might cause premature detonation.

5-6. OB Specific Requirements.

a. Open burning of explosives and smokeless powder or chemical decomposition of explosives will not be accomplished without prior approval of the CO.

b. Anticipate a high order detonation when burning pyrotechnics or incendiary-loaded UXO. Safety measures for personnel and property must be based upon this possibility.

c. Disposal by open burning will not be undertaken when wind velocity exceeds 15 mph.

5-7. Maintenance of Grounds.

a. For OD operations, all dry grass, leaves, and other flammable materials within a radius of 61 meters (200 feet) from the point of destruction will be removed.

b. The OB/OD area will be kept clean and orderly at all times.

c. Explosive items, hazardous materials, inert OE scrap, and wood, paper, and combustible packaging materials will not be mixed. Each of these categories will be carefully controlled and placed in separate, approved, and properly marked containers. The containers will be placed outside of the OB/OD area, except for containers required at the work location during operations. Working location containers will be emptied as needed but at least once during each 8-hour shift.

d. The above listed items will be removed to proper disposal areas at frequent intervals and prior to leaving at the end of the duty day or shift. When isolated collection points are used, time and quantity limits, which comply with environmental regulations, will be set up to ensure

timely movement of the material to the disposal area. Materials should not be “stored” in the disposal area, but disposed of as soon as possible after arrival.

e. Hazardous wastes, if any, will be disposed of in authorized facilities. Disposal operations of hazardous wastes generated during OB/OD operations will be covered in the Work Plan and SSHP.

f. OB Specific Requirements. For OB areas all dry grass, leaves, and other flammable material will be removed for a distance of 15 meters (50 feet) from the OB area. Burning will not be repeated on previously burned-over plots for 24 hours unless the burning area has been soaked thoroughly with water and an inspection by competent personnel has been made to ensure the safety of personnel during subsequent burning operations. The use of concrete mats for burning or detonation is not permitted.

5-8. Servicing/Close-out of Destruction Site.

a. Prior to beginning OB/OD operations, coordination with local environmental regulators should be made in order to establish the nature and extent of any OB/OD area sampling and decontamination requirements. These requirements will be documented in a closure plan developed specifically for the OB/OD area prior to the start of OB/OD operations.

b. Trucks transporting explosive material to burning or demolition grounds will meet the requirements of Chapter 6 of TM 9-1300-206. No more than two persons will ride in the cab.

c. When materials being processed at destruction sites are to be handled by gasoline or diesel powered forklift truck, the requirements of Appendix C of TM 9-1300-206 will be observed.

d. Containers for explosive material will have covers, preferably self-closing. Explosive material includes scrap powder, initiating or sensitive explosives, sweepings from open explosives areas, and rags contaminated with these explosives.

(1) Receptacles should have enough liquid, normally water or oil, to cover the scraps or rags if this does not add to the hazard.

(2) Number 10 mineral oil is useful for covering white phosphorous, pyrotechnic, tracer, flare, and similar mixtures. If water is used to cover such materials, scrap should be put in so it is immediately immersed to reduce the production of dangerous gases.

e. During closure of the OB/OD area, the contractor must remove and decontaminate all waste residues, contaminated containment areas, contaminated subsoils, and all contaminated structures and equipment, and manage them as hazardous waste IAW the requirements of the closure plan.

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f. After dismantling the OB/OD area, confirmation samples will be collected from the area IAW the requirements of the Closure Plan prepared for the site. Any residual contamination will be addressed under a follow-on Hazardous, Toxic, and Radioactive Waste (HTRW) investigation.

5-9. Documentation Requirements. Records shall be kept of all OB/OD operations. These records shall include at a minimum the types and numbers of all ordnance destroyed, the method of destruction (i.e. burning or detonation), and the disposition of the scrap.

5-10. Mishap Reporting and Investigation Requirements. The following information provides general guidelines to be followed for reporting mishaps involving ammunition and explosives. See AR 385-40, with USACE Supplement 1, and EM 385-1-1 for additional details on mishap reporting requirements.

a. Reporting Criteria. All mishaps will be investigated by the contractor and reported to the CO and Government Safety Officer or to the government authority cited in the statement of work. See EM 385-1-1 for accident reporting and recordkeeping requirements. Any accident will be reported on ENG FORM 3394, "Accident Investigation Report".

b. Mishap Scene. In the event of a mishap, the contractor will implement emergency procedures and secure the scene of the mishap to keep unauthorized persons away from the mishap scene for their protection and to preserve the evidence for the mishap investigation.