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| U.S. Department of Agriculture  Forest Service | 1. WORK PROJECT/ACTIVITY  BCHW Packing Explosives | | | 2. LOCATION  USFS – Forest Wide | | | 3. UNIT  Region 6 | | |
| JOB HAZARD ANALYSIS (JHA)  References-FSH 6709.11 and -12 | 4. NAME OF ANALYST  Back Country Horsemen of Washington | | | 5. JOB TITLE  BCHW Safety Committee | | | 6. DATE PREPARED  June 2017 | | |
| 7. TASKS/PROCEDURES | 8. HAZARDS | | 9. ABATEMENT ACTIONS | | | | 10. POST ABATEMENT  ACTION RISK RATING  (Severity/Probability Matrix) | | |
|  | | | | | | | Severity | Probability | Risk Code |
| Scope of this JHA | N/A | | The scope of this JHA is limited to:  Packing explosives onto pack stock at trail head.  Transporting explosives with pack stock over forest trails to the destination.  Unloading explosives from pack stock at the destination.  This JHA does NOT include:  Delivering (transporting) explosives in vehicles to the trail head where pack stock is located,  Security, guarding, storing, moving, handling or any other activity of explosives at destination after removal from pack stock.  Securing, handling, moving, setting up or any other activity of explosives from pack destination to actual job site shall be performed only by qualified Forest Service persons.  Pre-arrangements shall be made with Forest Service personel for destination security responsibility after unloading, or else do not proceed.  . | | | | N/A | N/A | N/A |
| Live Stock Operations | Injury to personell and live stock.  Equipment damage. | | Follow BCHW JHA for livestock operations.  Stock leader shall assign a drag rider (someone traveling behind string) to intercept any stock that inadvertently gets loose from string. (loose animal headed back to trailer) | | | | III - Marginal  III - Marginal | D-  Seldom  D-  Seldom | 4 –  Low  4 -  Low |
| Communications | Delay in getting prompt medical aid to seriously injured crew members. | | Follow trailhead Communication Plan (TCP)  Follow Emergency Evacuation Plan (EEP) | | | |
|  | Lack of proper communications equipment. | | At tailgate safety briefing, ensure you have  communication equipment as specified in tail gate safety briefing documents:  Two-way radio(s)  Mobile phone  Satellite phone  Satellite messenger  Have agency compatible radios on crew.  Ensure radios have properly programmed frequencies and are in working order.  Take extra set of batteries before leaving on the trip. | | | |
|  | Inadequate communications with call center. | | Knowledge of usable repeaters and best locations to use radios during emergency.  Check in and check out before and after project in accordance with BCHW and land manager.  Tailgate safety briefing at trailhead – all crewmembers must sign JHA(s)  If EEP is activated, contact BCHW and land manager contacts as soon as practical. | | | | III - Marginal | D-  Seldom | 4 -  Low |
|  | Possible explosives detonation by use of radio. | | Use communications devices such as radios or cell phones a considerable distance from the explosives. 50’ foot distance is a safe distance. | | | | III - Marginal | E -  Unlikely | 4 -  Low |
| Condition of Pack Stock | No security of explosives, and risk to damage, theft or loss.  Harm to pack stock and equipment. | | Animals should be seasoned trail stock in good condition and approved by the stock handler.  Stock handlers shall be experienced in handling pack stock and be familiar with JHA for packing and transporting explosives.  Pack equipment must be inspected for good condition.  Refer to and read Livestock Operations JHA. | | | | III -Marginal | E -  Unlikely | 4 - Low |
| Security of Explosives  Security of Explosives, continued | Security of explosives compromised. Risk of loss, damage or theft of explosives. | | All transporting and handling of explosives will be made under the direct supervision of a licensed blaster. A licensed blaster shall be with the explosives at all time, riding or walking.  Only persons that have a need to know shall be informed of BCHW explosives transportation.  If possible avoid heavy use areas or times of heavy trail traffic.  Destination security of explosives shall be pre-determined and coordinated with Forest Service such that BCHW is not responsible for security after unloading stock. | | | | III -  Marginal  III -  Marginal | E -  Unlikely  E -  Unlikely | 4 -  Low  4 - Low |
| Unplanned detonation or loss of explosives due to impoper packing. | | Detonators and explosives must be packed on separate animals immediately before departure.  Detonators and explosives must not be removed from their original containers.  Pack with moisture proof tarps, by experienced packers.  All packing voids must be filled to avoid movements and rattles using non-metalic materials such as bedrolls, tents, etc.  Protect detonators from impact due to a fall or from rattling inside packs. Do not carry detonators in your pockets. | | | |
| Unplanned detonation or destruction of explosives due to fire. | | No smoking during transporting explosives or withing 50 feet of explosives.  Never try to extinguish burning explosives. Assume explosives may detonate at any time. If explosives catch fire, evacuate area immediately and contact USFS. | | | |
| Unplanned detonation, loss or theft due to improper transport of explosives. | | When packing into remote work sites or on steep terrain, pack explosives securely, carry explosives and detonators separately.  Limit travel to between one-half hour after sunrise and one half hour before sunset. No night time travel.  Drugs or alchohol use by packers is prohibited.  In lightning storms, stop travel. Pack stock should be unloaded if time permits and moved a safe distance away from explosives. If no time  permits unloading, securely tether pack animals carrying explosives and move remaining pack stock and all personell a safe distance away.  No signs are required or allowed for packstrings carrying explosives. Guard transporting explosives from public awarness.  Check with Forest Service personel regarding use of radio with respect to type of explosives carried. | | | |
| 0. LINE OFFICER SIGNATURE | | | 11. TITLE  BCHW President | | | 12. DATE | | | |
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