Appendix E: State Noxious Weeds Present in Parks (2010)⁺

STATE OF IDAHO				
Noxious Weed Species	City of Rocks	Craters of the Moon	Hagerman Fossil Beds	Minidoka
EDRR				
Brazilian Elodea				
Egeria densa				
Common/European Frogbit				
Hydrocharis morsus-ranae				
Fanwort				
Cabomba caroliniana				
Feathered Mosquito Fern				
Azolla pinnata .				
Giant hogweed				
Heracleum mantegazzanium				
Giant Salvinia				
Salvinia molesta				
Hydrilla				
Hydrilla verticillata				
Policemen's helmet				
Impatiens glandulifera				
Squarrose knapweed				
Centaurea triumfetti				
Syrian Beancaper				
Zygophyllum fabago				
Tall hawkweed				
Hieracium piloselloides Variable-Leaf Milfoil				
Myriophyllum heterophyllum				
Water Chestnut				
Trapa natans Yellow devil hawkweed				
Hieracium glomeratum Yellow Floating Heart				
Nymphoides pelata Control				
	\ <u>'</u>			
Black henbane	X	X		
Hyoscyamus niger Bohemian knotweed				
Polygonum x bohemicum				
Buffalobur				
Solanum rostratum			1	
Common crupina				
Crupina vulgaris				
Common reed				
Phragmites australis				
Dyer's woad		X		
Isatis tinctoria				
Eurasian watermilfoil				
Myriophyllum spicatum				
Giant knotweed				
Polygonum sachalinense				
Japanese knotweed				
Polygonum cuspidatum				<u></u>
Johnsongrass				
Sorghum halepense				
Matgrass				
Nardus stricta	1	I	I	

Meadow knapweed				
Centaurea debeauxii				
Mediterranean Sage				
Salvia aethiopis				
Musk thistle	X	X		X
Carduus nutans	^	^		^
Orange hawkweed				
Hieracium aurantiacum				
Parrotfeather Milfoil				
Myriophyllum aquaticum				
Perennial Sowthistle	X			
Sonchus arvensis	^			
Russian knapweed	X	X	X	X
	^	^	^	^
Acroptilon repens Scotch Broom				
Cytisus scoparius				
Small bugloss				
Anchusa arvensis				
Vipers Bugloss				
Echium vulgare				
Yellow Hawkweed				
Hieracium caespitosum				
Containment				
Canada thistle	X	X	X	X
Cirsium arvense				
Curlyleaf Pondweed				
Potamogeton crispus				
Dalmatian Toadflax		Χ		
Linaria dalmatica ssp. dalmatica				
Diffuse knapweed	Х	Χ		
Centaurea diffusa				
Field bindweed	Х	Χ	Х	X
Convolvulus arvensis				
Flowering Rush				
Butomus umbellatus				
Hoary alyssum				
Berteroa incana				
Houndstongue	Х		Х	
Cynoglossum officinale				
Jointed goatgrass				
Aegilops cylindrical				
Leafy spurge		Χ		
Euphorbia esula				
Milium				
Milium vernale				
Oxeye Daisy				
Leucanthemum vulgare				
Perennial pepperweed				
Lepidium latifolium				
Plumeless thistle				
Carduus acanthoides				
Poison hemlock	Х			
Conium maculatum	^			
Puncturevine		X	X	
Tribulus terrestris		/\		
Purple Loosestrife			X	
Lythrum salicaria				
Rush skeletonweed		X	X	
Chondrilla juncea		^	_ ^	
Salt cedar	X		X	
Sair Ceual	^		^	L

Tamarix sp.			
Scotch thistle	Χ	X	Χ
Onopordum acanthium			
Spotted knapweed	X	X	
Centaurea stoebe			
Tansy Ragwort			
Senecio jacobaea			
White Bryony			Χ
Bryonia alba			
Whitetop	X		
Cardaria draba			
Yellow flag iris			
Iris pseudacorus			
Yellow starthistle			
Centaurea solstitialis			
Yellow toadflax			·
Linaria vulgaris			

STATE OF MONTANA				
Noxious Weed Species:	Grant-Kohrs Ranch	Little Bighorn	Nez Perce: Bear Paw	Nez Perce: Big Hole
Priority 1A These weeds are not present in I prevention.	Montana. Management cr	iteria will require en	adication if detected; e	
Yellow starthistle Centaurea solstitialis				
Priority 1B These weeds have limited preser education.	nce in Montana. Managen	nent criteria will req	uire eradication or con	tainment and
Dyers woad Isatis tinctoria				
Flowering rush Butomus umbellatus				
Japanese knotweed complex Polygonum sp.				
Purple loosestrife Lythrum sp.				
Rush skeletonweed Chondrilla juncea			X	
Eurasian watermilfoil <i>Myriophyllum spicatum</i>				
Scotch broom Cystisus scoparius				
Curlyleaf pondweed Potamogeton crispus				
Priority 2a These weeds are common in isol where less abundant. Managem			will require eradication	n or containment
Tansy ragwort Senecio jacobaea				
Meadow hawkweed complex Hieracium sp.				
Orange hawkweed Hieracium aurantiacum	X			
Tall buttercup Ranunculus acris	X			
Perennial pepperweed Lepidium latifolium	X			
Yellowflag iris Iris pseudacorus				
Blueweed Echium vulgare				Х

Hoary alyssum		I X		
Berteroa incana				
Priority 2b		l .		
These weeds are abundant in Montar	na and widespread in i	manv counties. Mar	nagement criteria will require	e eradication or
containment where less abundant. M				
Canada thistle	X	I X	X	Х
Cirsium arvense				
Field bindweed	Χ	Х	X	Х
Convolvulus arvensis				
Leafy spurge	X			Х
Euphorbia esula				
Whitetop	X	X		
Cardaria draba				
Russian knapweed	Χ	Х		
Centaurea repens				
Spotted knapweed	X	X		Х
Centaurea stoebe				
Diffuse knapweed				
Centaurea diffusa				
Dalmatian toadflax		Х		
Linaria dalmatica				
St. Johnswort		Х		
Hypericum perforatum				
Sulfur cinquefoil	Χ	Х		
Potentilla recta				
Common tansy	Χ			Х
Tanacetum vulgare				
Oxeye daisy				
Chrysanthemum leucanthemum				
or Leucanthemum vulgare				
Houndstongue	Χ	X		
Cynoglossum officinale				
Yellow toadflax	Χ			
Linaria vulgaris				
Saltcedar		X		
Tamarix sp.				
Priority 3				
Regulated Plants: (NOT MONTANA L				
negative impacts. The plant may not				tural products.
The state recommends research, educ				
Cheatgrass (Bromus tectorum)	Χ	X	X	X
Hydrilla (<i>Hydrilla verticillata</i>)				

STATE OF UTAH			
Noxious Weed Species	Golden Spike		
Class A: EDRR			
Black henbane			
Hyoscyamus niger			
Diffuse knapweed			
Centaurea diffusa			
Johnsongrass	X		
Sorghum halepense			
Leafy spurge			
Euphorbia esula			
Medusahead			
Taeniatherum caput-medusae			
Ox-Eye daisy	X		
Chrysanthemum leucanthemum			
Purple loosestrife			
Lythrum salicaria			
Spotted knapweed	X		
Centaurea stoebe			
St. John's wort			

Hypericum perforatum	
Sulfur cinquefoil	X
Potentilla recta	
Yellow starthistle	
Centaurea solstitialis	
Yellow toadflax	
Linaria vulgaris	
Class B: Control	
Bermudagrass	X
Cynodon dactylon	
Dalmatian toadflax	X
Linaria dalmatica	
Dyers woad	X
Isatis tinctoria	
Hoary cress	X
Cardaria sp.	
Musk thistle	X
Carduus nutans	
Perennial pepperweed	X
Lepidium latifolium	
Poison hemlock	
Conium maculatum	
Russian knapweed	X
Centaurea repens	
Scotch thistle	X
Onopordum acanthium)	
Squarrose knapweed	
Centaurea virgata	
Class C: Containment	
Canada thistle	X
Cirsium arvense	
Field bindweed (Wild Morning Glory)	X
Convolvulus arvensis	
Houndstongue	
Cynoglossum officinale	
Quackgrass	X
Elytrigia repens	
Saltcedar	X
Tamarix ramosissima	

^{**}Bermudagrass shall not be a noxious weed in Washington County and shall not be subject to provisions of the Utah Noxious Weed Act within the boundaries of the county.

STATE OF WYOMING		
Noxious Weed Species	Fossil Butte	
Canada thistle Cirsium arvense	X	
Common burdock Arctium minus		
Common St. Johnswort Hypericum perforatum	X	
Common Tansy Tanacetum vulgare		
Dalmatian toadflax <i>Linaria dalmatica</i>		
Diffuse knapweed Centaurea diffusa	X	
Dyers woad Isatis tinctoria		
Field bindweed Convolvulus arvensis	X	
Hoary cress (whitetop) Cardaria draba & Cardaria pubescens	X	
Houndstongue Cynoglossum officinale	X	
Leafy spurge Euphorbia esula		
Musk thistle Carduus nutans	X	
Ox-eye daisy Chrysanthemum leucanthemum		
Perennial pepperweed (giant whitetop) Lepidium latifolium		
Perennial sowthistle Sonchus arvensis		
Plumeless thistle Carduus acanthoides		

Purple loosestrife Lythrum salicaria	
Quackgrass Agropyron repens	X
Russian knapweed Centaurea repens	
Russian olive <i>Elaeagnus angustifolia</i>	
Saltcedar <i>Tamarix</i> spp.	Х
Scotch thistle Onopordum acanthium	
Skeletonleaf bursage Franseria discolor	
Spotted knapweed Centaurea stoebe	X
Yellow toadflax Linaria vulgaris	

^{*} Some Latin names change frequently. Integrated Taxonomic Information System (ITIS, available at http://www.itis.gov/) contains the most updated information. For example, Spotted knapweed is now *Centaurea stoebe*. It was previously *C. maculosa*. The list above is based on the names each state is using, but this is not always consistent among states or with ITIS. For example, Russian knapweed, now *Acroptilon repens*, has been updated in Idaho, but is still listed as *Centaurea repens* in Montana, Utah and Wyoming.

Appendix F: Pesticide Handling Procedures

(Based on NPS DINO 2005)

Pesticide Purchase

NPS 77 allows NPS personnel to purchase the amount of pesticide authorized for use during the year of approval. Larger amounts can be purchased only when the smallest amount available for purchase is larger than the amount necessary for the project. If an approved pesticide is unavailable, any substitutions with different active ingredients will require approval through the same pesticide use request and approval process.

Pesticide Storage

Pesticide storage facilities must be locked, fireproof, and ventilated; proper warning signs must be posted. Pesticides must be stored separately from all other substances, and the directions provided on the labeling must be followed. In addition, each type of pesticide must be stored on separate shelves. Any structure used for storage of pesticides should be posted, and copies of labels, material safety data sheets (MSDSs), and inventories should be kept in a locked container outside the storage facility.

Disposal of Pesticides

Only the amount of pesticide required for the treatment area should be mixed to limit the amount of excess pesticide generated during treatment. However, small remaining quantities of mixed pesticides and any rinsate from the container or spray equipment may be applied to the treatment area. If pesticides cannot be disposed of in this manner, they may be given to another agency or disposed of according to state laws and regulations. Donation of surplus chemicals should be documented and records kept for 3 years.

Pesticide Safety

Procedures for handling pesticides are provided on the pesticide label. These directions must be followed. The following precautions should also be followed.

- Unless the label specifies otherwise, applicators should wear protective goggles or face shields, rubber or neoprene gloves, an impervious cap with a brim and drip guard, long pants, a longsleeved shirt, and rubber boots during mixing, loading, application, and cleanup. Depending on the formulation of the pesticide, the applicator should use a respirator approved for the type of pesticide being applied. Mixers and loaders should take the additional precaution of wearing an impervious apron.
- When spraying liquids overhead, sleeves should be tucked inside the gloves. However, pants should never be tucked inside of rubber boots.
- Pesticide application equipment should never be worn home or washed in home laundry facilities.
- Pesticides should never be transported inside the cab or passenger compartment of a vehicle. Instead, they should be removed or placed in containers. They should never be stored in containers used for food preparation or other food service purposes.
- Copies of the label and MSDSs should be at the site where pesticides are being applied (as well as at headquarters for reference).

In addition to the safety of the applier, the safety of park visitors and others not involved with the application of pesticides must be considered. Many pesticide labels specify the minimum periods before unprotected individuals may enter treated areas, or they specify that treated areas must be posted. If the label specifies a reentry period, treated areas must be posted with signs warning visitors and others not to enter the treated area. The signs should indicate that the area has been treated with a pesticide, what materials were used, and the name and telephone number of a contact person.

Contracted Pest Management Services

Some practices may require the services of an exotic plant management firm or pest control operator. Contract specifications should describe what is permitted and what is not permitted on the NPS property. Specification should include exotic plant identification, monitoring on a regular basis, and no pesticide application unless action thresholds have been met.

Sample contract language may include the following points:

- 1. Contractor to arrive at the job site with factory sealed containers.
- 2. Contractor to mix and apply the pesticide under the observation of a NPS representative.
- 3. No surplus pesticide(s) will be disposed of on NPS owned or managed lands.
- 4. If the applicator has arrived at the job site, but is unaware of these contract criteria and has not read them, no work will be permitted until all contractual language has been read and understood and contractual compliance is in order.

Appendix G: Sample (Nez Perce National Historical Park) Safety Plans

- 1. Nez Perce National Historical Park Risk Respirator Plan (detached) (Available upon request)
- 2. Nez Perce National Historical Park Risk Management Worksheet: Herbicide Use
- 3. Nez Perce National Historical Park Risk Management Worksheet: Transporting Equipment and Supplies via UTV
- 4. Nez Perce National Historical Park Personal Protective Equipment Program
- 5. Nez Perce National Historical Park Off-Highway Vehicle Safety Policy (detached) (Available upon request)

1. Nez Perce National Historical Park Respirator Plan (detached)

(Available upon request)

2. Nez Perce National Historical – Risk Management Worksheet

BLOCK	DESCRIPTION / INSTRUCTIONS	
1	Operation / Task (In general terms, Identify the operation/task(s) to be performed.	Herbicide application and managing of exotic vegetation using OHV mounted sprayers
2	Beginning Date (enter the date that the operation / task(s) is to begin)	June 29, 2010
3	End Date (Enter the date that the operation / task(s) is to end.)	Until revision
4	Date Prepared (Enter the date that the Risk Assessment was prepared)	June 29, 2010
5	Prepared By (Name/Duty Position)(Enter the name and duty position of the person(s) completing the form)	Jason W. Lyon, Integrated Resource Manager, Nez Perce National Historical Park
6	Identify Hazards (Identify specific hazards associated with the operation/task(s). It is important to be specific and start at the beginning, the preparation phase (equipment draw/transportation of equipment) of the operation. For example: unfamiliar equipment, inexperienced operators, improperly configured equipment, challenging terrain, natural hazards hazardous chemical use, span of supervision, location of work, types of roads, confined spaces, pinch points.)	Potential exposure to herbicide, heat stress due to PPE, terrain related hazards (brush, trees, obscured (fence posts, down trees, rocks) and man-made hazards (historic remnants). Snakes, bees, and wasps may present a hazard.
7	Assess Hazards and Complete Risk Assessment Tool (Green=Low, Amber=Medium, Red=High.)	GREEN
8	Control Measures developed for identified hazards (Specific measures taken to reduce the probability of a hazard). Include PPE. Identify control measures for each hazard identified in block 6.	Only trained operators familiar with the park units will operate OHV's. Area will be scouted prior to operation. PPE identified in NEPE OHV Safety Policy and JHA will be worn. Applications will not take place in high wind or inclement temperatures. Handheld radios, fire extinguishers and first aid kits will be carried on each OHV. Water breaks will be required as needed.
9	How to implement the control measures: Identify how the control measures will be implemented. For example SOPs, tailgate safety briefings, written/oral policy statements/directions, familiarization training, Right-to-know training, use of PPE, Use of Spotters	Applicators will follow the NEPE OHV Safety Policy and OHV operations JHA. Daily tailgate safety briefings will be held prior to initiating work, and will be followed up on at the close of business with an after action review
10	(Approval / Authority Signature Block) The employee accepts the level of risk as determined by the decision authority, and he / she is accepting the risk.	Risk Decision Authority: Circle the level of risk: GREEN-immediate supervisor; AMBER– Division Chief (or Equivalent) RED – Superintendent (or equivalent). Supervisor or above signs this block indicating the risk assessment tool was completed for the aforementioned activities.
		1

3. Nez Perce National Historical – Risk Management Worksheet

BLOCK	DESCRIPTION / INSTRUCTIONS	
1	Operation / Task (In general terms, Identify the operation/task(s) to be performed.	Transporting of equipment and supplies via UTV
2	Beginning Date (enter the date that operation/task(s) is to begin)	June 29, 2010
3	End Date (Enter the date that the operation / task(s) is to end.)	Until revision
4	Date Prepared (Enter date that Risk Assessment was prepared)	June 29, 2010
5	Prepared By (Name/Duty Position)(Enter the name and duty position of the person(s) completing the form)	Jason W. Lyon, Integrated Resource Manager, Nez Perce National Historical Park
6	Identify Hazards (Identify specific hazards associated with the operation/task(s). It is important to be specific and start at the beginning, the preparation phase (equipment draw/transportation of equipment) of the operation. For example: unfamiliar equipment, inexperienced operators, improperly configured equipment, challenging terrain, natural hazards hazardous chemical use, span of supervision, location of work, types of roads, confined spaces, pinch points.)	Unsecured loads, heat stress due to PPE, terrain related hazards (brush, trees, obscured (fence posts, down trees, rocks) and man-made hazards (historic remnants). Snakes, bees, and wasps may present a hazard.
7	Assess Hazards and Complete Risk Assessment Tool (Green=Low, Amber=Medium, Red=High.)	GREEN
8	Control Measures developed for identified hazards (Specific measures taken to reduce the probability of a hazard). Include PPE. Identify control measures for each hazard identified in block 6.	Only trained operators familiar with the park units will operate OHV's. Area will be scouted prior to operation. PPE identified in NEPE OHV Safety Policy and JHA will be worn. When carrying equipment, equalize the load to maintain balance, stability, and center of gravity. When using an UTV to tow a trailer and/or equipment, the manufacturer's maximum permissible towing capacity shall not be exceeded. In addition, the trailer's weight rating shall not be exceeded. Hand-held radios, fire extinguishers and first aid kits will be carried on each OHV. Water breaks will be required as needed.
9	How to implement the control measures: Identify how the control measures will be implemented. For example SOPs, tailgate safety briefings, written/oral policy statements/directions, familiarization training, Right-to-know training, use of PPE, Use of Spotters	Operators will follow the NEPE OHV Safety Policy and OHV operations JHA. Daily tailgate safety briefings will be held prior to initiating work, and will be followed up on at the close of business with an after action review
10	(Approval / Authority Signature Block) The employee accepts the level of risk as determined by the decision authority, and he / she is accepting the risk.	Risk Decision Authority: Circle the level of risk: GREEN- immediate supervisor; AMBER— Division Chief (or Equivalent) RED — Superintendent (or equivalent). Supervisor or above signs this block indicating the risk assessment tool was completed for the aforementioned activities.

4. Nez Perce National Historical Park Personal Protective Equipment Program

FOREWARD

The objective of the Personal Protective Equipment (PPE) Program is to protect employees of Nez Perce National Historical Park from the risk of injury by creating a barrier against workplace hazards. Personal protective equipment is not a substitute for good engineering or administrative controls or good work practices, but should be used in conjunction with these controls to ensure the safety and health of employees. Personal protective equipment will be provided, used, and maintained when it has been determined that its use is required and that such use will lessen the likelihood of occupational injury and/or illness.

This program addresses eye, face, head, foot, and hand protection. Separate programs exist for respiratory and hearing protection since the need for participation in these programs is established through industrial hygiene monitoring.

The Nez Perce National Historical Park's Personal Protective Equipment Program includes:

- Responsibilities of supervisors and employees
- Hazard assessment and PPE selection
- Employee training
- Record keeping requirements.

Responsibilities

Supervisors

- Supervisors have the primary responsibility for implementation of the PPE Program in their work area. This involves:
- Providing appropriate PPE and making it available to employees.
- Ensuring employees are trained on the proper use, care, and cleaning of PPE.
- Maintaining records on PPE assignments and training.
- Supervising staff are to ensure that the PPE Program elements are followed and that employees properly use and care for PPE.
- Seeking assistance from OSHA or other sources to evaluate hazards.
- Notify the Safety Officer when new hazards are introduced or when processes are added or changed.
- Ensuring defective or damaged equipment is immediately replaced.

Employees

- The every Park employee is responsible for following the requirements of the PPE Program. This involves:
- Wearing PPE as required.
- Attending required training sessions.
- Caring for, cleaning, and maintaining PPE as required.
- Informing the supervisor of the need to repair or replace PPE.

Collateral Duty Safety Officer

The Collateral Duty Safety Officer (CDSO) is responsible for the development, implementation, and administration of the PPE Program, including:

- Conducting workplace hazard assessments to determine the presence of hazards which necessitate the use of PPE.
- Conducting periodic workplace reassessments as requested by supervisors and/or as determined by PSO.
- Maintaining records on hazard assessments.
- Providing training and technical assistance to supervisors on the proper use, care, and cleaning of approved PPE.
- Providing guidance to the supervisor for selecting and purchasing approved PPE.
- Periodically reevaluating the suitability of previously selected PPE.
- Reviewing, updating, and evaluating overall effectiveness of the PPE Program.

Program Components

Hazard Assessment and Equipment Selection

OSHA requires employers to conduct inspections of all workplaces to determine the need for personal protective equipment (PPE) and to help in selecting the proper PPE for each tasks performed. For each work site, a certificate must be completed which lists the findings of the inspection and the specific protective equipment needed. These duties will be distributed between PSO and supervisors.

The CDSO, with Supervisors, will conduct a walk-through survey of each work area to identify sources of hazards, including impact, penetration, compression, chemical, heat, dust, electrical sources, material handling, and light

radiation. Each survey will be documented using the Hazard Assessment Certification Form (Appendix B1), which identifies the workplace surveyed, the person conducting the survey, findings of potential hazards, and date of the survey.

Once the hazards of a workplace have been identified, PSO will determine the suitability of the PPE presently available and as necessary select new or additional equipment which ensures a level of protection greater than the minimum required to protect the employees from the hazards. Care will be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards will be provided or recommended for purchase.

Protective Devices

All personal protective clothing and equipment will be of safe design and construction for the work to be performed and shall be maintained in a sanitary and reliable condition. Only those items of protective clothing and equipment that meet NIOSH or ANSI (American National Standards Institute) standards will be procured or accepted for use. Newly purchased PPE must conform to the updated ANSI standards which have been incorporated into the OSHA PPE regulations, as follows:

Eye and Face Protection ANSI Z87.1-1989 Head Protection ANSI Z89.1-1986

Foot Protection ANSI Z41.1-1991

Hand Protection There are no ANSI standards for gloves, however, selection must be based on the performance characteristics of the glove in relation to the tasks to be performed.

Careful consideration will be given to comfort and fit of PPE in order to ensure that it will be used. Protective devices are generally available in a variety of sizes. Care should be taken to ensure that the right size is selected.

Eye and Face Protection

Prevention of eye injuries requires that all persons who may be in eye hazard areas wear protective eyewear. This includes employees, visitors, researchers, contractors, or others passing through an identified eye hazard area. To provide protection for these personnel, Supervisors of such areas shall procure a sufficient quantity of goggles and/or plastic eye protectors which afford the maximum amount of protection possible. If personnel wear personal glasses, they shall be provided with a suitable eye protector to wear over them.

Suitable protectors shall be used when employees are exposed to hazards from flying particles, molten metal, acids or caustic liquids, chemical liquids, gases, or vapors, bioaerosols, or potentially injurious light radiation.

Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. Side protectors shall be used when there is a hazard from flying objects.

Goggles and face shields shall be used when there is a hazard from chemical splash.

Face shields shall only be worn over primary eye protection (safety glasses or goggles).

For employees who wear prescription lenses, eye protectors shall either incorporate the prescription in the design or fit properly over the prescription lenses.

Protectors shall be marked to identify the manufacturer.

Equipment fitted with appropriate filter lenses shall be used to protect against light radiation. Tinted and shaded lenses are not filter lenses unless they are marked or identified as such.

Prescription Safety Eyewear

OSHA regulations require that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards shall wear eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn over the prescription lenses (goggles, face shields) without disturbing the proper position of the prescription lenses or the protective lenses. Personnel requiring prescription safety glasses must contact the Office of Health and Safety to have their request for prescription safety glasses processed.

Emergency Eyewash Facilities

Emergency eyewash facilities meeting the requirements of ANSI Z358.1 will be provided in all areas where the eyes of any employee may be exposed to corrosive materials. All such emergency facilities will be located where they are easily accessible in an emergency.

Head Protection

Head protection will be furnished to, and used by, all employees and contractors engaged in construction and other miscellaneous work. Head protection is also required to be worn by engineers, inspectors, and visitors at construction sites when hazards from falling or fixed objects, or electrical shock are present. Bump caps/skull guards will be issued and worn for protection against scalp lacerations from contact with sharp objects. However, they will not be worn as substitutes for safety caps/hats because they do not afford protection from high impact forces or penetration by falling objects.

Foot Protection

All Park employees shall wear Protective footwear that complies with ANSI Z41-1991, "American National Standard for Personal Protection - Protective Footwear." Safety shoes or boots with impact protection are required to be worn in work areas where carrying or handling materials such as packages, objects, parts or heavy tools, which could be dropped; and for other activities where objects might fall onto the feet. Safety shoes or boots with compression protection are required for work activities involving skid trucks (manual materials handling cars) or other activities in which materials or equipment could potentially roll over an employee's feet. Safety shoes or boots with puncture protection are required where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal etc., could be stepped on by employees causing a foot injury.

Hand Protection

Suitable gloves shall be worn when hazards from chemicals, cuts, lacerations, abrasions, punctures, burns, biological, and harmful temperature extremes are present. Glove selection shall be based on performance characteristics of the gloves, conditions, duration's of use, and hazards present. One type of glove will not work in all situations. The first consideration in the selection of gloves for use against chemicals is to determine, if possible, the exact nature of the substances to be encountered. Read instructions and warnings on chemical container labels and MSDSs before

working with any chemical. Recommended glove types are often listed in the section for personal protective equipment.

Face shields and Eye Protection

Face shields and goggles should be worn while employees are operating power tools as well as hand tools, to protect their eyes. Shields or goggles will be worn while working with Hazardous chemicals or aerosols.

Gloves

Gloves are worn by park employees whenever the MSDS sheets call for hand protection. Employees should also wear gloves while performing any task that poses a threat of cuts and abrasions. Protective gloves will be worn when ever employees are handling any Hazardous or potentially hazardous materials. Employees will consult their supervisors if needed to ensure they are provided with the proper gloves called for on the MSDS sheet.

Cleaning and Maintenance

It is important that all PPE be kept clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE should be inspected, cleaned, and maintained at regular intervals so that the PPE provides the requisite protection. Personal protective equipment shall not be shared between employees until it has been properly cleaned and sanitized. PPE will be distributed for individual use whenever possible. It is also important to ensure that contaminated PPE which cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards.

<u>Training</u>

Any worker required to wear PPE shall receive training in the proper use and care of PPE. Periodic retraining shall be offered by PSO to both the employees and the supervisors, as needed. The training shall include, but not necessarily be limited to, the following subjects:

When PPE is necessary to be worn.

What PPE is necessary

How to properly don, doff, adjust, and wear PPE.

The limitations of the PPE.

The proper care, maintenance, useful life and disposal of the PPE.

After the training, the employees shall demonstrate that they understand the components of the PPE Program and how to use PPE properly, or they shall be retrained.

Record keeping

Written records shall be kept of the names of persons trained, the type of training provided, and the dates when training occurred. The Supervisor shall maintain their employees' training records for at least 3 years. The Park Safety Officer shall maintain the Hazard Assessment Certification Form for each work site evaluated for at least 3 years.

Reference Legal Authorities

American National Standards Institute, American National Standard ANSI Z41-1991, "Personnel Protection - Protective Footwear".

American National Standards Institute, American National Standard ANSI Z87.1-1989, "Practice for Occupational and Educational Eye and Face Protection".

American National Standards Institute, American National Standard ANSI Z89.1-1986, "Safety Requirements for Industrial Head Protection".

OSHA Standard 29 CFR 1910.132, "General Requirements"

OSHA Standard 29 CFR 1910.133, "Eye and Face Protection"

OSHA Standard 29 CFR 1910.135, "Head Protection"

OSHA Standard 29 CFR 1910.136, "Occupational Foot Protection"

OSHA Standard 29 CFR 1910.138, "Hand Protection"

APPENDIX A

General Guidelines for Choosing Personal Protective Equipment

Description and Use of Eye/Face Protectors

<u>Safety Glasses</u>. Protective eyeglasses are made with safety frames, tempered glass or plastic lenses, temples and side shields which provide eye protection from moderate impact and particles encountered in job tasks such as carpentry, woodworking, grinding, scaling, etc. Safety glasses are also available in prescription form for those persons who need corrective lenses.

<u>Single Lens Goggles.</u> Vinyl framed goggles of soft pliable body design provide adequate eye protection from many hazards. These goggles are available with clear or tinted lenses, perforated, port vented, or non-vented frames. Single lens goggles provide similar protection to spectacles and may be worn in combination with spectacles or corrective lenses to insure protection along with proper vision.

<u>Welders/Chippers Goggles</u>. These goggles are available in rigid and soft frames to accommodate single or two eyepiece lenses.

Welders' goggles provide protection from sparking, scaling, or splashing metals and harmful light rays. Lenses are impact resistant and are available in graduated shades of filtration.

Chippers/Grinders goggles provide eye protection from flying particles. The dual protective eye cups house impact resistant clear lenses with individual cover plates.

<u>Face Shields</u>. These normally consist of an adjustable headgear and face shield of tinted/transparent acetate or polycarbonate materials, or wire screen. Face shields are available in various sizes, tensile strength, impact/heat resistance and light ray filtering capacity. Face shields will be used in operations when the entire face needs protection and should be worn to protect eyes and face against flying particles, metal sparks, and chemical/biological splash.

<u>Welding Shields.</u> These shield assemblies consist of vulcanized fiber or glass fiber body, a ratchet/button type adjustable headgear or cap attachment and a filter and cover plate holder. These shields will be provided to protect workers' eyes and face from infrared or radiant light burns, flying sparks, metal spatter and slag chips encountered during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding and oxyacetylene welding and cutting operations.

Head Protection

Head injuries are caused by falling or flying objects, or by bumping the head against a fixed object. Head protectors, in the form or protective hats, must resist penetration and absorb the shock of a blow. The shell of the protective hat is hard enough to resist the blow and the headband and crown straps keep the shell away from the wearer's skull. Protective hats can also protect against electrical shock.

Eye and Face Protection Selection Chart				
Source	Assessment of Hazard	Protection		
MPACT - Chipping, grinding, machining, drilling, chiseling, riveting, sanding, etc.	Flying fragments, objects, large chips, particles, sand, dirt, etc.	Spectacles with side protection, goggles, face shields. For severe exposure, use face shield over primary eye protection.		
CHEMICALS - Acid and chemicals handling	Splash Irritating mists	Goggles, eyecup and cover types. For severe exposure, use face shield over primary eye protection Special-purpose goggles		
<u>DUST</u> - Woodworking, buffing, general dusty conditions	Nuisance dust	Goggles, eyecup and cover types.		
LIGHT and/or RADIATION Welding - electric arc	Optical radiation	Welding helmets or welding shields. Typical shades: 10-14		
Welding - gas		Welding goggles or welding face shield. Typical shades: gas welding 4- 8, cutting 3-6, brazing 3-4		
Cutting, torch brazing, torch soldering	Optical radiation	Spectacles or welding face shield. Typical shades: 1.5-3		
Glare	Poor vision	Spectacles with shaded or special- purpose lenses, as suitable.		

Protective hats are made in the following types and classes:

- Type I Helmets with a full brim.
- Type 2 Brimless helmets with a peak extending forward from the crown.
- Class A General Service, limited voltage. Intended for protection against impact hazards. Used in mining, construction, and manufacturing.
- Class B Utility service, high voltage. Used by electrical workers.
- Class C Special service, no voltage protection. Designed for lightweight comfort and impact protection. Used in certain construction, manufacturing, refineries, and where there is a possibility of bumping the head against a fixed object.

3. Foot Protection

There are many types and styles of protective footwear and it's important to realize that a particular job may require additional protection other than listed here. Footwear that meets established safety standards will have an American National Standards Institute (ANSI) label inside each shoe.

<u>Steel-Reinforced Safety Shoes</u>. These shoes are designed to protect feet from common machinery hazards such as falling or rolling objects, cuts, and punctures. The entire toe box and insole are reinforced with steel, and the instep is protected by steel, aluminum, or plastic materials. Safety shoes are also designed to insulate against temperature extremes and may be equipped with special soles to guard against slip, chemicals, and/or electrical hazards.

Safety Boots. Safety boots offer more protection when splash or spark hazards (chemicals, molten materials) are present:

When working with corrosives, caustics, cutting oils, and petroleum products, neoprene or nitrile boots are often required to prevent penetration.

Foundry or "Gaiter" style boots feature quick-release fasteners or elasticized insets to allow speedy removal should any hazardous substances get into the boot itself.

When working with electricity, special electrical hazard boots are available and are designed with no conductive materials other than the steel toe (which is properly insulated).

4. Hand Protection

Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Most accidents involving hands and arms can be classified under four main hazard categories: chemicals, abrasions, cutting, and heat. There are gloves available that can protect workers from any of these individual hazards or any combination thereof.

Gloves should be replaced periodically, depending on frequency of use and permeability to the substance(s) handled. Gloves overtly contaminated should be rinsed and then carefully removed after use.

Gloves should also be worn whenever it is necessary to handle rough or sharp-edged objects, and very hot or very cold materials. The types of glove materials to be used in these situations include leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials.

Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts. To protect hands from injury due to contact with moving parts, it is important to:

Ensure that guards are always in place and used.

Always lock-out machines or tools and disconnect the power before making repairs.

Treat a machine without a guard as inoperative; and

Do not wear gloves around moving machinery, such as drill presses, mills, lathes, and grinders.

The following is a guide to the most common types of protective work gloves and the types of hazards they can guard against:

- <u>Disposable Gloves</u>. Disposable gloves, usually made of light-weight plastic, can help guard against mild irritants.
- <u>Fabric Gloves</u>. Made of cotton or fabric blends are generally used to improve grip when handling slippery objects. They also help insulate hands from mild heat or cold.
- <u>Leather Gloves</u>. These gloves are used to guard against injuries from sparks or scraping against rough surfaces. They are also used in combination with an insulated liner when working with electricity.
- <u>Metal Mesh Gloves</u>. These gloves are used to protect hands form accidental cuts and scratches. They are used most commonly by persons working with cutting tools or other sharp instruments.
- <u>Aluminized Gloves</u>. Gloves made of aluminized fabric are designed to insulate hands from intense heat. These gloves are most commonly used by persons working molten materials.
- <u>Chemical Resistance Gloves</u>. These gloves may be made of rubber, neoprene, polyvinyl alcohol or vinyl, etc. The gloves protect hands from corrosives, oils, and solvents. The following table is provided as a guide to the different types of glove materials and the chemicals they can be used against. When selecting chemical resistance gloves, be sure to consult the manufacturers' recommendations, especially if the gloved hand will be immersed in the chemical.

Glove Chart

Туре	<u>Advantages</u>	<u>Disadvantages</u>	Use Against
			Bases, alcohols, dilute water solutions; fair vs. aldehydes, ketones.
rubber		Physical properties frequently inferior to natural rubber	Same as natural rubber
chloride			Strong acids and bases, salts, other water solutions, alcohols
Neoprene	Medium cost, medium chemical	NA	Oxidizing acids, anilines, phenol,

	resistance, medium physical properties		glycol ethers
Nitrile	properties, dexterity		Oils, greases, aliphatic chemicals, xylene, perchloroethylene, trichloroethane; fair vs. toluene
Butyl		Expensive, poor vs. hydrocarbons, chlorinated solvents	Glycol ethers, ketones, esters
alcohol			Aliphatics, aromatics, chlorinated solvents, ketones (except acetone), esters, ethers
Fluoro- elastomer (Viton) ™ *	Specialty glove, organic solvents		Aromatics, chlorinated solvents, also aliphatics and alcohols
Norfoil (Silver Shield)		Poor fit, easily punctures, poor grip, stiff	Use for Hazmat work

^{*}Trademark of DuPont Dow Elastomers

Glove Type and Chemical Use

<u>*Limited service</u> <u>VG= Very Good</u>	G= Good	F=Fair P=Poor	(not reco	mmended)
Chemical	Neoprene	Natural Latex	Butyl	Nitrile Latex
		<u>or Rubber</u>		
*Acetaldehyde	VG	G	VG	G
Acetic acid	VG	VG	VG	VG
*Acetone	G	VG	VG	Р
Ammonium hydroxide	VG	VG	VG	VG
*Amyl acetate	F	P	F	Р
Aniline	G	F	F	Р
*Benzaldehyde	F	F	G	G
*Benzene	F	F	F	Р
Butyl acetate	G	F	F	Р
Butyl alcohol	VG	VG	VG	VG
Carbon disulfide	F	F	F	F
*Carbon tetrachloride	F	Р	Р	G
Castor oil	F	Р	F	VG
*Chlorobenzene	F	Р	F	Р
*Chloroform	G	Р	Р	Р
Chloronaphthalene	F	Р	F	F
Chromic Acid (50%)	F	Р	F	F
Citric acid (10%)	VG	VG	VG	VG
Cyclohexanol	G	F	G	VG
*Dibutyl phthalate	G	P	G	G
Diesel fuel	G	P	P	VG
Diisobutyl ketone	Р	F	G	Р
Dimethylformamide	F	F	G	G
Dioctyl phthalate	G	Р	F	VG
Dioxane	VG	G	G	G
Epoxy resins, dry	VG	VG	VG	VG
*Ethyl acetate	G	F	G	F
Ethyl alcohol	VG	VG	VG	VG
Ethyl ether	VG	G	VG	G
*Ethylene dichloride	F	Р	F	Р
Ethylene glycol	VG	VG	VG	VG
Formaldehyde	VG	VG	VG	VG
		Natural Latex		
<u>Chemical</u>	<u>Neoprene</u>	<u>or Rubber</u>	<u>Butyl</u>	<u>Nitrile</u>
Formic acid	VG	VG	VG	VG
Freon 11	G	P	F	G

Frank 12	<u> </u>	P	F	
Freon 12	G	ľ	- -	G
Freon 21	G	P	<u> </u>	G
Freon 22	G	Р	<u> -</u>	G
*Furfural	G	G	G	G
Gasoline, leaded	G	Р	F	VG
Gasoline, unleaded	G	Р	F	VG
Glycerine	VG	VG	VG	VG
Hexane	J F	Р	Р	G
Hydrochloric acid	VG	G	G	G
Hydrofluoric acid (48%)	VG	G	G	G
Hydrogen peroxide (30%)	G	G	G	G
Hydroquinone	G	G	G	F
sooctane	F	Р	Р	VG
sopropyl alcohol	VG	VG	VG	VG
Kerosene	VG	F	F	VG
Ketones	G	VG	VG	Р
Lacquer thinners	G	F	F	Р
Lactic acid (85%)	VG	VG	VG	VG
Lauric acid (36%)	VG	F	VG	VG
Lineoleic acid	VG	P	F	G
Linseed oil	VG	P	F	VG
Maleic acid	VG	VG	VG	VG
Methyl alcohol	VG	VG	VG	VG
Methylamine Methylamine	E	E E	G	G
Methyl bromide	G	<u> </u>	G	C .
*Methyl chloride	P	P	Þ	P
*Methyl ethyl ketone	G G	G	r VG	P
	F	r	VG VG	P
*Methyl isobutyl ketone	<u></u>	<u>r</u>		F
Methyl methacrylate	G	G	VG	l C
Monoethanolamine	VG	G	VG	VG
		G VG		VG G
Monoethanolamine Morpholine	VG VG	G VG <u>Natural Latex</u>	VG VG	G
Monoethanolamine Morpholine <u>Chemical</u>	VG VG <u>Neoprene</u>	G VG	VG	G <u>Nitrile</u>
Monoethanolamine Morpholine Chemical Naphthalene	VG VG <u>Neoprene</u> G	G VG <u>Natural Latex</u>	VG VG	G <u>Nitrile</u> G
Monoethanolamine Morpholine <u>Chemical</u> Naphthalene Naphthas, aliphatic	VG VG <u>Neoprene</u> G VG	G VG Natural Latex or Rubber F	VG VG	G <u>Nitrile</u> G VG
Monoethanolamine Morpholine <u>Chemical</u> Naphthalene Naphthas, aliphatic Naphthas, aromatic	VG VG <u>Neoprene</u> G VG G	G VG <u>Natural Latex</u>	VG VG	G <u>Nitrile</u> G
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid	VG VG <u>Neoprene</u> G VG	G VG Natural Latex or Rubber F F P	VG VG	G <u>Nitrile</u> G VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%)	VG VG <u>Neoprene</u> G VG G	G VG Natural Latex or Rubber F F P	VG VG	G <u>Nitrile</u> G VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%)	VG VG Neoprene G VG G G F	G VG Natural Latex or Rubber F F P P	VG VG Butyl F F F F F	Nitrile G VG G F F
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P	VG VG Butyl F F F F F F VG	Nitrile G VG G F F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid	VG VG Neoprene G VG G F F VG VG	G VG Natural Latex or Rubber F F P P VG	VG VG Butyl F F F F VG G	Nitrile G VG G F F VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid	VG VG Neoprene G VG G G F F VG VG VG VG VG	G VG Natural Latex or Rubber F F P VG VG VG	VG VG Butyl F F F VG G VG	G Nitrile G VG F F VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid	VG VG Neoprene G VG G F F VG VG VG VG VG	G VG Natural Latex or Rubber F F P P VG	VG VG Butyl F F F F G VG VG VG	Nitrile G VG F F VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid (60%)	VG VG Neoprene G VG G G F F VG VG VG VG VG	G VG Natural Latex or Rubber F F P P VG F VG VG VG F	VG VG Butyl F F F F VG G VG G	Nitrile G VG F F VG VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene	VG VG Neoprene G VG G F F VG VG VG VG VG VG VG VG	G VG Natural Latex or Rubber F F P VG VG VG VG VG F P	VG VG Butyl F F F VG G VG VG F	G Nitrile G VG F F VG VG VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha)	VG VG Neoprene G VG G F F VG VG VG VG VG VG F G	G VG Natural Latex or Rubber F F P P VG F VG VG VG F	VG VG Butyl F F F VG G VG VG F P	Nitrile G VG F F VG VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha)	VG VG Neoprene G VG G G F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F VG F P P F P F F F F F F F F F F F F F F	VG VG Butyl F F F F VG G VG VG P P	G Nitrile G VG F F VG F F F VG VG VG F
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid	VG VG Neoprene G VG G G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F VG F P F F F F F F F F F F F F F F F F F	VG VG Butyl F F F F VG G VG VG P P G VG VG	G Nitrile G VG F F VG VG VG VG VG VG VG F VG VG VG VG VG VG VG F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F VG F P P F P F F F F F F F F F F F F F F	VG VG Butyl F F F VG G VG VG P G VG	G Nitrile G VG F F VG F F F VG VG VG F
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG VG VG F P P C VG VG F VG VG F P P P F F F F F F F F F F F F F F F	VG VG Butyl F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG VG F VG VG F P P P F F F F F F F F F F F F F F F	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol Propyl alcohol (iso)	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG VG F VG F P VG F VG VG VG F VG VG VG F VG	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG VG F VG VG F P P P F F F F F F F F F F F F F F F	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol Propyl alcohol (iso) Sodium hydroxide Styrene	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG VG VG VG VG VG VG VG F VG VG P	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl alcohol Propyl alcohol Propyl alcohol (iso) Sodium hydroxide	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG VG VG VG VG VG VG VG VG VG VG VG VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol Propyl alcohol (iso) Sodium hydroxide Styrene	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG VG VG VG VG VG VG VG F VG VG P	VG VG Butyl F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl acetate Propyl alcohol Propyl alcohol (iso) Sodium hydroxide Styrene Stryene (100%)	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P VG VG VG F VG VG F P P P P P P P P P P P P P P P P P P	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG
Monoethanolamine Morpholine Chemical Naphthalene Naphthas, aliphatic Naphthas, aromatic *Nitric acid Nitromethane (95.5%) Nitropropane (95.5%) Octyl alcohol Oleic acid Oxalic acid Palmitic acid Perchloric acid (60%) Perchloric acid (60%) Perchloroethylene Petroleum distillates (naphtha) Phenol Phosphoric acid Potassium hydroxide Propyl alcohol Propyl alcohol Propyl alcohol (iso) Sodium hydroxide Styrene Stryene (100%) Sulfuric acid	VG VG Neoprene G VG G F F VG	G VG Natural Latex or Rubber F F P P VG F VG VG F P P C VG VG VG F P P F G VG VG F F F F F F F F F F F F F F F	VG VG Butyl F F F F VG G VG V	Nitrile G VG F F VG VG VG VG VG VG V

*Toluene	F	Р	Р	F
Toluene diisocyanate	F	G	G	F
*Trichloroethylene	F	F	Р	G
Triethanolamine	VG	G	G	VG
. 5 .	VG	Р	F	VG
Turpentine	G	F	F	VG
*Xylene	Р	P	Р	F

*Limited service	VG- Vary Good	G= Good F=Fai	r P-Poor (not recommended)
Littlited Service	vG= very Good	<u>G= Good</u> <u>F=Fai</u>	<u>r P=Poor (not recommended)</u>

Appendix B1

Hazard Assessment Certification Form

Location:

Hazard Assessment and Selection of Personal Protective Equipment I. Overhead Hazards -

- Hazards to consider include:
- Suspended loads that could fall
- Overhead beams or loads that could be hit against
- Energized wires or equipment that could be hit against
- Employees work at elevated site who could drop objects on others below
- Sharp objects or corners at head level

	. ,				
Hazards Ide	entified:				
Llagal Dua	4 4	•		•	•

<u>Head Protection</u>

Hard Hat:		Yes	No	
f yes, typ	e:			
	Type A (impact and p	enetration resistanc	e, plus low-volta	age electrical insulation)
	Type B (impact and p	enetration resistance	e, plus high-volt	age electrical insulation)
	Type C (impact and p	enetration resistanc	e)	

II. Eye and Face Hazards -

- Hazards to consider include:
- Chemical splashes
- Dust
- Smoke and fumes
- Welding operations
- Lasers/optical radiation
- Bioaerosols
- Projectiles

Hazards Identified:		
Eye Protection		
Safety glasses or goggles	Yes	No

Face shield		Yes	No	
III. Hand Hazards -				
 Hazards to cons 	ider include·			
Chemicals	idel include.			
 Sharp edges, spl 	inters, etc			
 Temperature ex 				
 Biological agents 				
 Exposed electric 				
• Sharp tools, mad				
 Material handling 	-			
Hazards Identified:	<u> </u>			\neg
Llavad Duata atiana				
Hand Protection Gloves		Yes	No	— 1
☐ Chemical resista	ant	res	INO	-
☐ Temperature re	sistant			
☐ Abrasion resista☐ Other (Explain)	int			
IV. Foot Hazards -				
• Hazards to cons				
· ·	handled by employees			
	oints (puncture risk)			
 Exposed electric 				
 Unusually slippe 	ery conditions			
• Wet conditions				
• Construction/de	emolition			
I I				—
Hazards Identified:				
Foot Protection				
Safety shoes		Yes	No	
Types:				\neg
☐ Toe protection☐ Metatarsal prot	ection			
☐ Puncture resista	int			
☐ Electrical insula☐ Other (Explain)	tion			
	fety and/or Health Hazard	_		
Hazard		ded Protection		\neg
T a out if we the set also set 1.	in an a ati an C		of mar 1	- ا 1
i certify that the abo	ve inspection was perforn	nea to the best	or my knov	wieag
	·			

(Signature)		

Record of Changes & Annual Review

Instructions:

The effective date of this Personal Protective Equipment Program is April 2000. The facility or agency may issue or require updated sections, which will bear the date of the revision in the upper right hand corner of each page. The updated pages are to be inserted in their proper place in the plan and any obsolete pages discarded. The holder of this plan is to record the receipt of each revision on this form.

Change Number	Date Reviewed	Page Number Affected	Date Changed	Date Entered	Signature of Person Entering Change
0	Feb 2002	NA	Feb 2002	Feb 2002	Randy Anderson
0	Jan 10 2003	NA	Jan 10 2003	Jan 10 2003	Randy Anderson
0	Jan 10 2003	NA	Jan 10 2003	Jan 10 2003	Randy Anderson
0	Jan 21 2005	NA	Jan 21 2005	Jan 21 2005	Randy Anderson
0	Feb 3 2006	NA	Feb 3 2006	Feb 3 2006	Randy Anderson
0	3/30/2010	NA	3/30/2010	3/30/2010	Scott Eckberg

Annual Reviewing Officials:		
Superintendent	Date	
	 Date	

Nez Perce National Historical Park: Off-Highway Vehicle Safety Policy
The following plan has been developed based on RM 50B Section 6.1. Nez Perce National Historical Park will implement the following policy and will become effective upon Superintendent approval.

Date: _____

June 2010

Superintendent

Signed:

(Nez Perce National Historical Park)

All-Terrain Vehicle Safety Policy Nez Perce National Historical Park

Summary: This policy clarifies and expands the definition of OHV (Off-Highway Vehicle) to include ATV (All Terrain Vehicle) and UTV (Utility Terrain Vehicle). This policy applies to all of Nez Perce National Historical Park (NEPE) including Big Hole National Battlefield and all associated NEPE park units located in the States of Idaho, Washington, Oregon, and Montana. This policy also strengthens training requirements, clarifies PPE (personal protective equipment) requirements, and adds additional requirements for training documentation.

SPECIALIZED EQUIPMENT.

All-Terrain Vehicles (ATV) and Utility Terrain Vehicles (UTV) are considered Specialized Equipment. Authority for the purchase and use of specialized equipment is found in Title 49 of the Code of Federal Regulations (49 CFR), Parts 172, 383-397.

1 – Definitions.

All-Terrain Vehicle (ATV): A motorized off-highway vehicle (OHV) traveling on four or more low-pressure tires, having a seat to be straddled by the operator and a handlebar for steering control. Note: This policy does not cover the use of 3-wheel ATVs, which are prohibited.

Amber Operations: Moderate hazard. An OHV operation where the Risk Assessment Tool generates a value of 50 up to and including 69.

ASI: All-Terrain Vehicle Safety Institute

ASI Certified ATV Instructor: An individual who has successfully completed the ASI ATV Rider Instructor Certification Course and maintains certification status.

Emergency Dismount Training: ATV operator training on techniques for quickly and safely dismounting the ATV when a rollover is imminent. The ATV must not be put in a rollover situation during this training.

Experienced Operator: This is an individual who has demonstrated experience in the safe use of OHV's under the conditions they will be used for at NEPE and in accordance with the manufacturer's operating manual, the JHA's, and this policy.

Green Operations: Low hazard. An OHV operation where the Risk Assessment Tool generates a value less than or equal to 49.

Job Hazard Analysis (JHA): A document that identifies hazards associated with specific work operations and lists safe actions or procedures for employees to follow.

Maximum Cargo Rack Weight Limitation: The weight limit specified by the manufacturer for the front cargo rack or the rear cargo rack.

Maximum Gross Vehicle Weight: The OHV weight limitation specified by the manufacturer including rider(s), attachments, fuel, oil, and all cargo.

Maximum Towing Capacity: The maximum towing capacity for an ATV or UTV as specified by the manufacturer.

Off-Highway Vehicle (OHV): For the purposes of this policy, an OHV means an ATV or UTV as defined in this section.

Red Operations: High hazard. An OHV operation where the Risk Assessment Tool generates a value of 70 or higher.

Rollover: OHV upset commonly due to steep terrain, slippery or uneven ground, large loads, top-heavy loads, and other environmental conditions or unsafe operating practices, including improper trailer/truck loading and unloading techniques.

Rollover Protective Structure (ROPS): A cage-like structure fastened to the UTV frame that complies with Society of Automotive Engineers (SAE) specification J2194-97 designed to protect the operator and passenger in case of UTV rollover. (Note: A cab/brush cage is not necessarily a ROPS)

T-Cloc Inspection: A pre-ride inspection focusing on the OHV's Tires, Controls (levers, cables), Lights, Oil (fluids), and Chassis (frame, suspension).

Utility Terrain Vehicle (UTV) (also called a side-by-side): A motorized OHV having four or more low pressure tires, designed with side-by-side seats, seatbelts, steering wheel, and optional cab, brush cage, or ROPS.

Vehicle Recovery/Extrication Equipment: Equipment such as tow straps, winches, jacks, come-alongs, and the like.

Well traveled area: An area where encountering other people is routine, commonplace, and predictable during the time period the OHV will be operated in that area.

Note: Requirements specified for an OHV in this document are meant to apply to both an ATV and UTV. Requirements specified for an ATV, or conversely a UTV, are meant to apply only to that specific type of vehicle.

2 – Qualifications.

A. Only qualified persons shall be authorized to operate an OHV.

- 1. All Nez Perce National Historical Park (NEPE) OHV operators must successfully complete the following:
 - (a) Introduction to Basic ATV Operation an online course that is a prerequisite for field training.
 - (b) ATV Safety Institute (ASI) ATV Rider Course training taught by an ASI certified instructor.
 - (c) Yearly review by an Experienced Operator on OHV operation under the conditions they will be used at the local park or operating unit.
 - (d) Review of safe operating procedures as specified in the local JHA and owner's manual.
 - (e) Training on this policy.
- 2. All OHV operators shall be provided a refresher training check ride each year by an Experienced Operator in accordance with local JHAs and reevaluated by an ASI Certified ATV Trainer every 3 years. Instructors will supply certificate of completion and supervisors will verify operator qualifications (see Appendix A2).
 - (a) Reevaluation consists of demonstrating to the Certified ATV Trainer the operator's abilities in: operation of controls, basic servicing, handling, loading/tie-down, unloading, and operating over terrain typically encountered at the park or operating unit, utilizing the equipment the operator will use on the job. This may be accomplished during a check ride.
 - (b) Infrequent users (less than 16 hours of riding a year), including volunteers and Special Program enrollees, shall have a check ride before the scheduled use of the OHV for project work, or as determined by the ASI Certified ATV Trainer.
- 3. All OHV operators must hold a valid state Motor Vehicle Operator's Permit. Operating restrictions identified on the operator's permit must be adhered to while operating an OHV (e.g., use of corrective lenses, etc).

3 – Personal Protective Equipment

- A. Personal protective equipment (PPE) required for OHV use shall be identified in the JHA. At a minimum, the following PPE is <u>required</u> and shall be provided and used:
 - 1. Standard first aid kit including the following items: rubber gloves, eye protection, and CPR clear-mouth barriers. It is recommended to enclose the first aid kit in a dust-proof container.

2. Helmet:

(a) ATV operators shall wear a full, three-quarter, or one-half style motorcycle helmet with chin strap properly secured for green, amber, and red operations. The JHA will specify the use of the most protective helmet consistent with operational needs.

Exception: A helmet is not required for ATV use in those green operations where the vehicle is moved over level or flat ground at slow speeds for short distances and repeatedly mounted/dismounted. Examples include ATV use in and around campgrounds, administrative buildings, movement by mechanics in and out of shops, movement a few feet at a time by work crews, etc. This exception does not apply to loading or unloading ATV's on trailers via ramps, etc.

- (b) If a UTV is operated in amber or red operations, the operator and passengers must wear helmets (as described for ATV's above). If needed, head protection for the UTV operator and passenger in green operations will be specified by the local JHA depending on local conditions of use.
- (c) The helmet shall meet Department of Transportation (DOT), ANSI Z90.1 or Snell (SMF) standards. If available, the use of an ANSI or Snell rated helmet is recommended in preference to a helmet that has only a DOT rating.
- (d) The helmet shall be properly sized to fit the user.
- (e) Helmets shall be replaced as recommended by the manufacturer or sooner if a helmet is involved in an impact related accident.
- 4. Gloves as determined by the JHA based on the work environment (e.g., brushy environment may warrant padded riding gloves as opposed to canvas gloves used for trash pickup).
- 5. Long pants and other specific clothing as specified by the JHA.
- 6. Footwear:
 - (a) ATV: sturdy over-the-ankle boots with heels to help prevent the operator's feet from slipping off the footrests.
 - (b) UTV: sturdy shoes that cover the toes and heel and have a slip resistant sole.
- 7. Eye protection: safety glasses, goggles, or sunglasses that meet the ANSI 87.1 standard as determined by the JHA based on the work environment (e.g., brushy environment may warrant goggles as opposed glasses).

B. PPE for Pesticide Application:

- 1. Helmets shall be equipped with removable, washable liners and meet the following additional requirements:
 - (a) ATV Pesticide Application A helmet is required and shall meet DOT, ANSI Z90.1 or Snell (SMF) standards. If available, the use of an ANSI or Snell rated helmet is recommended in preference to a helmet that has only a DOT rating. Helmets shall be replaced as recommended by their manufacturer, or sooner if a helmet is involved in an impact-related accident.
 - (b) UTV Pesticide Application A helmet is required and shall meet DOT, ANSI Z90.1, or Snell (SMF) standards. If available, the use of an ANSI or Snell rated helmet is recommended in preference to a helmet that has only a DOT rating. Helmets shall be replaced as recommended by their manufacturer, or sooner if a helmet is involved in an impact-related accident.
- 2. Nitrile gloves are to be worn during spray operations.
- 3. To protect the applicator from chemical exposure and for safe operation of the OHV, impervious boots with shank support in the sole will be worn OR impervious boots may be worn over leather riding boots.
- 4. Follow pesticide label instructions for other personal protective equipment, as specified.

C. Additional equipment required for OHV use:

- 1. Manufacturer's tool kit.
- 2. Fire extinguisher.
 - 3. UTV's must be equipped with a ROPS, a seat, and seat belt for each rider.

- 4. OHV's must be 4-wheel drive or all-wheel drive and be equipped with a power plant sufficient to preclude stalling on steep terrain under full load.
- 5. A means of emergency communication, i.e. radio, cell phone, satellite phone.

4 – Loading and Transporting

- A. Operator shall wear personal protective equipment (as described in Section 3 above) and specified in the JHA while loading/unloading OHV.
- B. An OHV being transported must be well secured to the transport vehicle, with the transmission in gear and the parking brake set. Transporting vehicle shall be of adequately rated capacity and not exceed 75% of the vehicle's gross vehicle weight requirements when hauling the OHV.
- C. OHV shall be secured using four tie downs to prevent forward, backward, and sideways movement. When transporting an OHV via:
 - 1. Vehicle During transport, the tailgate is recommended to be completely closed at all times. If the tailgate cannot be closed all four tires of the ATV must rest on the pick-up bed at all times
 - 2. Trailer An OHV shall be transported on an appropriately rated trailer, ensuring that the load does not exceed combined gross vehicle weight and trailer rated capacity.
- D. Tie down straps shall be in good condition, free of frays/splices with the following Minimum rated capacity.
 - 1. ATV -1,200 pounds. Only straps with cam action or ratchet action buckles may be used to secure ATVs; knotted straps or rope may not be used.
 - 2. UTV 2,500 pounds. Only ratchet-type tie downs may be used to secure a UTV.
- E. Containers with hazardous materials contents, such as pesticide, flammable solids, or flammable liquids shall:
 - 1. Be secured separately from the OHV inside the bed of the truck to prevent movement;
 - 2. Containers must be in good condition, free of leaks and residue on their exteriors, properly labeled, and meet D.O.T. specifications for over the road transportation requirements;
 - 3. When transporting hazardous material you should not exceed D.O.T. minimum transportation regulation for over the road transportation, unless placarding or licensing requirements are met; and
 - 4. A copy of the Material Safety Data Sheet (MSDS) must be provided and available.
- F. Any materials, equipment or gear in the pick-up bed shall also be secured from movement at all times.
- G. Trailers are the recommended method for transporting OHVs.
- H. Recommended hiearchy for loading ATVs into the back of a pickup truck is as follows:
 - 1. One piece, bi- or tri-fold ramps that are strapped, chained, bolted to the truck bed.
 - 2. Two individual ramps a minimum of 10 inches wide and 72 inches long. Chains or straps must be used to secure the ramps to the vehicle and prevent rearward movement of the ramps during loading.

- I. Loading ramps must meet the following criteria:
 - 1. Fabricated of aluminum or steel and must be of welded construction. Driving surface must have closely spaced crossed members or mesh construction with high traction surface. Wooden ramps may not be used.
 - 2. Ramps may be one or two piece, rigid or folding. Hinges must be factory installed.
 - 3. The weight capacity of the ramp(s) shall meet or exceed the weight of the OHV.
- J. Trucks and trailers shall not be positioned across side slopes for loading or unloading operations.
- K. The procedures for loading, unloading, and transporting OHVs further described in Appendix B2 to this policy shall be followed.

5 – Operation of OHV

- A. The supervisor shall ensure that a JHA is prepared for each work activity involving use of OHVs.
- B. Supervisors shall ensure that operators possess the skills required for the work project or activity. The supervisor, in consultation with the operator, shall consider the following issues:
 - 1. Is the OHV the appropriate vehicle for the work project or activity?
 - 2. Operator tasks
 - 3. Personal protective equipment
 - 4. Operator experience/training level
 - 5. Vehicle cargo rack weight limitations
 - 6. OHV capabilities/limitations
 - 7. Loading, unloading, and transportation of the vehicle
 - 8. Terrain
 - 9. Weather and work environment
 - 10. Maintaining reliable communications
- C. Prior to operating any OHV, tailgate safety meetings shall be held and documented specifically identifying their local hazards as identified within the JHA (see Appendix C2). Before riding, always perform a pre-maintenance check such as T-CLOC (ASI

Program) or similar check. The OHV pre-ride inspection shall be documented on Appendix D2, Pre-ride Inspection Checklist. T-CLOC maintenance check includes:

- 1. T-Tires, Wheels
- 2. C-Controls, Clutch, Brake, Throttle
- 3. L-Lights
- 4. O Oil, Fuel, Air Filter

- 5. C-Chassis, Suspension, Nuts, Bolts
- D. An annual maintenance inspection from the manufacturer, certified OHV mechanic, or Division Chief designee is required. A copy of the inspection report will be maintained in the equipment history folder.
- E. Do not carry passengers on ATVs.
- F. Carry only manufacturer recommended number of passengers on UTVs. All passengers must have their own seat and seat belt.
- G. When parking the OHV:
 - 1. Engage brake;
 - 2. Shift transmission into low range/low gear;
 - 3. Block tires when parking on an incline/decline; and
 - 4. Turn off and remove keys if appropriate.
- H. When carrying equipment, equalize the load to maintain balance, stability and center of gravity. Never exceed the manufacturer's maximum carrying capacity of either axle or cargo rack as specified in the OHV owner's manual. Follow manufacturer loading instructions.
- I. When using an OHV to tow a trailer and/or equipment the maximum manufacturer's towing capacity specified in the vehicle manual shall not be exceeded. [Note: Manufacturers specified towing capacity varies depending on grade or slope of the terrain to be travel.] In addition, the trailer's weight rating shall not be exceeded.
- J. Always secure equipment as close to the rider as possible to maintain center of gravity. Additional precautions as specified in the JHA must be observed when carrying liquids. All tools or equipment transported on OHV shall be secured.
- K. Do not drive recklessly or engage in horseplay.
- L. Modifications that include changes to the frame, electrical systems, and other changes to the manufacturer's design of the OHV mechanical configuration are not allowed.
 - 1. Installation of "off the shelf" "add-ons", such as carry-all boxes, equipment bags, approved extended range fuel tanks, equipment racks or other attachments such as agriculture spraying equipment are allowed.
- M. All accidents shall be reported in SMIS (Safety Management Information System) as required by DO 50A & 50B.
- N. When hazardous materials or pesticides are being transported, ensure that the JHA reflects the necessary actions to activate emergency procedures in the event of an accidental discharge as appropriate for the region and state. The JHA shall include chemical name, classification, quantity and precautions to be taken in the event of an accident.
- O. All containers used for externally transporting fuel, must meet specification requirements stipulated in the Interagency Transportation Guide for Gasoline, Mixed Gas, Drip-Fuel firing device Fuel, and Diesel prepared by the Missoula Technology and Development Center

Appendix A2

UTV Oper	ator Account	ability/Certifi	cation Tracking	g Record	
	Type of	INITIAL			
OPERATOR'S NAME	Training	TRAINING	REFRESHER	ANNUAL	
	4x4, 6x6,	COURSE	TRAINING	REVIEW	SUPERVISOR
	or UTV	DATE	DUE DATE	DATE	SIGNATURE

I certify that the individuals listed above have completed the required certification training to operate UTV's.

Certified Trainer - Signature & Title	Date:	

Appendix B2

ATV Loading and Transport Procedures for Pick-ups and Trailers

The objective of Appendix B2 is to establish Standard Operating Procedures to ensure safe loading, unloading, and transport of ATVs in pickup trucks. Only qualified operators are permitted to load or unload ATVs. Great care must be taken to avoid a wide variety of hazards associated with this operation. A JHA will be done prior to ATV operation, as circumstances are rarely constant. Loading/unloading operations should *never* become routine.

The recommended method of transporting ATVs is via trailer. Trailers normally have built-in ramps and set lower to the ground, decreasing the loading angle. If operational reasons make it necessary to transport an ATV via pick-up, it is strongly recommended that a winch be mounted either on the ATV or the pick-up and that the winch be used for all loading/unloading operations.

If the ATV must be ridden into a truck bed, the following procedures will govern NPS personnel:

Personal Protective Equipment:

• All required Personal Protective Equipment (PPE) must be worn while loading and unloading ATVs to/from vehicles.

Loading Ramps:

- Loading ramps may be aluminum or steel. If aluminum or steel they must be of welded construction. Ramps may be one or two piece, rigid or folding. Hinges must be factory installed. Ramp surface (driving surface) should have closely spaced cross members or mesh construction with high traction surface. Under no circumstances will wooden ramps be used.
- Ramps must have a minimum rated capacity of 1,000 pounds. For ATV's 500 cc and larger, or if the ATV has any type of external spray tank or other bolt-on accessories, ramps must have a minimum rated capacity of 1500 pounds.
- One piece, bi- or tri-fold ramps must be a minimum of 46 inches wide when extended for loading. One piece ramps must be wider than the distance between the ATV's tires as measured from the outside of the left tire to the outside of the right tire. For two-piece ramps, each ramp must be a minimum of 10 inches wide. Ramp length must be a minimum of 72 inches (6 feet) long when extended for loading.
- All ramps must have chains or straps to secure the ramps to the vehicle tailgate.
 Use of ramp chains or straps during loading is mandatory. These chains or straps prevent rearward movement of the ramps during loading.

Vehicle:

- Only pickup trucks or larger vehicles that have room for all four wheels of the ATV to rest on the bed of the truck will be used to transport ATVs. Gross Vehicle Weight Rating (GVWR), suspension weight capacity and tire load ratings may not be exceeded.
- Pickup trucks may transport only one ATV loaded in the bed and all four ATV wheels/tires must be in contact with the bed surface.
- Transport vehicles should be equipped with front-end header boards (headache racks) if possible.

- All vehicles must have a flat bed surface, wide enough between wheel wells that the ATV may be rolled on the bed
 without riding over the wheel wells. Under no circumstances will an ATV be loaded into a vehicle when the ATV
 must be driven over the wheel wells.
- Tie downs with a 1,200-pound capacity sufficient to secure the ATV to the vehicle shall be used.

Vehicle/Ramp Position:

- The ramp angle from vehicle to ground has the largest influence on risk when loading/unloading ATV's. If the ramp angle is reduced, and all other conditions remain the same, risk is reduced. The truck should be positioned to take advantage of any terrain features that will help reduce the ramp angle. Therefore, the operator should consider the following methods to reduce the ramp angle.
- The use of a loading wall, if available, or positioning the rear of the truck near a berm will reduce the ramp angle from truck bed to ground. If the loading wall is the correct height, it may eliminate the need for ramps and allow roll-on/roll-off loading.
- The truck may be positioned with the rear wheels in a depression (for example, a ditch) to reduce the ramp angle. This lowers the bed of the truck and allows the ramps to be located on higher ground on the far side of the depression.
- Loading ramps must be secured to the truck bed with chains or straps designed for that purpose. When in position for loading, the chains or straps must be taut with no slack or sag.
- Two-piece loading ramps must be positioned parallel and spaced so the ATV tires are centered on the ramps. One-piece ramps must be centered on the truck bed and the ATV driven up the center of the ramp.
- Loading ramps should be positioned so the ends in contact with the ground are level or at the same height. Uneven ramps may cause the ATV to tip over sideways during loading/unloading.
- Trucks and/or trailers shall not be positioned across side slopes for loading or unloading operations.

Loading Technique:

- The ATV's racks should be unloaded before transporting. Any heavy cargo must be removed and/or spray tanks emptied. If heavy cargo or tanks cannot be removed, sandbags or other heavy objects should be secured to the opposite cargo rack to help balance the ATV. The only safe method of loading an ATV that has a loaded spray tank or other heavy load on the back is to winch the ATV into the bed of the pick-up.
- When preparing to drive the ATV into the bed of a vehicle, the operator should be leaning well forward with feet positioned on the ATV's footrests. This keeps the operator's weight low over the ATV's center of gravity.
- The ATV should be loaded with the front of the ATV toward the front of the transport vehicle. In cases where the ATV must be loaded with a tank or other load on the ATV rear, it may be safer to load the ATV with the rear facing the front of the transport vehicle, placing the center of gravity further forward and reducing the probability of the ATV tipping backward off the ramp.
- The operator should apply throttle smoothly and climb the ramp at low speed. Too much or sudden increases in throttle will cause the ATV to be harder to control and may cause the ATV to impact the front of the vehicle bed or over-turn.
- As the ATV starts up the ramp the operator should lean toward the uphill direction, i.e. toward the ramps, to help keep the ATV balanced.

- The safest method of unloading is to push the ATV down the ramps, carefully braking to ensure control of the ATV. When riding down, the operator should apply only enough throttle to start the ATV down the ramps, then allow the ATV to roll backwards using light pressure on all the brakes to control speed.
- For transport, ATV's with manual transmissions should be left in first gear. ATV's with automatic transmissions should be in the Park position. The ATV's ignition key should be turned off and removed, the parking brake set, the run/stop switch in the stop (or off) position and the fuel lever turned to the off position.

Secure Load:

• Tie down straps shall be in good condition, free of frays/splices with the following minimum rated capacity. ATV – 1,200 pounds.

Only straps with cam action or ratchet action buckles may be used to secure ATVs; knotted straps or rope will not be used.

UTV - 2,500 pounds.

Only ratchet type tie downs may be used to secure a UTV.

- On the NEPE Polaris MV7 the front and rear winches will be used to secure the ATV to the Trailer used to haul the unit. Two additional straps will then be required. One of those tie downs must be secured to the front tie down D-ring of the ATV's front rack angling toward the back side of the trailer. The other tie down must be secured to the tie down D-ring of the ATV's rear rack angling toward the front side of the trailer.
- Hooks on one end of the tie-downs must be attached to the ATV's D-ring anchor points. Hooks on the other end must be attached to trailer cargo anchors. When using a tie-down to secure the ATV's front, pass the strap around tubing on the front bumper and secure hooks on both ends to vehicle cargo anchors.

Appendix C2

All-Terrain Vehicles

Introduction

ATVs continue to grow in popularity. These vehicles are used safely both for pleasure and work. However, over the years there have been many crippling, even deadly accidents. Operators of these vehicles must be extremely cautious about their special handling and operating characteristics.

Although today's ATVs are much better designed than earlier models, these vehicles are tough to control and much responsibility rests with the operator to ensure safe operation.

Topical Information

General Safety Information:

- Never operate ATVs while under the influence of alcohol.
- Wear protective padding and gear.
- Always wear a helmet.
- Make sure you are familiar with the area in which you are operating.
- Make sure the area in which you are operating is approved for such activities.
- Do not trespass.
- Perform a pre-trip inspection.
- Double check the brake system.
- Make sure all lights are in working condition.
- Make sure you comply with any minimum age requirements that may apply to your area.

Off- Road Driving Safety:

- Obtain proper training on the particular vehicle you will be driving *before* you operate the vehicle.
- Always follow the manufacturer's instructions and warnings.
- Never perform dangerous stunts.
- Slow down to a safe speed before turning; these vehicles are easy to flip over.
- Driving in mud reduces your traction and increases your breaking distance. It's best to use a low gear and keep your vehicle moving.
- Before driving through water, make sure that it isn't too deep for your vehicle.
- Use extra caution on high-angle grades.
- Ride with a "buddy" in case problems are experienced.
- If you decide you can safely negotiate a high-angle grade, use a low gear.
- Make sure you know what is on the other side of a hill; walk it first.
- Keep a firm hand on the steering mechanism.
- Avoid crossing water with a swift current.

•		
	osir	าด

All-terrain vehicles are useful and safe. However, they have their own unique safety concerns. Never underestimate the potential for accidents when operating these vehicles and never forget that the operator is the most important aspect of safe vehicle operation. Have fun and be safe!

Employees Attending the Tailgate Safety Meeting			
1	Date:		
2	Date:		
3	Date:		
4	Date:		
5	Date:		
6	Date:		
7	Date:		
8	Date:		
9	Date:		
10	Date:		

Appendix D2 OHV OPERATOR

Pre-ride Inspection Checklist

Warning: If a proper inspection is not done before each use, severe injury or death could result. Always inspect the OHV before each use to ensure the equipment is in proper operating condition.

- $\underline{T = TIRES \& WHEELS:}$ Air pressure Tire condition Wheels rim bolts (lug nuts) and axle nuts and wheel bearings.
- <u>C = CONTROLS & CABLES:</u> Controls & Throttle location and workability Brakes adjusted properly and Fluid level okay. Recoil Start and shifter are operational
 - <u>L = LIGHTS & ELECTRICS:</u> Ignition switch Engine stop switch Lights Check that they are working
- O = OIL, FUEL, FLUIDS & AIR FILTER: Oil Check level & for leaks. Fuel- is full. Air filter clean and not torn or blocked. Coolant full & no leaks
- <u>C = CHAIN/DRIVESHAFT, CHASSIS, SUSPENSION & EXTERNAL EQUIPMENT:</u> Chain Check chain slack for free-play and lubrication. Drive shaft Check for oil leaks and missing nuts and bolts Shake handlebars, footrests, racks, etc. to be sure nothing is loose. Check fasteners for tightness and racks for cracks. Winches Check for proper operation, damaged cables, fairlead, hook and controls. Tool boxes and other external equipment and loaded items are secured and in good repair. Trailer hitches secured and proper size and capacity.

Appendix E2

Risk Assessment Tool Analysis for NEPE and BIHO.

Appendix A: Risk Assessment Tool

Nez Perce National Historical Park

	OHV RISK AS	SSESSMENT TOOL TABLE		
	0	Under 10 mph		
Speed of Operation	4	11 to 20 mph		
	9	Over 20 mph		
Maximum Slope in Any Direction	0	Slight (<25% of mfgr's maximum)* Moderate (>26% & < 75% of mfgr's maximum)*		
	40	Steep (>75% of mfgr's maximum)*		
1	1.	Prepared Dirt/Gravel Road		
	4	Sand		
Surface Type	(5)	Soil		
	16	Rock		
	(1)	Firm		
Surface Condition	4	Soft or Loose		
	9	Slippery or Icy		
	(1)	Ruts/Bumps/Irregularities (less than 6 inches)		
Surface Configuration	9	Ruts/Bumps/Irregularities (6 to 12 inches)		
Consideration	25			
	0	Ruts/Bumps/Irregularities (> than 12 inches) No Load		
	1			
Lond Weight	4	Up to 25% of Mfgr's Recom'd Maximum		
	(9)	26% to 50% of Mfgr's Recom'd Maximum		
	16	51% to 75% of Mfgr's Recom'd Maximum		
	0	76% to 100% of Mfgr's Recom'd Maximum		
	1	No Load		
Land Type	4	Solid attached to vehicle		
	(9)	Liquid in a baffled container		
	(3)	Liquid in an unbaffled container		
Accessibility of Use Area for	4	Very accessible		
Emergency Response	9	Generally accessible		
	_	Generally inaccessible		
Time Operating	1	Under 1 hour		
Vehicle by Same Ritter in a Single	(4)	1 Hour to 4 hours		
Workday	9	4 Hours to 8 hours		
	16	Over 8 hours		
Distraction Potential of Other Task While Operating Vehicle	0	No Distraction		
	1	Slight Distraction		
	4	Moderate Distraction		
	9	Significant Distraction		
TOTAL OF CIRCLED VALUES	40	UP TO 49 50 TO 69 ABOVE HAZARD HAZARD HAZARD		

APPENDIX A OHV RISK ASSESSMENT TOOL

To compute the total level of risk for the ten elements, circle the number beside each element in the table that best describes the operation according to the guidance given below. Add the circled numbers to come up with a total risk score. Use the Green/Amber/Red scale and Section II of the policy as guidance to choose the safest vehicle for the operation.

SPEED OF OPERATION

The intended maximum speed of operation for OHV use associated with the job activity.

MAXIMUM TERRAIN SLOPE

The maximum slope that is known and/or expected to be encountered with the OHV during the job activity. If the manufacturer does not specify a maximum slope, the following guidance should be used: Slight(<11% slope) Moderate (11%-34% slope) Steep (>34% slope). NOTE: An OHV may not be operated on any slope that is greater than the maximum slope recommended by the manufacturer.

SURFACE TYPE

The type of surface upon which the OHV will primarily operate during the job activity. Occasional surface changes and variability are known to occur and may be encountered, but the majority of the operation will be completed on the surface type identified. NOTE-Paved surfaces should be avoided. If the vehicle must be operated on pavement the operator should turn gradually and go slowly.

SURFACE CONDITIONS

The condition of the surface upon which the OHV will primarily operate during the job activity. Occasional surface condition differences are known to occur and may be encountered, but the majority of the operation will be completed on the surface condition identified.

SURFACE CONFIGURATION

The primary surface configuration known and/or expected to be encountered during the job activity. Isolated surface configuration differences are known to occur and may be encountered, but the significant majority of the operation will be completed on the surface configuration identified.

LOAD WEIGHT

The greatest load weight (as a percentage of the manufacturer's recommended maximum weight) to be carried at any location on the wehicle, i.e., the front rack, rear rack, either axle or both. NOTE: An OHV may not be loaded in excess of the manufacturer's recommended maximum weight for any location on the machine.

LOAD TYPE

The type of load to be carried at any time during the job activity.

ACCESSIBILITY OF USE AREA FOR EMERGENCY
RESPONSE

The accessibility of the job activity area for emergency response at the point most remote from expected responding emergency medical responders.

TIME OPERATING VEHICLE

The amount of time the same rider will be operating the vehicle in a single workday.

DISTRACTION POTENTIAL OF OTHER TASK WHILE DRIVING

The most accurate description of how distracting a task will be if performed simultaneously while operating the vehicle. e.g., observing animal movements, observing wildfire activity, operating weed spraying equipment, operating drip torch equipment, etc.

14

	HV RISK A	SSESSMENT TOOL TABLE		
		Under 10 mph		
Speed of Operation	4	11 to 20 mph		
	9	Over 20 mph		
	(i)	Slight (<25% of mfgr's maximum)*		
Maximum Slope in Any Direction	20	Moderate (>26 % & < 75% of mfgr's maximum)*		
	40	Steep (>75% of mfgr's maximum)*		
	T	Prepared Dirt/Gravel Road		
Surface Type	4	Sand		
	(5)	Soil		
	16	Rock		
Surface	(1)	Firm		
Condition	4	Soft or Loose		
	9	Slippery or lcy		
	(1)	Ruts/Bumps/Irregularities (less than 6 inches		
Surface Configuration	9	Ruts/Bumps/Irregularities (6 to 12 inches)		
	25	Ruts/Bumps/Irregularities (> than 12 inches)		
	0	No Load		
	1	Up to 25% of Mfgr's Recom'd Maximum		
Load Weight	(4)	26% to 50% of Mfgr's Recom'd Maximum		
	9	51% to 75% of Mfgr's Recom'd Maximum		
	16	76% to 100% of Mfgr's Recom'd Maximum		
	0	No Load		
Load Type	(1)	Solid attached to vehicle		
	4	Liquid in a baffled container		
	9	Liquid in an unbaffled container		
Accessibility of	1	Very accessible		
Use Area for Emergency	4	Generally accessible		
Response	6	Generally inaccessible		
	1	Under 1 hour		
Time Operating Vehicle by Same	(4)	1 Hour to 4 hours		
Rider in a Single Workday	9	4 Hours to 8 hours		
	16	Over 8 hours		
	0	No Distraction		
Distraction Potential of	1	Slight Distraction		
Other Task While Operating Vehicle	(4)			
	9	Moderate Distraction		
	9	Significant Distraction		
TOTAL OF CIRCLED VALUES	35	UP TO 49 LOW HAZARD 50 TO 69 MODERATE HAZARD 70 8 ABON HIGH		

APPENDIX A OHV RISK ASSESSMENT TOOL

To compute the total level of risk for the ten elements, circle the number beside each element in the table that best describes the operation according to the guidance given below. Add the circled numbers to come up with a total risk score. Use the Green/Amber/Red scale and Section II of the policy as guidance to choose the safest vehicle for the operation.

SPEED OF OPERATION

The intended maximum speed of operation for OHV use associated with the job activity.

MAXIMUM TERRAIN SLOPE

The maximum slope that is known and/or expected to be encountered with the OHV during the job activity. If the manufacturer does not specify a maximum slope, the following guidance should be used: Slight (<11% slope) Moderate (11%-34% slope) Steep (>34% slope). NOTE: An OHV may not be operated on any slope that is greater than the maximum slope recommended by the manufacturer.

SURFACE TYPE

The type of surface upon which the OHV will primarily operate during the job activity. Occasional surface changes and variability are known to occur and may be encountered, but the majority of the operation will be completed on the surface type identified. NOTE:

Paved surfaces should be avoided. If the vehicle must be operated on pavement the operator should turn gradually and go slowly.

SURFACE CONDITIONS

The condition of the surface upon which the OHV will primarily operate during the job activity. Occasional surface condition differences are known to occur and may be encountered, but the majority of the operation will be completed on the surface condition identified.

SURFACE CONFIGURATION

The primary surface configuration known and/or expected to be encountered during the job activity. Isolated surface configuration differences are known to occur and may be encountered, but the significant majority of the operation will be completed on the surface configuration identified.

LOAD WEIGHT

The greatest load weight (as a percentage of the manufacturer's recommended maximum weight) to be carried at any location on the vehicle, i.e., the front rack, rear rack, either axle or both. NOTE: An OHV may not be loaded in excess of the manufacturer's recommended maximum weight for any location on the machine.

LOAD TYPE

The type of load to be carried at any time during the job activity.

ACCESSIBILITY OF USE AREA FOR EMERGENCY
RESPONSE

The accessibility of the job activity area for emergency response at the point most remote from expected responding emergency medical responders.

TIME OPERATING VEHICLE

The amount of time the same rider will be operating the vehicle in a single workday.

DISTRACTION POTENTIAL OF OTHER TASK WHILE DRIVING

The most accurate description of how distracting a task will be if performed simultaneously while operating the vehicle. e.g., observing animal movements, observing wildfire activity, operating weed spraying equipment, operating drip torch equipment, etc.