SAMPLE JOB HAZARD ASSESSMENT (JHA)

ACTIVITY: Rocket Netting / Waterfowl Banding/ Froggie Bottom NWR (CERTIFICATION OF HAZARD ASSESSMENT - 29 CFR 1910.132)

STATION: __Froggie Bottom_

DATE PREPARED: October 20, 2010

PREPARED BY Rachel Larson, Refuge Manager

CERTIFIED BY: Region __4__ Safety Office

PERSONAL PROTECTIVE EQUIPMENT REQUIRED:

☑ Head/Face Safety glasses. ☑ Hearing Ear plugs.

☐ Respiratory

☑ Hands Gloves.

☑ Feet Steel-toed boots.

☑ Body/Other Use only an approved/listed galvanometer to check circuit continuity. QUALIFICATIONS, EXPERIENCE, OR TRAINING REQUIRED:

Training: Completed explosive training per assigned operation (rocket charges &

launch set up)

Review: USFWS 244 FW 1 - Explosives Safety Review: USFWS 244 FW 3 - Rocket Netting

Review: Proper lifting techniques.

Training: Rocker		netting personnel must have first aid & CPR training.	
BASIC JOB STEPS	HAZARDS	SAFE JOB PROCEDURE	
Break work down to basic elements (such as remove, lift, carry, stop, start, apply, return, squeeze, weld, saw, walk, hold, grind, place, etc.). Describe what is done, not how it is done.	For each job step, state what accident could occur and/or what hazard is present. To determine this, ask yourself, "Can the person fall; overexert; be exposed to burns, fumes, rays, gas, etc.; hit against; be struck by; in contact with; be caught in, on, or between?"	State how each element of work should be performed to prevent the accident or avoid the hazard. What should the person do or not do? Be specific. What precautions should be taken? Ask yourself, "What can I do to eliminate, modify, guard, identify, or protect against the potential hazard or accident, including such things as how the worker stands, holds, uses, carries, dresses, etc.?"	
I. Baiting & preparing capture area.	I. Strains and sprains from lifting bait & traps	I. Review proper lifting techniques.	
II. a. Using rocket net device. (Rocket Netting Plan)	II. a. Burns & injuries from accidental firing of rocket or cannon net device.	II. a. Review rocket net procedures provided in authorized rocket net training. Procedures, hooking up power supply & firing, and safety precautions.	
Il b. Load rockets @ banding sites the day before a shoot.	II. b. Vehicle traffic by refuge staff/seasonals/volunteers; general public; contractors; or illegal trespass passing in front of loaded rockets and accidental firing of rocket & net.	II. b. No gate keys will be issued to any refuge visitor, such as, general public, contractors or researchers for access to an area where loaded rockets are present. II. b. All bait sites (loaded rockets) onFroggie Bottom_ NWR are located >1/2 mile behind locked gates with "Unauthorized Entry Signs". The Frog Pond site atFroggie Bottom NWR is located ~ 1/2 mile from behind an "Area Closed" sign mounted on a barricade in the middle of the two track trail heading east from minimum maintenance road. In addition, the following signs will be placed strategically: "Area Closed" sign will be mounted on a post .25 to .5 miles before the banding site alongside the two-track trail. "Danger Explosives Ahead – Waterfowl Banding Operations" signs will be mounted on a post ~ .2 of a mile before the banding site on both sides.	
III. Communications	III. Lack of communications by banders, refuge staff, contractors, researchers, special use permittees, LE, and DLWMD staff could result in personnel/equipment passing in front of loaded rockets and accidental firing of rocket & net.	III. Communications with refuge staff, contractors, researchers, special use permittees and LE: Those individuals using the refuge during banding operations are notified of loaded rocket locations in person or by email, radio, phone, or notice. Notice will be posted on office "Station News" bulletin board. The notification will indicate that the location will have loaded rockets for banding/netting operations until further notice. After firing or removal of unfired rockets, individuals will be notified again that the location no longer has loaded rockets.	

III. Communications		III. Communication with bunkhouse and quarters residence: A notice will be placed at the main entrance to each facility. The notification will indicate that the location will have loaded rockets for banding/netting operations until further notice. After firing or removal of unfired rockets, the notice will be removed indicating that rockets are no longer loaded.
		III. Communications with DLWMD/ <u>Froggie Bottom</u> NWR staff: A phone call will be made to the administrative officer who will inform the rest of the staff. After firing or removal of unfired rockets the administrative officer will be informed that the location no longer has loaded rockets. The administrative officer will then inform the rest of the staff.
IV. Bird capture.	IV. Contusion & bruises from handling birds. Muscle strains from lifting crates containing birds.	IV. Maintain a secure hold on captured animals when removing them from the net or trap. Use proper lifting techniques or get help when lifting crates containing birds.
V. Bird banding.	V. Abrasions or cuts from handling birds and using banding tools.	V. Select proper banding tools depending on the size of the animal.
VI. Exposure to birds.	VI. Handling diseased birds.	 VI. When possible, wear rubber or latex gloves that can be disinfected or disposed of and protective eyewear or a face shield while handling animals. VI. Wash hands with soap and water often and disinfect work surfaces and equipment between sites. VI. Do not eat, drink, or smoke while handling animals. VI. Wash hands thoroughly after handling birds.
VII. Misfires.	VII. Injury from unplanned firing.	VII. Wait one-hour before proceeding to disarm the rocket. VII. There must be an emergency action plan on site.
VIII. Safety guidelines. The Rocket Netter-in-Charge must maintain complete control of the blasting machine during rocket net operations.	VIII. Safety guidelines must be followed to prevent personal injury during rocket net operations.	VIII. Never stand in front of armed rocket net during arming or to adjust net. VIII. Use only an approved blaster's galvanometer to check circuit continuity. VIII. Always maintain a shunt at the lead wires of the firing cartridge and the ends of the firing line.
IX. Safety procedures.	IX. Safety procedures must be followed to prevent personal injury during rocket net operations.	 IX. Remote-controlled sites must be at least (½ mile) distance from live electrical circuits. IX. Note that electrical explosive devices can be triggered accidentally by radio frequency from towers near rocket net area. IX. Note that voltage transmission lines and low flying airplanes can emit enough energy to trigger electrical explosive devices. IX. Do not conduct rocket net operations if there is thunder or lighting within 5 miles of rocket net area. IX. Never use a 12 volt battery to initiate a rocket net charge. IX. Remove cell phones and pagers when working on rocket net projects. IX. Be aware of static electricity from vehicles or wires brushed against synthetic fiber clothing. Wear cotton clothing when handling explosives to reduce build-up of static electricity. IX. Never expose explosive device cartridges to unnecessary heat or abuse. IX. Only the number of charges necessary for planned work will be carried to the netting site. IX. All lead wires on charges must be shunted during storage. Only the rocket-netter in-charge may check for continuity, make wiring connections, and operate the blasting machine. The rocket-netter in-charge has complete authority over
		the rocket net operation and must ensure all safety procedures are followed.
X. Transport of explosives by vehicle.	X. Improper transport can result in injury or vehicle damage.	X. Transportation of explosives, rocket net agents, and rocket net supplies on public highways will be in accordance with local and State regulations, as well as Federal regulations Title 49 CFR Parts 171-180, and Service Manual chapter 244 FW 1.