

METEOROLOGICAL TOWER CLIMBING AND SUPPORT




Purpose This Meteorology and Air Quality Group (MAQ) procedure describes the requirements for climbing the meteorology towers for tower or meteorological instrument maintenance.

Scope This procedure applies to the individuals who climb the towers and the support individuals who assist the tower climbers.

In this procedure This procedure addresses the following major topics:

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Signatures

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03/01/06

CONTROLLED DOCUMENT

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General information

Attachments This procedure has the following attachments:

Number	Attachment Title	No. of pages
1	Hazard Review	3

History of revision

This table lists the revision history and effective dates of this procedure.

Revision	Date	Description Of Changes
0		Revision number not used?
1	6/86	New document.
2	11/90	Process updated.
3	4/93	Process updated.
4	5/9/94	Complete revision into new format.
5	8/24/96	Process updated and converted to ESH-17 format.
6	8/7/97	Climbing harness added, tower added.
7	3/9/00	Added HCP attachment and climbing of the PJMT Verizon cellular tower.
8	1/21/03	Quick-change revision to add medical surveillance requirements to HCP.
9	03/08/06	Added HR to replace HCP, added directions to tower locations, added requirements for equipment inspections, and made other edits.

Who requires training to this procedure?

The following personnel require training before implementing this procedure:

- employee who climbs a meteorological tower
- employee providing ground support

Annual re-training to this procedure is required.

Training method

The training method for this procedure is **mentored** training to be conducted by a previously-trained individual and will be documented in accordance with the procedure for training (MAQ-024). OSHA requires “competent person” training to be qualified to train others.

Annual retraining for this procedure will be by self-study (“reading”) training.

General information, continued

Prerequisites The following training is required before performing this procedure:

- Participation in the HSR-2 medical surveillance program for tower climbing.
- Competent person training by a nationally recognized training organization (for inspecting equipment and training other climbers)
- KSL Basic Fall Protection, course number 13079.
- CPR and First Aid training for ground support person and climber.

Anyone intending to be a tower climber must be comfortable working aloft. But the person must also be someone capable of great discretion. This is an innate ability not necessarily learned by reading a procedure. Not every issue that the climber might face can be documented and controlled – there will frequently be some situation which the climber must address and then make a decision.

**Definitions
specific to this
procedure**

Competent Person: Under 29 CFR 1926.32(f) is a person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. This person must also attend and complete a nationally recognized “Competent Person” training course.

PFAS: Personal Fall Arrest System which includes the harness that the worker wears; any lanyards; and for tower climbing, the positive-locking climbing safety device.

Positioning Device: A body harness rigged to allow an employee to be supported on an elevated, vertical surface, such as a wall or column, and work with both hands free while leaning back into the harness. Positioning devices shall be rigged such that a worker cannot free fall more than two feet. In this application, the positioning device shall be arranged to all but eliminate any free-fall.

Self-Rescue: In 1926.502(d)(20), OSHA states, “The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that the employees are able to rescue themselves.”

General information, continued

References

The following documents are referenced in this procedure:

- MAQ-024, "Personnel Training"
 - MAQ-404, "Repairing, Maintaining and Calibrating Meteorological Instruments in the Field"
 - MAQ-408, "Meteorology Tower Hoist Operation"
 - LIR402-400-02.0, "FMW Exposure Limits"
 - LIG402-10-01A, "Lightning Safety"
 - ISD 101-20, "Fall Protection Program"
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Note

Actions specified within this procedure, unless preceded with "should" or "may", are to be considered mandatory guidance (i.e., "shall").

Preparation for climbing

Location of towers All meteorological measurement sites are listed in MAQ-404. This list was compiled to provide access control and driving directions to the sites in the event of an accident.

Facility management and other notifications For the Pajarito Mountain tower (PJMT) only, follow the “Steps to access Pajarito Mountain” in procedure MAQ-404 (“Repairing, Maintaining and Calibrating Meteorological Instruments in the Field”).

General safety concerns and warnings Read the Hazard Review (Attachment 1) and the associated integrated work document (IWD). The person climbing the tower must be in good physical health and be able to work in situations up to 100 meters above the ground.

Tower climbing safety concerns include: falling, electrical shock from lightning, and possible injury from hand tools which are sometimes required.

Ground safety concerns include: being hit by something dropped by the tower climber, electrical shock from lightning, and possible injury from hand tools.

There are no hazards on these towers which would require lock out/tag out (LO/TO).

Environmental concerns include wind, precipitation, thunderstorms, wet working conditions or high humidity, and cold temperatures. The wind can exacerbate an already perilous work environment. Moisture from dew or a recent storm could cause a climber to slip. Thunderstorms obviously are dangerous because lightning is more apt to strike the tower than anything else. A climber ill-prepared for cold temperature may be unable to reach safety if stricken with the effects of hypothermia.

Preparation for climbing, continued

Safety concerns with PJMT tower

The Pajarito Mountain (PJMT) tower offers a special safety concern because of the various RF (radio frequency) broadcast antennas and the potential for EMR (electro-magnetic radiation) exposure. Tower transmissions will not be interrupted for any tower climbing work. From LIR402-400-02.0, the Maximum Permissible Exposure (MPE) level for the frequencies encountered on this tower is 3.0 mW/cm². An EMR survey obtained readings from 0.3%-6.0% of the MPE (HSR-5:05-139, August 16, 2005). The EMR field strength meter has never alarmed (at 1/3 the MPE) on this tower.

There are no hazards on the PJMT tower which would require lock out/tag out (LO/TO).

Climbing the PJMT tower

Because the EMR levels on this tower have historically been well within MPE limits, it is not necessary to use the EMR protective suit, which was purchased for climbing this tower. The tower climber will continuously monitor the EMR field strength with an EMR field strength meter which alarms at 1.0 mW/cm². If the EMR levels are found to exceed MPE limits, then the climber should return to the ground and don the EMR protective suit.

The RF transmission from this tower's antennas can change without ENV-MAQ personnel knowing that changes have been made. A second EMR field strength meter will be available for rescue personnel, if needed.

Equipment needed

The following equipment will be needed for climbing a tower:

- Lightning threat detector – Sweeney model number 1128D static meter or Airborne Model M-10 lightning detector
- cellular telephone
- hard hats
- two safety climbing harnesses with positive-locking climbing safety device (the second rig is for use by rescue personnel)
- lanyards or nylon safety lines
- rope (as needed) for tying off equipment
- tool pouch, back pack, or rope to hoist material
- safety boots, gloves, appropriate clothes for windy and cold temperature conditions
- PJMT only – two EMR field strength meters (the second meter is for use by rescue personnel).

Preparation for climbing, continued

Equipment specifications

The tower mounted portion of the fall protection system and the positive-locking climbing safety device are manufactured by Tuf-Tug. The company's certifies compliance with:

- ANSI A14.3 Safety Requirements for Fixed Ladder Safety Devices, "The ladder safety device shall be designed to absorb the impact load of a solid object weighing at least 500 pounds in a free-fall of 18 inches."
- ANSI A14.3 further states, "Ladder safety devices shall allow at least two persons, but not more than four, averaging 250 pounds each to ascend or descend simultaneously, flexible carriers shall have a safety factor not less than 10 times the designed static load."

NOTE: The Tuf-Tug fall protection system can arrest a fall within two inches of the original cable attachment point. Tests show that the Tuf-Tug fall protection system will withstand a 5,000 pound load with no permanent deformation.

Requirements for equipment inspection

- Under 1926.502(d)(21) OSHA states, "Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service."
- Under 1926.502(d)(19) and 1926.503(a)(2)(ii), OSHA states that, "...the equipment must be inspected prior to each use by an employee who has been trained by a competent person to do the inspection."
- The fall protection equipment will be inspected by the ENV-MAQ tower climber before each use as specified by OSHA. Complete the inspection form found in ISD 101-20, Appendix A.
- ISD 101-20 requires that a Competent Person inspect personal fall arrest systems (PFAS) every six months. An inspection tag shall be attached to each item stating the inspection expiration date.

Preparation for climbing, continued

Inspection of climbing harness

- Belts and Rings: For harness inspections begin at one end, hold the body side of the belt toward you, grasping the belt with your hands six to eight inches apart. Bend the belt in an inverted "U." Watch for frayed edges, broken fibers, pulled stitches, cuts, or chemical damage. Check D-rings and D-ring metal wear pads for distortion, cracks, breaks, and rough or sharp edges. The D-ring bar should be at a 90 degree angle with the long axis of the belt and should pivot freely.
- Attachments of buckles and D-rings should be given special attention. Note any unusual wear, frayed or cut fibers, or distortion of the buckles. Rivets should be tight and unremovable with fingers. Body side rivet base and outside rivets should be flat against the material. Bent rivets will fail under stress.
- Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut or burnt stitches will be readily seen.
- Tongue Buckle: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Rollers should turn freely on the frame. Check for distortion or sharp edges.
- Friction Buckle: Inspect the buckle for distortion. The outer bar or center bars must be straight. Pay special attention to corners and attachment points of the center bar.
- Ensure the harness is correctly sized for the climber.

Lanyard Inspection

Web Lanyard Inspection: When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Bend lanyard in an inverted U and inspect the entire length and inspect both sides in this manner for cuts or breaks.

Lanyard Snap Inspection: Inspect closely for hook and eye distortion, cracks, corrosion, or pitted surfaces. The keeper or latch should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes.

Preparation for climbing, continued

Positive-locking climbing safety device

- Inspect for damage that could cause malfunction.
 - Ensure that the device to be used is correct for the tower to be climbed.
 - Near the ground, test the device by simulating the forces which would be applied by a fall and ensure that the device works correctly.
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Tower-mounted fall restraint system

Inspect the in-place or tower-mounted portion of the anti-fall system. This is a climbing inspection that is done each time the tower is climbed. This climbing inspection also includes the tower and its appurtenant structures.

While in the process of climbing, if a hazard is identified that presents undue danger to the tower climber, then descend to the ground and make arrangements for the problem to be fixed.

Preparing to climb a tower

Check weather conditions and get a weather forecast from a MAQ group meteorologist at 667-7079. Always be alert for any weather changes, which can occur quickly in the Los Alamos area. Do not climb a tower if the weather is marginal. Do not climb a tower if the wind speed is higher or the temperature is lower than that given below:

- maximum steady state wind speed: 10 meters/sec
- minimum temperature: -10°C.

Dress appropriately for the weather. Wear safety boots, gloves, and warm clothing. The wind speed increases and temperature decreases with greater height above the ground. There is no protection from the elements for a climber on an open tower.

Test EMR meter

For the PJMT tower only, turn on the EMR field strength meter and verify that it is operational. Attach the meter to the outer clothing so that it can be heard and the display meter viewed.

Test the meter before leaving the office:

- Use a voltmeter to verify that the batteries are good.
 - Turn on a microwave oven and pass the meter around the microwave oven's door. There is usually sufficient energy leakage around the door to cause the meter to indicate and possibly alarm. This qualitative test will verify that the meter is operational.
-

Preparation for climbing, continued

Access requirements Refer to the access requirements for each tower in procedure MAQ-404 (“Repairing, Maintaining and Calibrating Meteorological Instruments in the Field”).

Notification of fire department Before planning a climb, notify the LA Fire Department so they can ensure that the appropriate rescue people will be available. Contact Lt. Romero or his replacement at 662-8411.

NOTE: LAFD has indicated that because of the height of the towers and the terrain at the tower sites that their tall ladder truck would not be an option.

Climbing a tower

When climbing a tower

The **climber** must use a climbing harness with a positive-locking climbing safety device for all climbing. The nylon safety line must also be used when the work station is reached as a “positioning device” to allow the climber to work with both hands free. **Always remain securely attached to the tower.**

Do not attempt to climb the tower with anything in the hands. Use a tool pouch, back pack, or hoist materials up by rope.

Use lanyards to tie off any equipment that is not secured in any other way to minimize the possibility of dropping something.

Monitor lightning threat

The **ground support person** must monitor the weather and check the lightning threat with one of the detectors before and during the ascent if conditions warrant. If the atmospheric potential gradient reaches 2 kilovolts per meter, as measured by the static meter, or lightning is detected by the M-10, then the ground support person must alert the climber of the potential danger and the climber will climb down from the tower. Go to a place of safety until there is no longer a threat of lightning.

Role of ground support person

A **ground support person** must be present for all tower climbing. This person must have a cellular telephone to be used to summon help as required: ambulance, fire department, or whatever an emergency may require.

The **ground support person** must wear a hard hat and must stay clear of the base of the tower unless the work requires otherwise. The climber and the ground support person must be very aware of the possibility that the climber might accidentally drop an object that could be dangerous to a person on the ground.

Assisting activities at base of tower

There are occasions when the ground support person needs to do some support activity for the climber and will therefore need to get near the tower. On these occasions, the **climber** will cease all other work activities and secure all equipment which might be a threat, then notify support person that it is safe to approach the tower base.

Emergencies

In case of an emergency

In an emergency situation, the **ground support person** must use the cellular telephone to call 911 to request appropriate assistance. The following suggestions are offered:

- Contact the MAQ group office at 5-8855.
 - Arrange for appropriate transportation to the hospital or nearest Occupational Medicine Group medical station. Medical examination by the Occupational Medicine Group is mandatory for all work-related injuries.
 - Request the assistance of the fire department. Define the assistance required, e.g. ladder truck, rescue assistance, etc.
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Requirements for rescuing

In 1926.502(d)(20), OSHA states, “The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that the employees are able to rescue themselves.”

In ISD 101-20, HSR-5 only addresses self-rescue in the definitions section. It must be understood that ISD 101-20, “Fall Protection Program” is totally focused on building maintenance and construction.

Discussion of requirements for self rescue

A worker falling from a roof or a steel construction project would in all probability be hanging from a six foot lanyard in open space. Self-rescue in this scenario is not likely. So, the employer must provide for prompt rescue.

But, a worker falling from a tower or fixed ladder (a tower is really just a fixed ladder) is not hanging in open space. A tower climber is in “intimate contact” with the tower and readily able to self-rescue. For this reason, it is not necessary to arrange for prompt rescue. Also, because the tower climber, in a fall situation, is in “intimate contact” with the tower, it is prudent to keep lanyard lengths to a minimum. Falling along the face of a tower with a six foot lanyard could hurt the climber.

In a tower or fixed ladder fall situation the climber is readily able to self-rescue. The Tuf-Tug fall protection system can limit a fall to two inches which means that free-fall distance is determined by the slack in the climber’s harness. The free-fall distance will be about one foot which will be no more than a jolt. Prompt rescue, by others, in a fall situation on a tower is not necessary.

Emergencies, continued

Rescuing a disabled climber

In the event a climber becomes disabled on the tower, the **ground support person** must call 911 to request the assistance of the LAFD. A **fire department rescue climber** may use the second climbing harness to climb the tower and rescue a disabled climber.

For Pajarito Mountain rescue work, a second EMR field strength meter will be available to the LAFD rescue climber. This will provide the rescue climber with the assurance that EMR fields are safe.

Records resulting from this procedure

Records

The following records resulting from this procedure will be filed in the Meteorology Team records room:

- Form from ISD 101-20 to document PFAS inspection

[If you have read and understand the preceding document, click here to receive EDS credit.](#)

HAZARD REVIEW FOR METEOROLOGICAL TOWER CLIMBING AND SUPPORT

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
Task: Collect equipment - See steps in MAQ-401 chapter "Preparation for Climbing"	None		Low
Task: Perform pre-climb inspections - See steps in MAQ-401 chapter "Preparation for Climbing"	None		Low
Task: climb tower – see procedure MAQ-401 chapter "Tower Climbing."	Falling from tower, overexertion, fatigue. Improbable / catastrophic = medium	Overall comments: Tower climbing will only be done by an experienced climber or a person who is trained by an experienced authorized climber and the trainee is authorized by the group leader.	Moderate
As above.	Falling from the tower. Improbable / catastrophic = medium	Use safety climbing harness with positive-locking climbing safety device. The climbing safety device is attached to the tower's antfall system for climbing. When at a work station, the climber will attach the snap ring of a nylon safety line to a secure point on the tower. The climber may then disconnect from the tower's antfall system to allow movement. The climber must always be attached to the tower.	Moderate

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
As above.	<p>2. Wet conditions – Slipping while working on the tower.</p> <p>Improbable / catastrophic = medium</p>	<p>The climber must exercise discretion before and during any ascent. This is true of conditions which might cause slipping. As you climb, examine the tower, e.g., look at each rung of the ladder as you ascend; the ladder attachments to the tower; the tower section bolts, guy attachments, etc.— there should be no surprises. Weather conditions in NM rarely cause or support slippery conditions, so you can always delay an ascent for another day if conditions are not safe.</p>	Moderate
As above.	<p>3. Over-exertion while climbing.</p> <p>Frequent/ negligible = low</p>	<p>Climbing a vertical ladder up to 100 m tall is a hard work out. It is important to maintain good physical condition with a regular exercise program. Along with other strength and stamina exercises, a step-block work out comes close to ladder climbing to maintain conditioning of the legs.</p>	Low
As above.	<p>4. Lightning.</p> <p>Remote/ catastrophic = low</p>	<p>The lightning threat must be continually monitored by the tower climber and the ground safety person. Developing cumulonimbus clouds, anywhere in the area, are a definite indicator that it's time to get off the tower. Also, the ground support person will periodically check the lightning threat.</p>	Low

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
As above.	<p>5. Temperature. Occasional/ moderate = low</p>	<p>Cold temperatures pose a greater threat to the climber than heat. The procedure specifies a minimum operating temperature of -10 degrees C. Again, the climber must exercise discretion and factor in wind and the length of time that the climber will be aloft. It is important to wear appropriate clothing to protect against the cold.</p>	Low
As above.	<p>6. High winds Occasional/ moderate = low</p>	<p>Wind is more of a nuisance than a hazard but a maximum operating limit is specified. That maximum operating limit is 10 m/s steady state. On the other hand, wind chill is a decided hazard and must be carefully considered. Appropriate clothing is important but if conditions are not conducive to safe work, then delay the work for another time when conditions improve.</p>	Low
As above.	<p>7. Sun exposure. Frequent/ negligible = low</p>	<p>Sun exposure can be minimized with proper clothing, such as long sleeves and a brimmed hat. It is also important to use a high-number sunscreen.</p>	Low
As above.	<p>8. Hand tool injuries. Occasional/ moderate = low</p>	<p>Hand tool injuries are usually things like banged knuckles, abrasions, etc. The climber simply needs to be careful.</p>	Low

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
<p>Tasks for ground support person: support tower climber as described in chapter "Climbing a tower" in MAQ-401.</p>	<p>9. Ground personnel being struck by falling objects. Remote/ catastrophic = low</p>	<p>The ground support person must wear a hard hat and more importantly stay 60 ft away from the tower to avoid being struck by anything dropped by the climber. There are occasions when the ground support person needs to do some support activity for the climber and will therefore need to get near the tower. On these occasions, the climber will cease all other work activities and secure all equipment which might be a threat.</p>	<p>Low</p>
<p>General hazard during tasks</p>	<p>10. Collapse of the tower structure because of mechanical failure. Remote/ catastrophic = low</p>	<p>The towers are periodically inspected by a professional tower installer. Also, as the climber ascends the tower, the climber shall inspect the mechanical integrity of the tower structure and of the lightning protection system. Because of the relatively benign NM environment (no atmospheric corrosives such as salt, no ice buildup and attendant damage, etc.) the towers do not suffer much deterioration.</p>	<p>Low</p>

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
<p>Task: climb tower – see procedure MAQ-401 chapter “Tower Climbing.”</p>	<p>12. Electro-Magnetic Radiation (EMR) exposure during tower climbing (PJMT only).</p> <p>Occasional/ moderate = Low</p>	<p>The Maximum Permissible Exposure (MPE) levels for E (electric) & H (magnetic) fields of 3.0 mW/cm² (see note below) will be maintained by measuring the EMR power density levels, minimizing exposure time, and using PPE (only if measured EMR exceeds MPE). Meteorological maintenance on the tower will be conducted in an expeditious manner to minimize exposure time. Climber will stay away from the front face of RF antennas to reduce exposure levels.</p> <p>NOTE: The MPE of 3.0 mW/cm² is derived from LIR402-400-02.0 RFMW Exposure Limits, Table 1 Controlled Environment Exposure Limits. An EMR radiation meter, which alarms at 1.0 mW/cm², will be carried or worn by the climber, to ensure that this MPE is not exceeded.</p>	<p>Low</p>

Wastes or residual materials resulting from process

None.

Emergency actions to take in event of control failure

For all injuries, provide first aid and see that injured person is taken to Occupational Medicine (only if immediate medical attention is not required) or the hospital. Notify supervisor and group office as soon as possible. Follow all site-specific emergency plans for any radiation or explosives emergencies.

In the event a climber becomes disabled on the tower, the ground support person must call 911 to request the assistance of the fire department to affect a rescue. A fire department rescue climber may use the second climbing harness to climb the tower and rescue a disabled climber.

Meteorology and Air Quality Group
PROCEDURE TRAVELER

This form is from MAQ-022

Part 1 (completed by any group employee)

Procedure number: ENV-MAQ-401 Revision: 8

Procedure title: METEOROLOGICAL TOWER CLIMBING AND SUPPORT

Action Requested: New procedure Major revision of existing procedure Deletion of existing procedure

Description of and reason for action: Quick-change revision of existing procedure (parts 3 and 5 N/A)

MAJOR REVISION REQUIRED TO REMOVE TOWER LOCATION INFORMATION AND TO COMPLY WITH CURRENT BUREAUCRATIC REQUIREMENTS. THE ACTUAL WORK AND THEREFORE SAFETY ISSUES REMAIN UNCHANGED.

[Signature]
Signature

William A. Olson
Name (print)

23 JAN 06
Date

Part 2 (completed by appropriate manager)

I agree with the action requested: Yes No If No, enter reasons below.

If Yes, assigned preparer: William A. Olson. Affected teams, programs, groups, or individuals required to review this procedure and others who should review it (see procedure page 5):

Required reviewers: NA

Optional reviewers: NA

[Signature]
Signature

H. DARRELL HOLT
Name (print)

1/23/06
Date

Part 3 (completed by preparer or other qualified safety reviewer)

I have evaluated, according to MAQ-035 and LIR300-00-01, the risks inherent in performing this procedure and have documented them on the Hazard Control Plan form, or referred to a plan that covers this type of work.

[Signature]
Preparer

William A. Olson
Name (print)

23 JAN 06
Date

Draft prepared and sent for formal review on: 23 JAN 06. Comments resolved on: _____ After comments have been resolved with each reviewer, obtain signatures of the reviewers in part 5.

Part 4 (signed by safety officer or group leader)

I agree that the appropriate safety-related activities and appropriate risk level were identified during the hazard evaluation:

[Signature]
Safety officer or group leader

D Joane Wilborn
Name (print)

2/27/06
Date

Part 5 (signed by required reviewers: NA for quick-change revisions)

I attest that all my comments and concerns have been satisfactorily discussed, resolved, and/or incorporated into the final version of the procedure.

[Signature]
Signature

H. DARRELL HOLT
Name (print)

2/27/06
Date

Signature _____

Name (print) _____

Date _____

Signature _____

Name (print) _____

Date _____

Signature _____

Name (print) _____

Date _____

Preparer: After all reviewers have signed above section, submit this form with copy of draft and final procedure to records coordinator.