



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

JAN 15 2008

Mr. Scott J. Bloch
Special Counsel
U.S. Office of Special Counsel
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

Re: OSC File Nos. DI-07-1993 and DI-07-2225

Dear Mr. Bloch:

As noted in his letter to you on September 12, 2007, Secretary Kempthorne has delegated to Acting Assistant Secretary Kamaran Onley the responsibility to respond to the subject whistleblower disclosures referenced above. As the individual delegated the responsibilities and authorities of the Acting Assistant Secretary during her absence, I am responding on her behalf.

These disclosures alleged that employees at the Department of Interior (DOI), U.S. Geological Survey, Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station, Vallejo, California, were exposed to substantial and specific dangers to public safety. Specifically, the anonymous whistleblowers allege that workers must cross an active railroad bridge to perform water quality tests; workers have limited visibility of oncoming trains and are at risk of being hit by the trains when they cross the bridge; and employees must handle explosives without sufficient safety training and that the explosives are stored in unsafe conditions.

The DOI Office of Inspector General (OIG) has investigated these allegations. A copy of their report is attached. The report provides a description of the conduct of the investigation; a summary of the evidence obtained from the investigation; and copies of safety regulations that were questionably enforced at the WERC.

As noted in the report, the investigation did not support the allegation that workers were exposed to substantial and specific danger when crossing the active railroad bridge. Employees are provided with instructions that are intended to reduce the risks associated with crossing the bridge. If they express any concern about crossing the bridge, they are not required to do so.

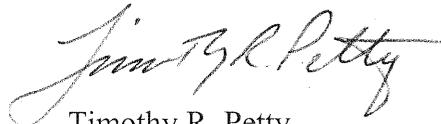
With regard to the allegations concerning explosives, the investigation found that the WERC does not have a formal training or certification course in the use of explosives, nor do they keep any records of employees who receive informal training. It was also found that explosives have occasionally been stored inappropriately and kept in containers not designed for explosives.

According to management officials at the Center, although contrary to USGS policy, the practices described in the report have been "standard operating procedures" for this office for some time. Center management does not believe that employees were placed at risk because appropriate training, although informal, had been provided to each person who handled explosives. Center management has been counseled on the need to modify practices and has acknowledged the requirement, importance, and need for a formal explosives training program. Management is currently consulting with safety management officials to establish a training program and to ensure proper technology is available for the storage and transportation of explosives in the future.

Although there was not a formal training program for the use of explosives at the WERC, it was clear from the investigation that management was intent on ensuring that all employees involved with the explosives were experienced in the safe handling and storage of explosives. The investigation did not reveal any evidence that disciplinary action was warranted on any of the management officials involved.

If you have any questions, please contact Sue Padgett, USGS Office of Human Resources, on 703-648-7450.

Sincerely,

A handwritten signature in cursive script that reads "Timothy R. Petty".

Timothy R. Petty
Deputy Assistant Secretary
for Water and Science

Enclosure

Copy To: DOI Office of Inspector General



THE SECRETARY OF THE INTERIOR
WASHINGTON

AUG 17 2007

The Honorable Earl E. Devaney
Inspector General
Department of the Interior
Washington, D.C. 20240

Dear Mr. Devaney:

On July 23, 2007, I received a letter from Special Counsel Scott J. Bloch forwarding to the Department of the Interior a whistleblower disclosure alleging that employees of the United States Geological Survey, Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (Field Station), in Vallejo, California, were exposed to substantial and specific dangers to public safety. By this letter, I am forwarding this disclosure and pertinent documents relating to the disclosure to your Office for an investigation and the preparation of a report on your findings.

The letter from Special Counsel Bloch notes that the whistleblowers, who have requested anonymity, allege that employees of the WERC Field Station must cross an active railroad bridge to perform water quality tests. The employees have limited visibility and are at risk of being hit by an oncoming train each time they cross the bridge. Additionally, one of the whistleblowers alleges that employees must handle explosives without sufficient safety training and that the explosives are stored in unsafe conditions.

The Special Counsel has found a substantial likelihood that the information provided by the whistleblowers to the OSC "discloses substantial and specific dangers to public safety." As a result, I am required by law to review, sign, and submit to the Special Counsel a report that meets the five criteria set forth in 5 U.S.C. §1213(d). I will delegate this responsibility, as well as the responsibility to take the actions necessary under the statute, to Ms. Kameran L. Onley, Assistant Deputy Secretary. Ms. Onley is temporarily exercising the delegated duties of the Assistant Secretary – Water and Science. Because the fifth criterion requires a description of any action taken or planned as a result of the investigation, I ask that your report address only the first four requirements and that it be provided to Ms. Onley with sufficient time to enable her to determine, in consultation with your Office, the appropriate actions to be taken, if any.

The report must be submitted to the Special Counsel within 60 days of receipt of his letter, unless a limited extension of time is granted. Please provide by August 27, 2007, an estimate of how much time you will require to complete your investigation and report, in order to facilitate communication with the Special Counsel regarding both whether additional time must be secured and the delegation of authority.

The Honorable Earl E. Devaney

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If you have any questions or concerns regarding this matter, please do not hesitate to contact me or Ms. Onley directly.

Sincerely,

A handwritten signature in black ink, appearing to read "Dirk Kempthorne". The signature is written in a cursive style with a large initial "D" and a long horizontal stroke at the end.

DIRK KEMPTHORNE

Enclosure

cc: Assistant Deputy Secretary
Associate Solicitor, Division of General Law



U.S. OFFICE OF SPECIAL COUNSEL
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

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RECEIVE

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OFFICE OF THE
EXECUTIVE SECRETARY

The Special Counsel

July 20, 2007

The Honorable Dirk Kempthorne
Secretary
U.S. Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

Re: OSC File Nos. DI-07-1993 and DI-07-2225

Dear Mr. Secretary:

Pursuant to my responsibilities as Special Counsel, I am referring to you a whistleblower disclosure that employees at the Department of the Interior, United States Geological Survey, Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (Field Station), Vallejo, California, were exposed to substantial and specific dangers to public safety. The whistleblowers, who have requested anonymity, allege that workers must cross an active railroad bridge to perform water quality tests. The workers have limited visibility of oncoming trains and are at risk of being hit by the trains each time they cross the bridge. Additionally, one of the whistleblowers alleges that employees must handle explosives without sufficient safety training and that the explosives are stored in unsafe conditions. Accordingly, I am referring this information to you for an investigation of these allegations and a report of your findings.

The U.S. Office of Special Counsel (OSC) is authorized by law to receive disclosures of information from federal employees alleging violations of law, rule, or regulation, gross mismanagement, gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety. 5 U.S.C. § 1213(a) and (b). As Special Counsel, if I find, on the basis of the information disclosed, that there is a substantial likelihood that one of these conditions exists, I am required to advise the appropriate agency head of my findings, and the agency head is required to conduct an investigation of the allegations and prepare a report. 5 U.S.C. § 1213(c) and (g).

WERC employees cross the railroad bridge at least once per month to perform water quality tests on Salt Ponds A20 and A21 in the Alviso Salt Pond Complex. The railroad bridge, which is located directly north of these salt ponds, is roughly 300 yards long and is too narrow for a person to cross at the same time as a train. The railroad bridge is used by freight and commuter trains, the fastest of which travel upwards of 70 miles per hour. While it would be possible to reach Salt Ponds A20 and A21 via boat, employees were instructed to cross the railroad bridge instead. At times, binoculars were used to determine if a train was approaching. However, a curve in the railroad track one mile north of the bridge impedes visibility of oncoming trains, thus adding to the inherent danger of crossing a railroad bridge not designed for pedestrian traffic.

The Honorable Dirk Kempthorne

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One of the whistleblowers also alleges that explosives are improperly stored, and employees do not receive sufficient safety training on handling them. The explosives are used in conjunction with box nets, which are used to trap birds. Box nets are propelled into the air by three 10-inch rockets. Each rocket contains a five-inch charge. Three teams at the Field Station use the box nets. When stored at the Field Station, the charges are kept in a cardboard box. When needed for use, one team can transport them in a safe. However, the other teams must transport their charges in tackle boxes when the safe is already in use. The employees receive no formal training, only a brief explanation from a colleague. The lack of formal training and the selective use of the safe strongly suggest that employees are being exposed to substantial yet unnecessary risks.

I have concluded that there is a substantial likelihood that the information the whistleblowers provided to OSC discloses substantial and specific dangers to public safety. As previously stated, I am referring this information to you for an investigation of the whistleblowers' allegations and a report of your findings within 60 days of your receipt of this letter. By law, the report must be reviewed and signed by you personally. Should you delegate your authority to review and sign the report to the Inspector General, or any other official, the delegation must be specifically stated and must include the authority to take the actions necessary under 5 U.S.C. § 1213(d)(5). Without this information, I would hasten to add that the report may be found deficient. The requirements of the report are set forth at 5 U.S.C. § 1213(c) and (d). A summary of § 1213(d) is enclosed.

In the event it is not possible to report on the matter within the 60-day time limit under the statute, you may request in writing an extension of time not to exceed 60 days. Please be advised that an extension of time is normally not granted automatically, but only upon a showing of good cause. Accordingly, in the written request for an extension of time, please state specifically the reasons the additional time is needed. Any additional requests for an extension of time must be approved by me.

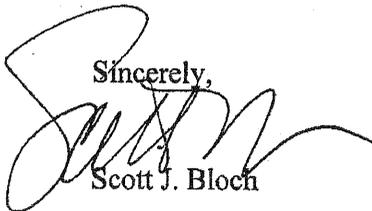
After making the determinations required by 5 U.S.C. § 1213(e)(2), copies of the report, along with any comments on the report from the person making the disclosure and any comments or recommendations by this office will be sent to the President and the appropriate oversight committees in the Senate and House of Representatives owing to the requirements set forth in 5 U.S.C. § 1213(e)(3). Unless classified or prohibited from release by law or by Executive Order requiring that information be kept secret in the interest of national defense or the conduct of foreign affairs, a copy of the report and any comments will be placed in a public file in accordance with 5 U.S.C. § 1219(a).

The Special Counsel

The Honorable Dirk Kempthorne
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Please refer to our file number in any correspondence on this matter. If you need further information, please contact Catherine A. McMullen, Chief, Disclosure Unit, at (202) 254-3604. I am also available for any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Bloch", written over the word "Sincerely,".

Scott J. Bloch

Enclosure

Enclosure

Requirements of 5 U.S.C. § 1213(d)

Any report required under subsection (c) shall be reviewed and signed by the head of the agency¹ and shall include:

- (1) a summary of the information with respect to which the investigation was initiated;
- (2) a description of the conduct of the investigation;
- (3) a summary of any evidence obtained from the investigation;
- (4) a listing of any violation or apparent violation of law, rule or regulation; and
- (5) a description of any action taken or planned as a result of the investigation, such as:
 - (A) changes in agency rules, regulations or practices;
 - (B) the restoration of any aggrieved employee;
 - (C) disciplinary action against any employee; and
 - (D) referral to the Attorney General of any evidence of criminal violation.

In addition, we are interested in learning of any dollar savings, or projected savings, and any management initiatives that may result from this review.

¹ Should you decide to delegate authority to another official to review and sign the report, your delegation must be specifically stated.

NOV 9 2007



Investigative Report of USGS Workspace Safety



United States Department of the Interior
Office of Inspector General

REPORT OF INVESTIGATION

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity	Report Date November 8, 2007
Report Subject Closing Report	

SYNOPSIS

We initiated this investigation at the request of Secretary Dirk Kempthorne, who asked us to investigate allegations made to the United States Office of Special Counsel by whistleblowers who had requested anonymity. The whistleblowers alleged that employees of the United States Geological Survey (USGS), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA, were exposed to substantial dangers because they were required to cross an active railroad bridge to perform water quality tests. Additionally, one of the whistleblowers alleged that SFBEFS employees must handle explosives without sufficient safety training and that explosives are stored in unsafe conditions.

We determined that the railroad bridge and its approaches were constructed with a pedestrian walkway. The terrain is flat and there is 2 to 3 miles of visibility in all directions. We also learned that USGS provided instructions to employees that are intended to reduce risks associated with crossing the active railroad bridge. Further, we found that USGS employees who express concern about crossing the bridge are not required to cross it and that there are equal or greater risks associated with use of a boat to access the area where the water quality tests are conducted.

We also determined that while USGS supervisors provide informal field training in the use of explosives, there is no formally approved training/certification course nor is any record made of who has received the informal training. Additionally, we found that the explosives are, on occasion, stored inappropriately and are kept in containers that are not designed for explosives, including a fireproof safe, tackle boxes, cardboard boxes, and coolers.

We are referring this case to the Secretary for use in preparing a response to OSC and any other action deemed appropriate.

Reporting Official/Title
Keith A. Kuczka/Senior Investigator

Signature

Approving Official/Title
Alan F. Boehm/Director, Program Integrity

Signature

Authentication Number: 05E93EC1D014F53EA57595E1234BE2B9

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OI-002 (04/07)

DETAILS OF INVESTIGATION

We initiated this investigation at the request of Secretary Dirk Kempthorne, who asked us to investigate allegations made to the United States Office of Special Counsel by whistleblowers who had requested anonymity (**Attachment 1**). The whistleblowers alleged that employees of the SFBEFS were exposed to substantial and specific dangers because they were required to cross an active railroad bridge to perform water quality tests at salt ponds. According to the whistleblowers, employees have limited visibility of oncoming trains and are at risk of being hit by trains each time they cross the bridge which was not designed for pedestrian traffic. Further, the whistleblowers assert that although the salt ponds were accessible by boat, employees were instead instructed to cross the railroad bridge.

Additionally, one of the whistleblowers alleged that SFBEFS employees must handle explosives without sufficient safety training and that explosives are stored in unsafe conditions. According to the whistleblower, explosive charges used to propel box nets into the air to capture birds are kept in a cardboard box. When needed, one of the three teams who utilize the explosive charges can transport the charges in a safe while other teams must transport the charges in tackle boxes. The whistleblower further alleged that employees receive no formal training for the use of the explosive charges and that training consists of a brief explanation from a colleague.

(Agent's Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife.)

Our investigation of the allegations included interviews of USGS supervisors and employees, interviews of USGS safety officers, and review of applicable laws or regulations. Additionally, we conducted site visits at the railroad bridge and the explosives magazine used for storage of rocket net charges.

Use of Railroad Bridge by USGS Employees

John Takekawa, Research Wildlife Biologist, USGS, Western Ecological Research Center (WERC), SFBEFS said that he is responsible for oversight of operations at the SFBEFS and is the assigned principal investigator for the work carried out by SFBEFS employees (**Attachment 2**). Takekawa said that one of the projects assigned to SFBEFS employees involved research and restoration work to salt ponds at the Don Edwards San Francisco Bay National Wildlife Refuge in the south bay area of San Francisco Bay in California.

Takekawa said that the salt ponds designated as A20 and A21 were known as the "island ponds" because they are difficult to access. He said that employees access salt ponds A20 and A21 on a weekly to monthly basis by walking across a railroad bridge. He added that two employees are sent when there is a need to go to salt ponds A20 and A21.

[Agent's Note: A map of the South Bay Salt Pond Restoration Project obtained through an internet search shows the location of salt ponds A20 and A21. It also shows that a railroad runs between the two salt ponds (Attachment 3).]

Takekawa claimed that the railroad bridge is safe for regular pedestrian use. He explained that the railroad bridge has a walkway for pedestrians and that employees cross the bridge after evaluating

whether a train is approaching. Takekawa recognized that there is some risk in crossing the bridge but opined that the risk was reasonable. He said that the bridge is about 10 to 15 feet above the water and that it is not open to the public.

OIG investigators conducted a site visit of the railroad bridge and salt ponds A20 and A21 (**Attachment 4**). OIG investigators learned and/or observed the following during the site visit:

- The railroad bridge and its adjacent approaches were constructed with pedestrian foot paths.
- The terrain is relatively flat with good visibility, estimated to be 2 to 3 miles, in all directions.
- A leisurely walk (with stops) from the bridge access to the first salt pond access, estimated to be approximately 300 feet, took 2 minutes.
- A leisurely walk from the first salt pond access to the second salt pond access, estimated to be less than 200 feet, took approximately 1 minute.
- A northbound freight train was heard 6 minutes before it crossed the bridge and was observed approximately 4 minutes before it crossed the bridge.
- A southbound passenger train was heard and observed about 3½ minutes before it crossed the bridge; a second southbound passenger train was heard and observed about 3 minutes before it crossed the bridge.

Takekawa said that job hazard analysis packets, approved by the WERC safety officer, were kept in SFBEFS government vehicles for employees to use (**Attachment 5**). Takekawa explained that the analysis provides instructions to employees to scan the tracks for approaching trains and to stay alert while walking across the bridge. He added that commuter train schedules are also included in the packet for use by employees since commuter trains are on specific schedules and travel at high speeds. He said that freight trains are not a significant safety threat because they move much slower than commuter trains.

In addition to Takekawa, we interviewed various WERC employees: Nicole Athearn, Biologist; Stacy Moskal, Biological Science Technician; Kathleen Henderson, Biological Technician (contractor); Jill Bluso, Biological Science Technician; and Annie Schultz, Biological Technician (contractor) (**Attachments 6, 7, 8, 9, and 10**). None of these individuals indicated in their interviews that they considered the railroad bridge to be a safety concern. All of the interviewees agreed that crossing the bridge required an awareness that it was an active railroad. They collectively suggested looking both ways and remaining alert and mentioned the availability of the job hazard analysis, train schedules, and binoculars in their vehicles. Specifically, Moskal noted that USGS interns must read and sign that they understand the job hazard analysis before accessing the salt ponds using the railroad bridge. Further, each of these individuals described that approaching trains can be seen and heard and made note of the pedestrian walkways along the tracks and good visibility in the area during their interviews.

One employee interviewed during the course of this investigation voiced safety concerns about the railroad bridge. Angela Rex, Biological Research Assistant, said that she has crossed the bridge to the salt ponds but does not go on a regular basis (**Attachment 11**). Rex said that she jogs across the bridge unless she is carrying equipment that necessitates going slower. According to Rex, freight trains are slow and can be seen approaching the bridge; however, the commuter trains are very fast and do not always blow their whistles because of the long expanse of salt ponds on either side of the bridge. Rex stated that the commuter trains are quieter than the freight trains and sometimes cannot be heard until they are close enough to feel the railroad start to shake. Rex opined that train schedules are not effective because the trains are not always on time. She added that there is a "blind curve" in

one direction so visibility is limited. *[Agent's Note: During our site visit, we observed that the tracks to the north curve toward the northwest approximately 3 miles beyond the trestle while the tracks to the south are straight; however, the train can be seen while approaching, during, and after the curve. Visibility in both directions is estimated to be 2 to 3 miles. Photographs are provided in the attachment (See Attachment 4).]*

Rex stated that nobody had discussed safety issues pertaining to the railroad bridge until she was at the site with Bluso, who told her to be very careful around the railroad bridge. Rex, when asked, said that she was not aware of anyone talking to Takekawa about safety concerns pertaining to pedestrian use of the railroad bridge. Rex did not report her concerns about the railroad bridge.

March 2006 Incident and Safety Review:

Eric Williams, Western Regional Health and Safety Manager, USGS, Sacramento, said he was aware that there had been an incident at the railroad bridge in which a USGS employee sustained an injury but did not know details because it occurred prior to him being assigned to his present position (**Attachment 12**). Williams provided OIG investigators with an accident report for the incident (**Attachment 13**).

Our review of the accident report disclosed that on March 11, 2006, Jennifer Maclean, a USGS employee, was injured while involved in sampling preparations and meter calibration. In the incident report, Maclean provided a statement, stating, "I was asked to gather water quality data at pond A20 by crossing a railroad drawbridge. I checked with binoculars and didn't see any trains, so an intern and I began to cross. A bullet train came suddenly, so we ran back. While running, my left lung collapsed." (*Agent's Note: Maclean is no longer employed by USGS.*) The accident report documents that Maclean stayed overnight in the hospital for treatment of a collapsed lung.

Williams stated that a safety review of the bridge was conducted by his predecessor "about a year ago," and based on the photographs in the review, he opined that it did not look to him like anyone would be in imminent danger while using the bridge. Takekawa said that on April 3, 2006, a safety review was conducted by USGS safety officers and Takekawa to assess the hazards associated with pedestrian crossing of the railroad bridge (See Attachment 2). According to Takekawa, the safety review was conducted in response to an incident on March 11, 2006, in which Maclean, then a SFBEFS employee, had a "panic attack" when a train approached and ran from the bridge resulting in a collapsed lung.

Takekawa stated that the safety review, which included photographs, concluded that it was safe for pedestrians to use the railroad bridge to gain access to the salt ponds (**Attachment 14**). Takekawa explained that the bridge construction was found to be safe, with a foot path to facilitate pedestrian traffic, and in an area that had good visibility. Takekawa added that the safety review concluded that the employee's lack of awareness and a pre-existing condition were to blame for her injury.

The safety review of the incident concluded that "the employee's pre-existing physical ailment, coupled with her lack of awareness or absence of caution of the approaching train, caused her surprise, excitement and subsequent injury." The report further said that Maclean should be covered under Workman's Compensation because she was acting "in the line of duty" when she was injured. The report added that Takekawa decided to assign Maclean to "light duty" so she would not have to return to the bridge.

Mary Ellen Mueller, Research Manager, USGS, WERC, stated that she was satisfied with the report and that the bridge was not a safety concern (**Attachment 15**). She said, "If you were a reasonable person and looked both ways, you had plenty of time to act in a cautious and safe manner." Mueller referred to the level of risk at the bridge as "no more than walking across the street with cars."

Takekawa said that subsequent to the safety review, SFBEFS procedures for employees to cross the bridge were updated and a job hazard analysis was created (See Attachment 2). Takekawa stated that he now discusses work requirements in more detail with employees and added that employees may choose not to be assigned work that requires crossing the bridge. Athearn and Henderson both stated that, after the safety review, a job hazard analysis was created to inform employees that they should look both ways with binoculars and that they should consult a passenger train schedule, both of which are provided in the USGS vehicles, prior to walking across the bridge (See Attachments 6 and 8).

When asked about any other incidents on the bridge, only Schultz and Bluso were aware of events other than Maclean (See Attachment 10 and **Attachment 16**). Schultz said she had once spoken to a Pacific Gas and Electric employee that had been on the train bridge when a train approached. According to Schultz, the employee "just held onto the side [of the bridge]." Bluso recalled that David Haines, then a USGS technician, was surprised by a train while walking along the tracks in approximately July 2003. According to Bluso, Haines ran off of the bridge along the tracks and jumped onto the path that is used to access the tracks in order to avoid the train. Bluso said that Haines "did not think much" of the incident and opined that Haines was surprised because he "was not looking back" while walking on the tracks. According to Bluso, she and Haines decided to start using binoculars to scan for trains and to be more careful when walking along the tracks and crossing the bridge. Bluso added that she attributed the incident to a learning experience after which they became more careful around the active railroad.

While it is not open for public use, Takekawa said that United States Fish and Wildlife Service (FWS) employees, contractors, and university students also use the bridge for access to salt ponds A20 and A21. Henderson had also seen FWS personnel and added employees of consulting firms and a scientist from San Jose State University use the railroad bridge to access the ponds (See Attachment 8). According to Moskal, the Don Edwards San Francisco Bay National Wildlife Refuge staff also uses the bridge and at one time used the bridge to provide a public tour of the ghost town of Drawbridge, CA, which is located in the vicinity of the salt ponds (See Attachment 7). In fact, during a site visit, OIG investigators encountered Juan Flores, Maintenance Worker, FWS, Don Edwards San Francisco Bay National Wildlife Refuge, making repairs to the walkway leading to the salt pond designated as A21 in preparation for an upcoming tour, arranged by FWS, of the Drawbridge ghost town (See Attachment 4).

Kathryn Phelps, Physical Scientist, USGS, WERC, stated that she has held a collateral duty as a safety officer since October 2006 and has not received any safety complaints (**Attachment 17**). She described Takekawa as approachable and felt both he and Woo were responsive to safety concerns. Takekawa stated that no employees had raised safety concerns about crossing the railroad bridge to him. Neither Moskal nor Bluso had heard anyone complain about crossing the bridge or say that they did not want to cross it. Moskal, a former intern, also said the interns are told that if they are not comfortable with crossing the bridge that they do not have to do it. Athearn and Henderson both explained that they have told employees that if they are concerned or nervous about crossing the bridge, they would not have to go to the salt ponds. In fact, Schultz stated that she was initially afraid

of walking along the tracks to the salt ponds and mentioned her concerns to Henderson. In response, according to Schultz, Henderson told Schultz that she would no longer have to go to the salt ponds.

Williams expressed doubt that anyone would require an employee to engage in an unsafe activity because that is not part of the USGS "culture," (See Attachment 12). Williams explained that USGS has many avenues for employees to report unsafe conditions either anonymously, through their supervisor or through Williams. He said that employees are strongly encouraged to report unsafe or unhealthful conditions and that he vigorously markets the safety program. Williams added that the USGS Inspection and Abatement System (IAS) allows for anonymous reporting of safety and health related concerns. Williams estimated that the IAS has been in operation for about 1 ½ years. Both Moskal and Henderson recalled online training provided by USGS for reporting safety concerns through (IAS).

Boat Access to Salt Ponds A20 and A21:

According to Takekawa, salt ponds A20 and A21 can be accessed by boat; however, he said use of a boat has its own requirements and hazards (See Attachment 2). Takekawa explained that employees must be trained in towing, launching, and operating boats. In addition, Athearn noted that there is no established docking location to get the boat and its occupants onto the salt ponds (See Attachment 6). During our interviews, Takekawa, Mueller, Athearn, and Bluso all opined that it is harder to access salt ponds A20 and A21 by boat than it is to access them by walking across the railroad bridge (See Attachments 2, 15, 6, and 9). Henderson did not believe that boat access to the salt ponds was necessarily a safer alternative to use of the railroad bridge (See Attachment 8).

Additionally, Takekawa added that the marsh area is very shallow, which impedes boat operation and increases the likelihood of running aground. Similarly, Athearn, Moskal, and Bluso all expressed concern that boat navigation would be dangerous at low tide because it is very easy to get stuck in the mud. Further, Henderson warned that there is a lot of debris around the levees and depending on the tide speed, the area around the breaches in the levees can be hazardous in a boat.

Athearn stated that a boat would have to navigate a marshy area even at high tide and their work cannot be completed in time to avoid the low tides. Mueller also said to use a boat takes quite a bit longer—double or triple the time—and would not always be available depending on the water levels. Moskal, when asked, said it would take much more time to attempt to access the salt ponds by boat.

Rex stated that she has occasionally gone out to the salt ponds with the salt pond crew that visits the salt ponds once per month (See Attachment 11). Rex was asked if there was an alternative to crossing the trestle to access the salt ponds. In response, Rex said that USGS never offered an alternative. However, Rex stated that she has used a boat in the sloughs and speculated that the salt ponds could be accessed by boat if "you worked the tides."

Storage and Transport of Explosive Charges

In addition to reviews of USGS internal audits and relevant sections of the Code of Federal Regulations (CFR) and the USGS Occupational Safety and Health Requirements Handbook, OIG investigators interviewed 11 USGS employees with direct knowledge of and/or experience with the explosives used in rocket netting to capture birds. These interviews include Takekawa, Schultz, Bluso, Moskal, Rex, and Williams, all of whom were interviewed regarding the first allegation. We also

interviewed Research Wildlife Biologists Michael Casazza and Joseph Fleskes from the Dixon Field Station; Research Wildlife Biologist Joshua Ackerman from the Davis Field Station; and Biologists Sam Iverson and Isa Woo (collateral duty safety officer) from the SFBEFS (**Attachments 18, 19, 20, 21, and 22**).

A review of 49 CFR §173.50 disclosed that Explosives in Class 1 are divided into six divisions and that Division 1.3 explosives consists of explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard (**Attachment 23**). Our review of the USGS Occupational Safety and Health Requirements Handbook (SM-445-2-H), disclosed that Chapter 39, Wildlife Netting Safety, defines explosives and requires that all Division 1.3 explosives be “stored in a locked/secure Type 4 magazine/location as prescribed within 27 CFR 55.203” (**Attachment 24**). (*Agent’s Note: We learned that the rocket net charges used by USGS are identified as a Class 1.3 explosive on the manufacturer’s shipping boxes. We also determined that Chapter 39 incorrectly references 27 CFR §55. The applicable regulations are actually found at 27 CFR §555.*) A review of 27 CFR §555.203 disclosed that Type 4 explosives magazines are used for storage of low explosives. We also determined that in accordance with 27 CFR §555.205 all explosive materials must be stored in locked magazines when not in use (**Attachments 25 and 26**).

Storage at Dixon Field Station

With the exception of two —Moskal and Rex—all of our interviewees said that when the rocket net charges are not being used in the field, they are stored in the explosives magazine at Dixon Field Station. Takekawa, Fleskes, and Ackerman also noted that the magazine is used by multiple USGS field stations for rocket net storage (See Attachment 2, 19, and 20). Fleskes, who works at the Dixon Field Station and is one of two people with access to the magazine, said the explosives magazine is labeled with the class of explosives it contains.

Casazza said that the Dixon Field Station does not have a formal requisition process and that they do not keep track of every single explosive charge (See Attachment 18). He added, “We don’t have that running tally” to account for each explosive charge. Casazza stated that when USGS field stations take charges from their box of charges, he does not count what they remove from it. Casazza said that only Joe Fleskes and he can open and access the explosives magazine so they “kind of keep control of it that way.” Casazza explained, “We know who is getting in there and when.” Fleskes said that employees contact Fleskes or Casazza when they need charges (See Attachment 19). In Fleskes’ experience, it has been Takekawa or Ackerman who comes to the station to pick up charges and Fleskes accompanies them to the magazine with the key.

Ackerman said there is no requisition system or process to document the number of charges taken when they are removed from the explosives magazine (See Attachment 20). Ackerman stated that he just sends an e-mail stating how many charges he would like to take to the field. Ackerman said that he usually contacts Fleskes because, to his knowledge, Fleskes is the only individual who has the key to the explosives magazine. Takekawa and Iverson described a similar process of requesting and acquiring charges (See Attachments 2 and 21).

OIG investigators visited the Dixon Field Station to view and examine the explosives magazine (**Attachment 27**). We observed that the explosives magazine was located in an open air equipment storage area adjacent to one of the field station buildings, surrounded by chain link fences with locked access gates along the perimeter. Access to the equipment storage area could be made through the

gates in the perimeter fence or through field station building entry/exit doors. A yellow placard affixed to the door of the magazine read, "Explosives 1.3C 1" and a metal identification tag indicated the magazine was manufactured by Alpha Explosives, Lincoln, CA on June 4, 1998.

Subsequent to the site visit, Williams was asked to provide documentation to verify the type and class of the explosives magazine because no placards or tags with this information were found on or inside the magazine. Williams responded to the request by e-mail and said that the manufacturer had identified the USGS magazine at DFS as an outdoor, Type 2 magazine (**Attachment 28**). (*Agent's Note: 27 CFR §555.203 identifies Type 2 magazines as mobile or portable indoor and outdoor magazines for the storage of high explosives (See Attachment 25).*)

Williams said that the rocket net charges should not be stored anywhere other than in the explosives magazine at the Dixon Field Station (See Attachment 12). Our review of regulations found within 27 CFR §555 Commerce in Explosives confirmed there are no exemptions or provisions to allow storage of explosives outside of the magazine. Further, a review of 49 CFR §171.1(d)(5) - Applicability of Hazardous Materials Regulations (HMR) to persons and functions - disclosed that the Hazardous Materials Regulations pertaining to the safe and secure transportation of hazardous materials (which includes explosives) do not apply in this case because the federal government is exempt from this requirement (**Attachment 29**).

Fleskes had stated that the explosives magazine is inspected as part of periodic USGS safety inspections (See Attachment 19). Williams, when asked if there were inspection requirements for the explosives magazine, said there is an annual self-inspection required as part of the USGS Inspection and Abatement System (IAS). He added that the USGS safety staff also conducts an external audit every 3 years as part of the IAS (See Attachment 12). Our review of the IAS self-inspections for the Dixon Field Station for 2006 and 2007 and the external safety inspection disclosed no indication that the explosives magazine was included in or inspected as part of the IAS self-audits (**Attachments 30, 31, and 32**). Williams, in an e-mail to OIG investigators, said that he conducted the external inspection and recalled looking at the explosives magazine (**Attachment 33**). He explained it is not mentioned in the external inspection report because no discrepancies pertaining to the magazine were noted.

Takekawa, Casazza, Fleskes, Ackerman, Iverson, and Bluso specifically noted that the rocket net charges are delivered by the manufacturer to the Dixon Field Station in a cardboard box. Winn-Star, Inc., Carbondale, IL, the manufacturer of the rocket net charges, includes a Material Safety Data Sheet with each shipment of the rocket net charges (**Attachment 34**). According to this document, rocket net charges should be kept away from flame, fire, and stray electrical current and that if the charges are ignited, they should be allowed to "burn out" instead of making attempts to extinguish them. During transport, explosives should be secured from shifting and kept away from flames, electrical charges, or corrosive substances; vehicles containing explosives should not be taken into a garage or repair shop. The document also noted that the charges should be stored in a cool environment and kept dry. The Material Safety Data Sheet does not reference sections of the Code of Federal Regulations applicable to storage of explosives.

Casazza, Woo, and Iverson described the explosive rocket net charges, which are no longer than 6 inches in length, as "inert"; however, Casazza and Iverson pointed out that they must be protected from fire and electrical charges. Casazza stated that if the charges are accidentally ignited, they burn but do not explode; Takekawa, Schultz, Fleskes, and Ackerman also noted that the explosives simply burned

if ignited. Iverson stated that in the case of damaged or wet charges, the standard procedure is to remove the cap, spread the explosives on the ground, and burn them. Bluso opined that there is more risk in filling a car's gas tank than there is in handling the rocket net charges. Bluso explained that the rocket net charges are benign when they are not loaded into a rocket. However, once they are put in a rocket then the rocket and charge can be lethal. Casazza, Takekawa, Fleskes, and Ackerman each commented that the charges must be in a confined space, such as a rocket, to create an explosive force.

Both Casazza and Fleskes recalled that the charges used to be delivered via FedEx but in recent years the manufacturer began delivering them. Casazza also informed OIG investigators that prior to the purchase of the magazine, the charges were stored in a heavy duty file cabinet.

Transporting Rocket Net Charges in the Field

No one interviewed during this investigation knew of any guidance pertaining to the transportation of explosives and/or net charges. According to Casazza, he is not aware of any requirements for transportation of the charges by USGS personnel (See Attachment 18). When asked, Casazza opined that perhaps there should be some type of official policy from USGS for handling of the charges. However, Casazza said that they currently follow the guidance provided by the manufacturer with each shipment.

Interviewees informed OIG investigators of four types of containers used to transport rocket net charges: cardboard boxes (the manufacturer's shipping boxes), a fireproof safe, tackle boxes, and coolers. There was no consensus as to the type of container used; individuals had different preferences and experiences, which are discussed in their attached interviews. Takekawa, Ackerman, Casazza, Iverson, Schultz, Moskal, and Rex explained the charges needed protection from exposure to water, electrical charge, and fire. The majority of the employees that were aware that the charges were shipped by the manufacturer in a cardboard box also said that the charges were transported in the field the same way and felt (based on the manufacturer's use of cardboard) that it was acceptable.

Most of the interviewees also confirmed that the charges were transported in a plastic, fireproof safe. Ackerman, who said he was not aware of any regulations or requirements pertaining to transportation of the charges, also said he purchased a Sentry fireproof safe about 3 years ago and that it is used to store the charges in the field (See Attachment 20). When asked to respond to the allegation that there is only one fireproof safe resulting in some USGS teams being forced to use cardboard boxes or tackle boxes to transport rocket net charges, Ackerman responded, "Usually we don't have that many people setting nets." Ackerman said that usually one safe is enough because there is only one lead technician going around and setting off the charges. He commented that nobody had ever asked for another safe or suggested that one was needed. When asked about the fireproof safe used by employees of the SFBEFS to transport rocket net charges, Casazza said he was unsure if that was a "good idea" and added that he was uncomfortable with it (See Attachment 18). Fleskes also did not believe the safe was specifically designed to hold explosives, rather he considered the safe to be added security for the charges (See Attachment 19).

Takekawa said that there is no specific requirement to use the fireproof safe for transportation of the explosive charges (See Attachment 2). Takekawa said that charges are removed from the magazine and taken to the field in a fireproof safe or in the manufacturer's cardboard shipping box. Takekawa stated that the rocket net charges are sometimes transported in plastic tackle boxes, which are good insulators against electrical charges that might ignite charges. Casazza said that the rocket net charges

are sometimes transported to the field in the cardboard shipping box used by the manufacturer, but typically USGS personnel use a fiberglass tool box or tackle box to take the number of charges estimated to be needed in the field. Casazza opined that the fireproof safe did not add a measurable risk but he preferred to use the tackle boxes. When asked, Ackerman concurred that a plastic tackle box would also be acceptable for transportation of the charges because the goal is to prevent accidental ignition.

Schultz said the charges are transported in a fireproof safe and are sometimes transported in coolers in the field to avoid getting them wet (See Attachment 10). Schultz opined that the fireproof safe seems safer and provides "peace of mind for us," but she said she was not sure if it was actually any safer than transporting the charges in a cardboard box. Bluso did not believe that there was any guidance pertaining to the transportation of the rocket net charges and said that Takekawa instructed employees to use coolers (See Attachment 9). When asked, Bluso said coolers were used to keep the charges from getting wet and to keep them from hitting any other items. Bluso said that the manufacturer of the rocket net charges ships them in cardboard boxes and speculated that it would not pose a hazard to transport the charges in cardboard box or a tackle box. Rex said that during 2005, her first year at SFBEFS, the rocket net charges were stored in coolers or plastic tackle boxes (See Attachment 11). She said that after Ackerman provided the fireproof safe he told her to be careful, not to get the charges wet, to avoid static electricity, and to secure them in the vehicle. Based on this guidance, Rex put the fireproof safe on the passenger seat next to her to prevent it from being jostled during transport between Vallejo and Newark, CA. She said the charges were transported in tackle boxes to the field sites and that there was not much guidance on how the rocket net charges should be transported.

Temporary Storage at SFBEFS

Employees who had personally observed how rocket net charges were stored at the SFBEFS field station include Takekawa, Woo, Schultz, Iverson, and Rex (See Attachments 2, 22, 10, 21, and 11). According to Iverson, before the crews leave to work in the field, they typically pick up a week's worth of charges—15 to 18 charges, which is enough for 5 or 6 captures—from the magazine in Dixon. Iverson said for short term storage, the charges are kept in a portable safe during transport and when not in use. Takekawa, who supervises the field station, admitted that rocket net charges are occasionally stored at the SFBEFS prior to use in the field. He said that when this occurs, the rocket net charges are kept in the office or in a government vehicle parked in a garage in one of the old military buildings near the SFBEFS (Building 505). According to Takekawa, it is also permissible to store the rocket net charges in a government vehicle when employees must travel overnight to other locations. (*Agent's Note: The SFBEFS is located on the former Mare Island Naval Shipyard.*)

Woo, Schultz, and Iverson also said that charges may be kept overnight at the SFBEFS before they are taken into the field the following morning, or for short periods of time. Woo said sometimes the charges are kept in vehicles parked next to the SFBEFS building. Schultz added that the charges are sometimes stored for a few days in the fireproof safe or in a cooler in Building 505. Iverson also said that the rocket net charges may be kept between captures up to a month at a time while doing field projects, and they are kept in cardboard boxes, if necessary, or a portable safe stored in Building 505. Iverson said that he feels better transporting the charges in a safe and said that 90 percent of the time the charges are kept in the safe; however, the charges are sometimes kept in cardboard boxes. Iverson explained that if one team is in the field with the safe, another team would keep the charges in a cardboard box. Iverson explained that the charges are delivered from the manufacturer, Winn-Star, in cardboard boxes and he feels it is "perfectly safe" to keep them in a cardboard box.

Rex recalled that at the beginning of 2007, she went to the SFBEFS to retrieve some of the rocket net charges. She said the charges were stored in Building 505 in a tackle box—she also recalled other times when the charges were stored in cardboard boxes—in the middle of the floor along with other tackle boxes containing other equipment. Rex stated that she had to open all of the tackle boxes to locate the rocket net charges. Rex said it made her nervous that the rocket net charges were stored in an unmarked tackle box in the middle of the floor because it would have been easy to have tripped over the tackle box containing the explosive charges or to have mistaken it for a tackle box that did not contain explosive charges.

Temporary Storage at Don Edwards San Francisco Bay National Wildlife Refuge

Employees who had personally observed how rocket net charges were stored at the Don Edwards San Francisco Bay National Wildlife Refuge include Ackerman, Bluso, Moskal, and Rex (See Attachments 20, 9, 7, and 11). Ackerman said that when rocket net charges are taken to the field, they are kept in a locked, fireproof safe at the USGS site at the wildlife refuge. Bluso said that Ackerman usually transported the rocket net charges from Dixon to the refuge at the beginning of the season and made other deliveries if additional charges were needed. She said the charges were placed in a fireproof safe that is stored in a shed at the refuge. When asked whether it was safe, Bluso responded that the fireproof safe had a lock on it, the shed is also locked, and she never thought the storage was unsafe. Bluso said the USGS shed is in a non-public area of the refuge and that the refuge gate, which she estimated was 2 miles away, is locked at night. Bluso also stated that the charges would be transported to the field in coolers after removal from the fireproof safe. Both Moskal and Rex said that charges were transported in coolers in the field and were stored the fireproof safe in a locked USGS shed.

Rocket Net Training

Our review of the USGS Occupational Safety and Health Requirements Handbook (SM-445-2-H), Chapter 14, Safety and Health Training and Chapter 39, Wildlife Netting Safety disclosed the following requirements (See Attachment 24 and **Attachment 35**):

- 14.3B – “Certification procedures for *high-hazard tasks* such as the *use or transporting of explosives* will be documented and carried out by certified examiners.” (emphasis added)
- 14.3C – “Formal classroom training and certification that is given for *high-hazard* activities will be recorded by the USGS and maintained at least 5 years.” (emphasis added)
- 39.4B(2) – Organizational Managers and Supervisors should “Provide personnel instruction in the use and handling of explosives.”
- 39.4F(2) – Personnel should “Complete required rocket-netting, blasting, or explosives safety training programs.”

There is currently no formal training program, certification procedures, or record of training for rocket netting at USGS WERC. This was confirmed by all of our interviews who either directly stated there was no training or certification or replied negatively when asked; some interviewees, such as Ackerman, also mentioned they were not aware such formal training or certification was required (See Attachment 20). All interviewees confirmed that informal, individual training is provided by the senior staff.

Williams stated that employees receive on the job training from supervisors or other authorized

employees on the safe use of rocket net charges (See Attachment 12). Williams said that because rocket netting is such a localized specialty that it is currently up to the supervisors to provide appropriate on the job training to employees. However, he noted that because of the potential hazards associated with rocket net charges, it might be beneficial to address the training requirements at a higher lever and formalize them. When asked, Williams said that any documentation or record of who is approved to do rocket netting would be maintained by the local supervisor. Williams said the training should be based on the job hazard analyses and manufacturer-supplied user manuals for safe handling and operation of the product. Williams was asked to provide a copy of the job hazard analysis for rocket netting. He responded that they did not have an analysis for rocket netting, but added that the WERC Safety Officer (Phelps) was working on an analysis but it was not done (**Attachment 36**).

During our interviews, Takekawa, Casazza, and Fleskes were named as the senior employees, and experts, that provide training (See Attachments 2, 18, and 19). Takekawa stated that he has 20 years of experience using explosive charges to capture birds with nets. He provides training in the field to SFBEFS employees before allowing them to handle or use the explosive charges. Takekawa said that employees must demonstrate that they are competent to handle the charges before they receive authorization to use the rockets. He explained that training is informal because of the limited number of people. "We just know" who is trained, he said, because it is a "specialty area," and added, "No one is allowed to go out on their own without that training."

Similarly, Casazza stated that the rocket net training is an informal process but it is taken seriously, with an emphasis on safety. Casazza stated that he and the other rocket net experts are very careful with the training because they recognize that they are ultimately responsible for the safety of their employees. He noted that this responsibility is a "pretty good motivator" to ensure that rocket net shots are done safely. Casazza said the training is not formalized and that approval to lead a rocket net shot is at the discretion of the experts, whom he named as himself, Takekawa, and Fleskes. Casazza said that he did not "see a need for" certification or records under their current system; he added that some sort of certification might be beneficial.

Casazza, when asked, said that rocket net training is provided on the job by example. Fleskes stated that only experienced employees use the rocket nets; these experienced employees (trainers) accompany technicians in the field, usually for at least a year, until the trainers feel the technician is ready to set up without them.

Ackerman asserted that USGS only allows technicians who are "really experienced" and are very comfortable with the process to use the rocket nets (See Attachment 20). Ackerman said that at the beginning of the year they will set off rocket nets, demonstrate the use of other equipment, and discuss safety precautions to new USGS technicians. Ackerman said that only lead field technicians and other technicians who are very involved in capturing activities are allowed to conduct rocket net shots and that USGS is very "anal" about the process, ensuring that everyone knows their job before going out to the field.

OIG investigators interviewed four employees who received the informal training described above: Iverson, Bluso, Schultz, and Moskal (See Attachments 21, 9, 10, and 7). Each employee spent a few days, first in the field office reviewing set up of and safety during rocket netting and then out in the field receiving "hands on" training with practice set ups, in training with Takekawa, among others. Further, each trainee had to receive the approval of a senior expert before conducting, and especially

leading, rocket netting in the field. All four employees felt prepared by the training and able to conduct rocket netting without supervision. Bluso said she was impressed with the rigor with which Takekawa provided the training and with how he stressed safety issues associated with rocket netting. Schultz described the training as informal, but noted she was the only one being trained at the time.

When asked if the training was sufficient, Iverson responded, "I would like more." According to Iverson, "We do rely a lot on just the experience of the people who have done it and we pass that on." Iverson explained that the first time he experienced rocket netting, he found it intimidating and would have preferred more formal training; after continued practice in the field, Iverson became more comfortable. When asked whether there should be formal training, Bluso responded "not necessarily." She commented that she thought the August 2004 training she received from Takekawa was very formal and sufficient for what she viewed as a simple process. Bluso stated that at the beginning of each field work season Takekawa provided familiarization training to USGS field personnel on how to safely set up the rockets. Schultz said it would be beneficial to have more formalized training; however, she felt well trained. Moskal opined that perhaps a write up to use as a reference would be helpful. Moskal was shown a copy of the USGS Occupational Safety and Health Program Requirements Handbook, Chapter 39, Wildlife Netting Safety. She did not recall having seen the chapter before and, after reviewing it, said it would serve well as a reference for setting up a rocket, as a "cheat sheet."

Conversely, Rex, when asked about training to use the rocket net charges, responded that there was no training, certification, or record (See Attachment 11). Rex, when asked, said there should be a formal training process. Rex stated that in 2005 she assisted graduate students to set up rocket net equipment only one time. Rex said that when she was put in charge of rocket netting in 2007, she did not know how because she had only observed the set up the one time 2 years earlier. Rex noted that she had been present when other rocket nets were used in 2005 and 2006, but she did not participate in the set up. According to Rex, she told Ackerman that she did not know how to set up and use the rocket nets. Rex said that Ackerman told her to go to Schultz for training and, when she did, Schultz spent only 5 minutes with her. She said that Schultz' assistance consisted of drawing a diagram of how to do the wiring for the rocket net charges and how to stake the equipment.

In about March 2007, when it came time to use the rocket nets, Rex said she had to contact Ackerman while on site for verbal instructions. According to Rex, she told Ackerman that she did not know how to use the detonators and asked him if it mattered which end of the wire goes into each end of the detonator. Rex said that she actually had a set of instructions at the field site but someone had duct taped over them and her attempts to remove the duct tape to read the instructions ruined them. When asked, Rex said the instructions would have been of minimal use had she been able to read them.

Ackerman said that Rex was hired by USGS in February 2005 and had been part of their rocket netting activities since that time (**Attachment 37**). Ackerman said that he would have been comfortable with Rex leading the rocket net shots in 2005 and 2006, but she did not need to lead the shots because other personnel were assigned to do it. Ackerman said that Rex led rocket net shots in 2007. Ackerman stated that in approximately February or March 2007, he had several conversations with Rex about rocket netting. He said that the discussions involved how to catch birds and locations to set up rocket nets. Ackerman recalled that he asked Rex and she responded affirmatively that she was comfortable with leading rocket net shots.

When asked, Ackerman said that Rex may have said that she would like refresher training for rocket

netting in early 2007. Ackerman claimed he did not recall details of that conversation but remembered that he told Rex that she could obtain refresher training from Schultz since Rex would be picking up rocket netting equipment at the SFBEFS where Schultz was employed. Ackerman said he did not receive any feedback from Rex or Schultz regarding refresher training for Rex. Ackerman recalled that during the 2007 rocket net season (approximately March to May 2007), Rex attempted a rocket net shot and the rockets failed to fire. Rex telephoned Ackerman for assistance in determining why the rocket net failed to fire. Ackerman said he helped her to troubleshoot the problem but did not recall details of the conversation.

Moskal stated that in 2007, Rex had complained to her that she did not receive sufficient training related to rocket nets (See Attachment 7). Moskal said Rex raised the issue when they were talking about a DOI employee satisfaction survey. Moskal said that her experience with Rex was that Rex did not speak up and then complained at a later time. Moskal opined that Rex's complaint about a lack of training was the result of Rex not speaking up or reporting her concerns to management. Moskal opined that Rex should have asked for more training if she believed that she needed it.

Casazza, Takekawa, Ackerman, Fleskes, Woo, Schultz, Iverson, Williams, and Phelps stated that they were unaware of any complaints regarding the handling, use, or storage of explosives. Ackerman said that prior to allowing technicians to use rocket nets independently, technicians are asked if they are comfortable and whether they have any questions; nobody had informed him that they did not want to go out and do rocket netting. According to Casazza, rocket netting is the "fun part of the job" and most employees are excited to be part of it.

SUBJECT(S)

USGS Western Ecological Research Center

DISPOSITION

We are referring this case to the Acting Assistant Secretary for Water and Science for use in preparing the Secretary's response to OSC and any other action deemed appropriate.

ATTACHMENTS

1. Secretary Dirk Kempthorne letter, dated August 17, 2007
2. IAR – interview of John Takekawa on August 29, 2007
3. South Bay Salt Pond Restoration Project Map
4. IAR – Site Visit at Railroad Bridge and Salt ponds on September 6, 2007
5. USGS Job Hazard Analysis – Salt Pond Access
6. IAR – interview of Nicole Athearn on September 4, 2007
7. IAR – interview of Stacy Moskal on September 6, 2007
8. IAR – interview of Kathleen Henderson on September 6, 2007
9. IAR – interview of Jill Bluso on September 5, 2007
10. IAR – interview of Annie Schultz on September 5, 2007
11. IAR – interview of Angela Rex on September 6, 2007
12. IAR – interview of Eric Williams on September 5, 2007
13. USGS accident report, dated March 19, 2006
14. USGS Safety Review, dated April 3, 2006
15. IAR – interview of Mary Ellen Mueller on September 5, 2007

16. IAR – interview of Jill Bluso on October 2, 2007
17. IAR – interview of Kathryn Phelps on September 5, 2007
18. IAR – interview of Michael Casazza on September 4, 2007
19. IAR – interview of Joseph Fleskes on September 4, 2007
20. IAR – interview of Joshua Ackerman on September 4, 2007
21. IAR – interview of Sam Iverson on September 4, 2007
22. IAR – interview of Isa Woo on September 4, 2007
23. 49 CFR §173.50 Class 1 - Definitions
24. USGS Occupational Safety and Health Requirements Handbook, Chapter 39, Wildlife Netting Safety
25. 27 CFR §555.203 Types of Magazines
26. 27 CFR §555.205 Movement of Explosive Materials
27. IAR – Site Visit, USGS Explosives Magazine, Dixon, CA on September 4, 2007
28. E-mail from Eric Williams, dated September 18, 2007, through October 3, 2007
29. 49 CFR §171.1(d)(5) Applicability of Hazardous Materials Regulations (HMR) to Persons and Functions
30. 2006 USGS Inspection and Abatement System self-inspection, Dixon Field Station, Dixon, CA
31. 2007 USGS Inspection and Abatement System self-inspection, Dixon Field Station, Dixon, CA
32. USGS Western Region Safety Inspection, Dixon Field Station, Dixon, CA, dated October 19, 2005
33. E-mail from Eric Williams, dated September 17, 2007
34. Material Safety Data Sheet, Winn-Star, Inc., dated August 17, 1992
35. USGS Occupational Safety and Health Requirements Handbook, Chapter 14, Safety and Health Training
36. IAR – voicemail message from Eric Williams on September 26, 2007
37. IAR – interview of Joshua Ackerman on September 20, 2007



United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date August 31, 2007
Report Subject Interview of John Takekawa	

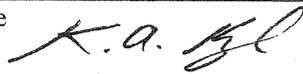
On August 29, 2007, John Takekawa, Research Wildlife Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA was interviewed telephonically by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to determine Takekawa's knowledge of and response to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties, employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Takekawa read and signed a Garrity warning that was provided to him via e-mail.

Note: Takekawa was interviewed by telephone because investigators learned that he was scheduled to travel overseas on government business for approximately 30 days beginning September 1, 2007.)

Takekawa said that he is responsible for oversight of operations at the SFBEFS and is the assigned principal investigator for the work carried out by SFBEFS employees. He stated that SFBEFS employees perform work related to wetland restoration and added that they also provide science support to the United States Fish and Wildlife Service (USFWS).

Takekawa said that one of their projects involved research and restoration pertaining to salt ponds in the south bay area of San Francisco Bay. Takekawa stated that the salt ponds were formerly used for commercial production of salt and now are part of a wildlife refuge.

When asked, Takekawa said that salt ponds designated as A20 and A21 were known as the "island ponds" because they are difficult to access. He said that employees access salt ponds A20 and A21 by walking across a railroad trestle. Takekawa added that USFWS employees, contractors and university students also use the trestle for access to salt ponds A20 and A21. Takekawa claimed that pedestrian use of the railroad trestle is safe for regular pedestrian use. He explained that the train trestle has a walkway for pedestrians and that employees cross the trestle after evaluating whether a train is

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
Authentication Number: 5549D2D2FA01F07B5875ABBC138EB154	

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approaching. Takekawa recognized that there is some risk in crossing the trestle but opined that it was reasonable. He said that the trestle is about 10 to 15 feet above the water and that it is not open to the public.

Takekawa stated that SFBEFS employees cross the trestle to do water quality sampling on a weekly to monthly basis depending upon the time of year. He explained that equipment must be cleaned more frequently during the warm weather months from about May to November. Takekawa added that two employees are sent when going to the salt ponds.

Takekawa said that on about March 11, 2006, a SFBEFS employee named Jennifer Maclean had a "panic attack" when she observed a train approaching the trestle. According to Takekawa, Maclean ran to a location she believed was safer resulting in a collapsed lung. Maclean filed an Occupational Safety and Health Administration (OSHA) claim for an on the job injury. Takekawa said that Maclean and another employee, Dominique Monie, had been tasked to conduct work that required crossing the railroad trestle on the day that Maclean sustained the injury.

Takekawa said that the WERC Safety Officer, William Fitzpatrick, and the SFBEFS Safety Officer, Scott Jackson, conducted a safety review on April 3, 2006 with Takekawa to assess the hazards associated with pedestrian crossing of the railroad trestle. According to Takekawa, the safety review concluded that it was safe for pedestrians to use the railroad trestle to gain access to the salt ponds. Takekawa explained that the trestle construction was found to be safe, the trestle was constructed with a foot path to facilitate pedestrian traffic and that the area had good visibility. Takekawa added that the safety review concluded that Maclean's lack of awareness and a preexisting condition were to blame for her injury. Takekawa said that he would provide investigators with a copy of the report which included photographs.

Takekawa said that USGS approved the OSHA claim because Maclean was injured while on duty. He added that Maclean was reassigned to other duties so that she would no longer have to cross the trestle. When asked, Takekawa said that he believed Maclean is now employed by USFWS. He also said that Fitzpatrick and Jackson are no longer working for USGS.

Takekawa said that after the safety review, SFBEFS procedures for employees to cross the trestle were updated. He said that job hazard analysis packets were placed in government vehicles for employees to use. The packets include commuter train schedules and instructions to employees to scan the tracks for approaching trains and to stay alert while walking across the trestle. Takekawa claimed that there was about one half mile visibility in one direction and a three quarter mile visibility in the other direction. He added that the job hazard analysis packets were approved by the WERC safety officer.

When asked, Takekawa said commuter train schedules were put in the government vehicles because they are on specific schedules and travel at high speeds. He indicated that freight trains move much slower so they are not a significant safety threat. He indicated that "if you look around" there is little danger in crossing the trestle.

Takekawa said that subsequent to the incident involving Maclean he began discussing work requirements in more detail with employees and that employees may choose not to be assigned work that requires crossing the trestle.

Takekawa said that salt ponds A20 and A21 can be accessed by boat but that option has its own

requirements and hazards. Takekawa explained that employees must be trained in towing, launching and operating boats. Additionally, he added that the marsh area is very shallow which impedes boat operation and increases the likelihood of running aground. Takekawa opined that it is harder to access salt ponds A20 and A21 by boat than it is to access them by walking across the railroad trestle.

Takekawa stated that no employees had raised safety concerns about crossing the train trestle to him.

According to Takekawa, SFBEFS employees use explosive charges that launch nets to capture birds. He said that the explosive charges are designed for use by the scientific community for use in cannons or rockets used to propel nets over birds. He described the explosive charges as class 2 smokeless propellants and display fireworks that use a compressed powder. He added that the charges only burn like paper if ignited outside of a restricted environment such as a rocket tube.

Takekawa said that the SFBEFS does not use cannons. Takekawa said that the SFBEFS utilizes rocket nets made by Winn-Star. Takekawa explained that the tubes hold the explosive charge and propel nets of about 25 feet by 60 feet over targeted birds. He added that each net requires the use of three rocket tubes. Takekawa also said that the SFBEFS uses "net launchers" which use a .222 blank to propel smaller nets.

Takekawa stated that he has 20 years of experience using explosive charges to capture birds with nets. He provides training in the field to SFBEFS employees before allowing them to handle or use the explosive charges. Takekawa said that employees must demonstrate that they are competent to handle the charges before they receive authorization to use the rockets.

Takekawa said there is no formal classroom training and, when asked, stated that no records are kept to document when an employee received training in the use and handling of the explosive charges. Takekawa said "we just know" who is trained because it is a "specialty area" for a limited number of people. He added that "no one is allowed to go out on their own without that training."

When asked, Takekawa stated that the USGS Occupational Safety and Health Program Requirements Handbook (SM-445-2-H), Chapter 14.5I, Explosives Work and Chapter 38, Blasting Safety did not apply to the use of the explosive charges used in the rocket nets. He said that Chapter 39, Wildlife Netting Safety was written to address use of cannon and rocket net devices.

Takekawa said that there have been no injuries resulting from the use of the explosive charges at the SFBEFS. However, he stated that one employee sustained a minor injury when the employee dropped equipment on her foot.

Takekawa stated that the manufacturer of the explosive charges, Winn-Star, delivers them in cardboard boxes to the WERC explosives bunker at the WERC field station in Dixon, CA. He said that charges are removed from the bunker and taken to the field in a fireproof safe or in the manufacturer's cardboard shipping box. Takekawa said that each WERC field station stores its explosive charge supply at the bunker in Dixon, CA.

Takekawa did not believe that there are routine inspections of the explosives bunker but recalled that the General Services Agency (GSA) inspected it on one occasion since it is located on a GSA facility.

Takekawa said that there is no specific requirement to use the fireproof safe for transportation of the

explosive charges. Takekawa added that although there is no transportation requirement they (SFBEFS employees) try to use the fireproof safe when transporting the rocket net charges. Takekawa said that the squibs (igniters) can be detonated if electricity is encountered so the squibs are shunted to insulate the wires to prevent accidental detonation.

Takekawa stated that the rocket net charges are sometimes transported in plastic tackle boxes. He explained that the plastic of the tackle box is a good insulator against electrical charges that might ignite the squibs or charges.

Takekawa admitted that rocket net charges are occasionally stored at the field station prior to use in the field. He said that when this occurs the rocket net charges are kept in the office or in a government vehicle parked in a garage in one of the old stone military buildings near the SFBEFS. According to Takekawa, it is also permissible to store the rocket net charges in a government vehicle when employees must travel overnight to other locations.

Takekawa said that the net launcher blanks are stored with their shotguns and shells in a locked cabinet.

Takekawa said that the frequency of use of the rocket net charges depends upon the needs of their projects at any specific time.

Takekawa stated that he was not aware of any complaints or concerns made by employees about the handling or storage of rocket net charges.

When asked, Takekawa said that to his knowledge nobody has submitted a Report of Unsafe Conditions and Allegations of Reprisal report in accordance with Chapter 8 of the Occupational Safety and Health Program Requirements Handbook. Additionally, Takekawa stated that he was not aware of any situation in which employees were discouraged from reporting unsafe conditions.

Takekawa opined that the anonymous allegations concerning workplace safety may have been made by a disgruntled employee whose temporary job was not extended.



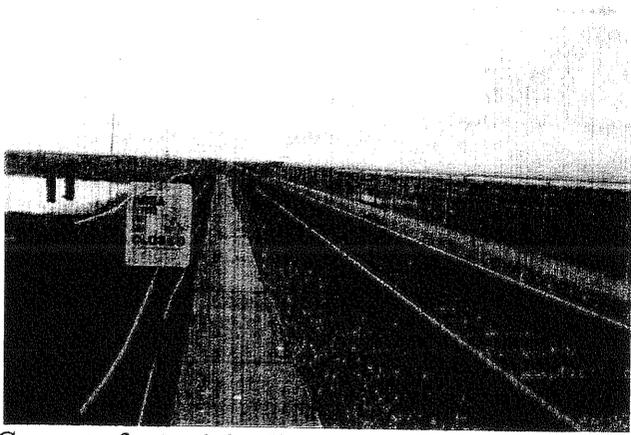
**United States Department of the Interior
Office of Inspector General**

INVESTIGATIVE ACTIVITY REPORT

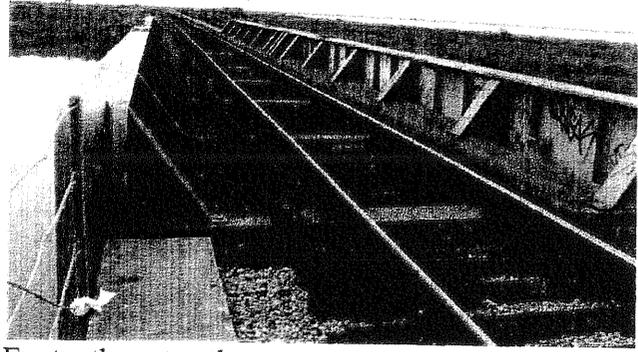
Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 14, 2007
Report Subject Site visit – Railroad Trestle to Salt Ponds	

On September 6, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG) conducted a site visit at a railroad trestle on the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR), Newark, CA that is used by United States Geological Survey (USGS), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA employees for pedestrian access to Alviso salt ponds A20 and A21. The site visit was conducted as part of an investigation into allegations that SFBEFS employees were exposed to safety hazards. Specifically, allegations were made that employees must cross an active railroad bridge in order to perform water quality tests. Nicole Athearn, Biologist, USGS, SFBEFS accompanied investigators to unlock gates on the access road to the railroad trestle which is located in a remote, non-public area of the SFBNWR.

Upon arrival at the railroad trestle, investigators observed that the trestle and adjacent approaches to the trestle were constructed with pedestrian foot paths as shown in the following photographs:



Concrete footpath leading to trestle



Footpath on trestle

Reporting Official/Title
Keith A. Kuczka/Senior Investigator

Signature
[Handwritten Signature]

Authentication Number: 2D368409B9E85AA0C21D6E148B8814BA

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Investigators observed that the railroad runs approximately north and south. The tracks to the north curve toward the northwest approximately one to two miles beyond the trestle while the tracks to the south are straight. The trestle crosses a slough and straddles the salt ponds identified as A20 and A21. The area is relatively flat with good visibility, estimated to be two to three miles, in all directions. On the day of the site visit, the winds were calm and the air was hazy due to smoke drifting into the area from wildfires in another part of the state.

Investigators, who were not burdened by equipment, walked onto the concrete footpath adjacent to the track and crossed the trestle to the first wooden walkway leading away from the tracks toward the salt pond designated as A21. The distance for this walk is estimated to be between 250 and 300 feet and took approximately two minutes while walking at a leisurely pace. The distance from this first wooden walkway to another wooden walkway that leads away from the tracks to the salt pond designated as A20 took about one minute and is estimated to be less than 200 feet.

During the site visit, investigators heard and observed three trains approach and cross the trestle. Binoculars were not used by the investigators during these observations.

A northbound freight train, estimated to be traveling at 35 miles per hour, was heard when it blew its whistle approximately six minutes before it crossed the trestle. The light on the train's engine was observed approximately four minutes before it crossed the trestle.

A southbound Amtrak passenger train, estimated to be traveling 45 to 50 miles per hour, was heard when it blew its whistle about three and a half minutes before it crossed the trestle. The train was observed traveling along the northwesterly bend in the tracks at about the same time as it was heard.

A southbound Altamont Commuter Express commuter train, estimated to be traveling 55 miles per hour, was heard when it blew its whistle approximately three minutes before it crossed the trestle. The train was observed traveling along the northwesterly bend in the tracks at about the same time as it was heard.

During the site visit, investigators encountered Juan Flores, Maintenance Worker, United States Fish and Wildlife Service, SFBNWR. Flores was making repairs to the walkway leading to the salt pond designated as A21 in preparation for an upcoming tour, arranged by FWS, of the Drawbridge ghost towns.

When asked, Flores said that he walks across the trestle when he is assigned work in the vicinity of salt ponds A20 and A21. Flores stated that he considers it safe to access the salt ponds by walking across the trestle. According to Flores, it is important to listen and observe before walking across the trestle. He stated that he looks both ways and proceeds to cross the trestle if it is clear. Flores noted that if he sees or observes a train approaching from either direction he just waits until it has passed by. Flores indicated that the tracks will be clear for awhile after a train has crossed the trestle.

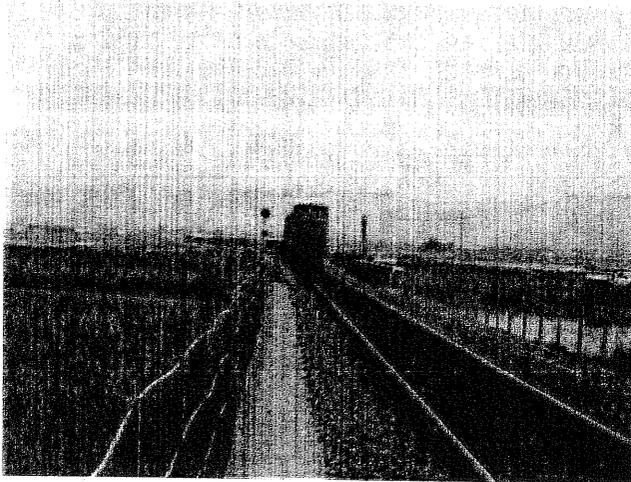
The following photographs depict trains approaching and crossing the trestle and show the visibility on the day of the site visit:



Northbound train approaching



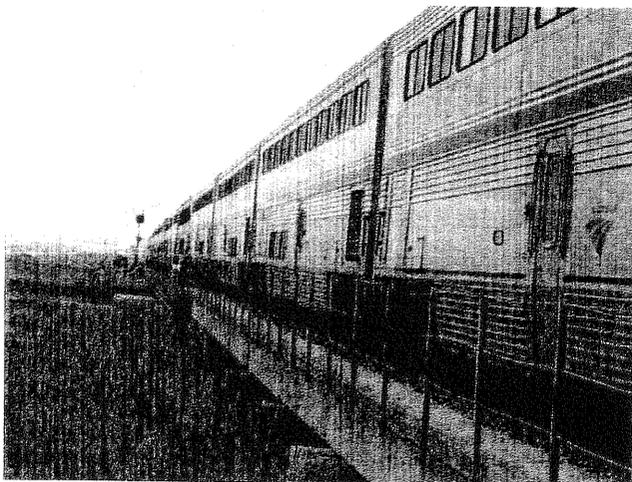
Northbound train approaching trestle



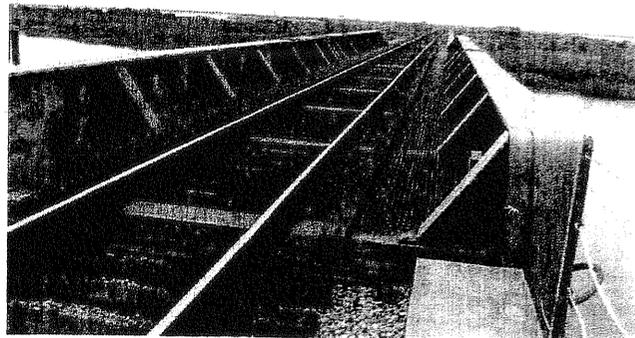
Northbound train leaving trestle



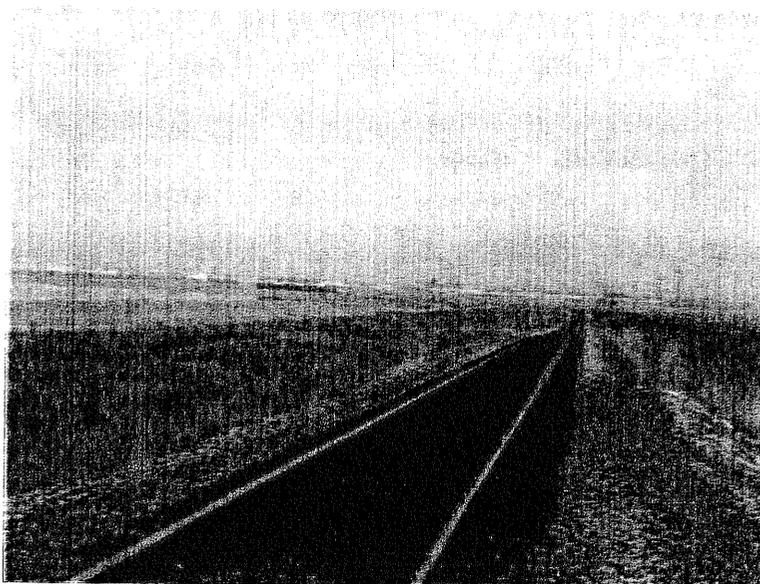
Southbound Amtrak train on bend in tracks



Southbound train crossing trestle



Visibility looking south from trestle



Visibility looking north from trestle with approaching train

Subsequent to the site visit, the writer accessed Google maps on the internet to obtain the following approximate distances from the available satellite maps:

- Distance from the trestle to the point where trains were observed approaching from the north is approximately 3 miles.
- Distance from the trestle to the point where trains were observed approaching from the south is approximately 2.5 miles.
- Distance from the north side access to the trestle to the salt pond A21 walkway on the south side of the trestle is between 250 feet and 300 feet.
- Distance from the salt pond A21 walkway to the salt pond A20 walkway is between 150 feet and 200 feet.

JOB HAZARD ANALYSIS

Date Created: 7/13/06

JOB: Salt pond access

Date Last Modified: 7/13/06

PREPARED BY: John Takelawa

REVIEWED BY: Scott Jackson

Recommended Protective Clothing and Equipment:

None.

PAGE 1 OF 1

Sequence of Basic Job Steps	Potential Accidents/Hazards	Recommended Safe Job Procedures
Traveling from office	Traffic accident	Obey all traffic signs and laws. Stay alert for hazardous driving conditions.
Accessing levee roads	Vehicle stuck in mud	Check weather conditions. Drive to access. If area received rain within past 3 days, visually assess road conditions. If mud, puddles, or fresh, deep tracks from other vehicles are apparent, get out of vehicle and assess conditions by foot. If conditions seem acceptable, slowly drive onto road. If vehicle creates tracks in road or if muddy areas are encountered, turn back and leave roadway.
Driving on levee roads	Accident, particularly due to slick conditions while roads are wet	Drive carefully, maintaining driving speed under 20 mph and no faster than appropriate for conditions. Speed should be reduced when members of public or animals are present and especially when roads are wet. Stay alert for changing road conditions.
Turning around on levee roads	Vehicle stuck in mud or soft dirt	Drive to widest possible portion of levee. Execute turn in multiple steps, taking care not to move wheels less than one foot from road edge (or more, depending on conditions). If necessary, have passenger leave vehicle and guide maneuver.
Accessing Alviso Salt Ponds A20-A21	Railroad bridge crossing	Drive to access. Pack only necessary equipment for easy handling. Check provided train schedule. Use binoculars to scan track in both directions. When access

Crossing railroad bridge to ponds A20-A21	Train spotted while on railroad bridge crossing	is clear, walk quickly along walkway across bridge while staying alert for trains. Immediately alert others on bridge. Leave bridge as quickly as possible: if more than halfway across, quickly finish crossing; otherwise, quickly turn back. This should be done regardless of perceived train speed.
Accessing Alviso Salt Ponds A16-A17	Train track crossing	Drive to access. If walking, pack only necessary equipment for easy handling. Scan track in both directions. When access is clear, drive or walk quickly across tracks while staying alert for trains.
Traveling back to office	Traffic accident	Obey all traffic signs and laws. Stay alert for hazardous driving conditions.



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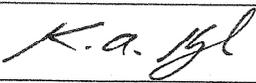
Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 12, 2007
Report Subject Interview of Nicole Athearn	

On September 4, 2007, Nicole Athearn, Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA was interviewed at the SFBEFS by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Athearn about her experiences relevant to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties. Athearn read and signed a Garrity warning form. The interview was recorded.

Athearn stated that two salt ponds that are visited by SFBEFS employees are considered island ponds and are only accessible by crossing a train trestle. She said that the railroad runs in a north and south direction through the middle of the salt ponds and added that there is a slough at either end. Athearn added that there is a stable walkway with good footing along both sides of the railroad tracks to the salt pond "dock" or walkway.

Athearn said that USGS personnel were told about this access to the salt ponds along the railroad by the Clyde Morris who is the manager of the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR), Newark, CA. The salt ponds are located on the refuge.

Athearn said that the railroad tracks are used by different types of trains, including Amtrak trains. She said that trains can approach from either direction. Athearn said that freight trains are less of a threat to pedestrians because they move much slower than the passenger trains. Athearn stated that she does not perceive that there is a great amount of danger when using the walkways along the railroad tracks because there is at least one mile of visibility in both directions, the trains have a light, and binoculars can be used to look both ways. She estimated that the trestle that must be used to cross the slough is approximately 50 meters. Athearn equated this to a short distance and said that she would be able to get to a safer location if a train approached. Adding to this statement, Athearn said that she is not the most physically fit member of her crew. Athearn noted that their work at the salt ponds once they get

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
Authentication Number: 1701E5590F15778903C2105ED5F9F656	

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to them is well away from the railroad tracks.

When asked, Athearn said that USGS employees cross the railroad trestle one to two times per month depending upon the work to be done.

Athearn said that the salt ponds might be accessible by boat but added that there is no established docking location to get the boat and its occupants onto the salt pond. Athearn added that a boat would have to navigate a marshy area even at high tide. She said that their work cannot be completed in time to avoid the low tides. Athearn stated that in her opinion boat navigation would be dangerous at low tide because it is very easy to get stuck in the mud. Athearn said she would not encourage the use of boats to attempt to access the two island salt ponds. Athearn explained that there is danger inherent in boating, attempting to launch a boat, and the need to have a secure place to tie up the boat and a safe place to get in and out of the boat without having to walk through the marsh. In summation, Athearn opined that it is safer to cross the railroad trestle having awareness of potential train hazards than to boat or walk through the marsh.

Athearn said that she had not received any complaints or concerns about crossing the railroad trestle with the exception of a complaint made by then-USGS employee Jennifer Maclean in the spring of 2006. Athearn explained that Maclean was surprised by a train, became frightened and ran away from the railroad tracks resulting in a collapsed lung. According to Athearn, Maclean filed a worker's compensation claim because the injury occurred on the job.

Athearn stated that she has told employees that if anyone is concerned or nervous they should not cross the trestle and that they should never access the salt ponds while alone. Athearn noted that USGS employees always access the salt ponds in pairs. When asked, Athearn said the Maclean was with Dominique Monie, another USGS employee, when she sustained the injury. Athearn believed that Monie had crossed the trestle a number of times and that Maclean had only crossed it one time.

Subsequent to Maclean's injury, Athearn recalled that USGS safety personnel conducted an investigation. Athearn believed that the safety investigation determined that USGS was not the only organization that accessed the salt ponds by crossing the trestle. She said that a result of the safety investigation was that USGS should have a more thorough or formal discussion about potential safety hazards with employees.

Athearn said that a Job Hazard Analysis (JHA) was created to inform employees that prior to walking across the trestle they should look both ways with binoculars and that they should consult a passenger train schedule that is provided in the USGS vehicles. Athearn noted that the train schedules have only limited use because the trains are not always on schedule. She said that the train schedule is useful to help employees be aware of periods of high train activity. Athearn further said that employees must remain aware while walking across the trestle.

Athearn said that USGS employees have been accessing the island salt ponds for approximately 5 years. She added that their first access to the salt ponds was in September 2002 with the first official survey being conducted in October 2002.



United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 12, 2007
Report Subject Interview of Stacy Moskal	

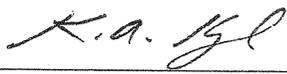
On September 6, 2007, Stacy Moskal, Biological Science Technician, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA was interviewed at the USGS office located at the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR) by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Moskal about her experiences relevant to anonymous allegations that SFBEFS employees were exposed to safety hazards.

The complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties, employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Moskal read and signed a Garrity warning form. The interview was recorded.

Moskal first crossed the railroad trestle to access salt ponds about one and one half years ago. She was taken to the trestle by other employees who were experienced in crossing the trestle. Moskal said that before crossing the trestle USGS personnel look both ways two or three times with binoculars to determine if a train is approaching.

Moskal stated that the first few crossings were a bit disconcerting because she did not know what to expect and had to trust that she was with someone who knew what they were doing. Moskal said she has had no problems crossing the trestle and noted that employees must remain alert. Moskal stated that although it might be loud and uncomfortable, she did not believe that a person caught on the trestle by a passing train would be hit if they "hunkered down" toward the outside of the trestle.

Moskal said that employees have a Job Hazard Assessment (JHA) and two different train schedules available in their vehicles to provide guidance when preparing to cross the trestle. Moskal said the train schedules are for the high speed trains. She noted that they do not have schedules for the low speed "cargo" trains but noted that the slower trains can be easily seen and heard.

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
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Moskal said she is responsible for making sure USGS interns are comfortable at her location. She said that the interns must read and sign that they understand the JHA. She added that the interns are told that if they are not comfortable with crossing the trestle that they do not have to do it. Moskal added that it is pretty common in the "biological world" that employees are asked to do something that is not one hundred percent safe. She added that it is also somewhat standard that if an employee does not feel comfortable performing certain tasks that it is safe to speak up without being concerned about losing the job.

Moskal said that she and the interns discuss safety issues for crossing the trestle including remaining aware and thinking about what actions to take if surprised by a train. Moskal stated that nobody has complained about crossing the trestle or had stated that they did not want to cross it. Moskal said that the SFBNWR also uses the trestle to access the salt ponds.

Moskal stated that the SFBNWR staff also uses the trestle and that at one time the SFBNWR used the trestle to provide a public tour of the ghost town of Drawbridge, CA which is located in the vicinity of the salt ponds.

Moskal, when asked, estimated that visibility is good in both directions from the trestle. She said that looking north toward Freemont, CA the railroad tracks curve so the visibility may be about 2 miles straight but could be as much as 4 miles along the railroad tracks. Moskal said that looking south visibility is almost all the way to Alviso, CA which she estimated was 3 to 4 miles away.

Moskal stated that the trains always blow their whistles. However, Moskal added that there is another set of railroad tracks not too far away and she once waited about 20 minutes to cross the trestle because she heard a whistle that must have been from a train on the other tracks.

When asked, Moskal said it would take much more time to attempt to access the salt ponds by boat. She added that at low tide a boat would be hitting mud which would necessitate walking in deep mud to get to the levies. She opined that use of a boat at high tide is realistic but added that they conduct water quality sampling at both high tide and low tide.

Moskal said that she worked with rocket nets from about February 2006 through June 2006. At the time, she was a Point Reyes Bird Observatory employee working with USGS at the SFBNWR.

Moskal said that a rocket net charge is a small 6-inch bag filled with a substance that looks like charcoal. She added that there were wires coming out of the charges. Moskal said the charges are not active until an electrical current is run to them. She said that after the charges are inserted into a rocket they are connected to the hot wire for detonation.

Moskal said that the rocket net charges were kept in a cooler when in she was in the field. She said the charges were stored in a metal box, possibly designed to hold explosives, when they were not in the field. She stated that the metal box was kept in the USGS corrugated metal shed at the SFBNWR. Moskal added that there is a lock on the shed door.

Moskal received her on the job training about rocket nets in the field. Moskal said she was required to participate in multiple rocket net shots with multiple people and that once she was comfortable with using the rocket nets she was asked to do it under the supervision of an experienced person. Moskal was not asked to set up rocket net shots until she had been doing it under supervision for several

months. Moskal said she was comfortable with running a rocket net shot when she was finally allowed to do one independently.

When asked, Moskal said that there was no formal certification or checklist used in the training. Moskal opined that certification was not necessary but added that perhaps a write up to use as a reference would be helpful. Moskal was shown a copy of the USGS Occupational Safety and Health Program Requirements Handbook, Chapter 39, Wildlife Netting Safety. She did not recall having seen the chapter before and, after reviewing it, said it would serve well as a reference for setting up a rocket if a shorter "cheat sheet" were created.

Moskal did not recall that there was any training pertaining to transportation of the rocket net charges. Moskal, when asked, said that she felt safe working with the rocket net charges.

Moskal said that people who have worked in the field expect to have training on the job and that they are good at speaking up if they do not feel like they have had enough training. Moskal stated that in 2007, Angela Rex, another USGS employee, had complained to Moskal that she did not get enough training related to rocket nets. Moskal said Rex brought up the issue when they were talking about a DOI employee satisfaction survey.

Moskal said that her experience with Rex was that Rex does not speak up and then complains at a later time. Moskal opined that Rex's complaint about a lack of training was the result of Rex not speaking up or reporting her concerns to management. Moskal believed that Rex had been doing rocket net shots for "years". Moskal also believed that Rex conducts rocket net shots independently as a "crew leader" and commented that because of this, the complaint about a lack of training was "absurd". Moskal opined that Rex should have asked for more training if she believed that she needed it.

Moskal said that rocket net charges were not stored in tackle boxes when she was conducting rocket net shots in 2005 and 2006. Moskal said that she has not been involved in rocket netting this year so she does not know if anything has changed.

Moskal said that if she believed something were unsafe she would be comfortable going to Nicole Athearn, Biologist, USGS, SFBESFS with her concerns. Moskal also recalled that she had received training in the past about where to report safety concerns.



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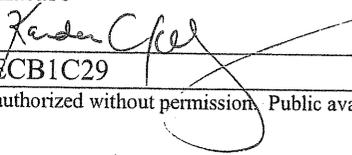
INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 18, 2007
Report Subject Interview of Kathleen Henderson	

On September 6, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Kathleen Henderson, Biological Technician (contractor), United States Geological Survey (USGS), Western Ecological Resource Center (WERC), at the USGS office located at the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR) in Vallejo, CA. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Henderson's inspection. Henderson read and signed a Garrity warning, and the interview was recorded.

Henderson said employees access the salt ponds using the train trestle at least once a month; occasionally, they will access it more often for water quality testing. When accessing the ponds, Henderson described that she carries her gear, looks both directions for a train using binoculars, and proceeds across the train trestle along the walkway. After the work is completed, again she looks both directions and returns to the access point. Henderson said if for some reason someone did not hear the train coming, then they should move quickly to get off the trestle. Henderson estimated that carrying gear and walking requires 3 minutes from the access point to the first salt pond and 4 minutes from the access point to the second salt pond. From the first access point to the second salt pond, she estimated the total length one would walk along the train tracks to be 200 meters. She said there is a commuter train schedule in the work vehicles. There is not one for the freight trains, but she said those trains are much slower—about 10 to 15 miles per hour.

Henderson said she has never had any issue crossing the train trestle and feels "pretty comfortable" going out to the salt ponds. She said employees work in teams and normally access the salt ponds in a team of two; however, she has been working there 4 ½ years and will access them alone, being sure to notify someone when she goes out and when she returns. Henderson has accessed the salt ponds by boat but warned there is a lot of debris around the levies and said she had stepped on a piece of wood

Reporting Official/Title Karden C. Kelly/Special Agent	Signature 
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and drove a nail through her foot. For this reason, she did not think the boat was necessarily a safer alternative. She also mentioned that depending on the tide speed, the area around the breaches can be hazardous in a boat.

While working with USGS, Henderson has worked with many interns and has experienced complaints from some people about accessing the salt ponds. She said anyone that ever had a complaint or problem would not have to go out there and she would not want to make anyone do anything they did not want to do. She was aware of the incident involving a USGS technician who had a panic attack and suffered a collapsed lung after being surprised by a train. She described the incident as "unfortunate," and went to the site with safety inspectors from Menlo Park to discuss safety issues. After the safety inspection of the site, Henderson said there was a job hazard analysis completed for the site, which is kept in the vehicles with a train schedule.

Henderson had seen Fish and Wildlife Services, consulting firms (H.G. Harvey and Associates and PWA), and a scientist from San Jose State use the train trestle to access the ponds. She said, "There's a lot of people out there right now," and estimated there is someone crossing the trestle about twice a week.

Henderson had never handled the rocket net charges but had carried the safe that the charges are transported in and observed Annie Schultz, Biological Technician, set them up. She said the charges were small, were transported in a 1- by 1-foot cooler, and were stored in the shed at the refuge whenever there was rocket netting conducted in the field. She said there were no charges at the refuge at the time of the interview. Henderson had not received any rocket netting training and had not ever set up a rocket net; she does operate mist nets for smaller bird captures. She felt she was adequately prepared for her role in transporting rocket nets and witnessed some training in the field when the nets were set up. According to Henderson, there are only a few people that do rocket netting and they are very careful in their handling of the charges.

Henderson said she would feel comfortable approaching her supervisors if she had a concern. She also had taken DOI's online safety training with USGS, which included how to report safety concerns.



United States Department of the Interior
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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 11, 2007
Report Subject Interview of Jill Bluso	

On September 5, 2007, Jill Bluso, Biological Science Technician, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Davis Field Station (DFS), Davis, CA was interviewed at the DFS by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Bluso about her experiences relevant to anonymous allegations that San Francisco Bay Estuary Field Station (SFBEFS) employees were exposed to safety hazards.

The complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties, employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Bluso read and signed a Garrity warning form. The interview was recorded.

She received 3 to 5 days of netting training in August 2004 from John Takekawa, Wildlife Research Biologist, SFBEFS. Bluso said the training was held in the field and included going over the equipment and how to use the explosive charges used for rocket netting. Bluso said the training was intended to prepare her for doing rocket netting on her own or under supervision of others. She said the training included how to handle the charges, prepare the nets, and set up the wiring for the charges. Bluso said Takekawa stressed assignment of jobs, making sure that one person was in charge and that everyone involved knew what they were supposed to do.

Bluso said there was no certification process for her to be allowed to use rocket nets on her own. Bluso said that she was required to use rocket nets under Takekawa's supervision and was subsequently cleared by him to work independently. Bluso said she was impressed with the rigor with which Takekawa provided the training and with how he stressed safety issues associated with rocket netting.

When asked whether there should be formal training, Bluso responded "not necessarily". She commented that she thought the August 2004 training she received from Takekawa was very formal and sufficient for what she viewed as a simple process. Bluso said that in 2005 and 2006 she was

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tasked to conduct rocket net shots to capture three species of water birds and to put radio tags on them. Bluso said that she used rocket nets 20 to 30 times in 2005 and 2006.

Bluso stated that at the beginning of each field work season Takekawa provided familiarization training to USGS field personnel on how to safely set up the rockets. She estimated that, based on her recollection, the training was held for between 1 and 3 days.

Bluso believed that the rocket net charges are normally stored at the USGS Field Station at Dixon, CA but had not gone to the site to obtain the explosive charges. Bluso said that rocket net charges were transported in coolers from the storage location at Dixon, CA to the USGS facility located on the Don Edwards San Francisco Bay National Wildlife Refuge, Newark, CA where they were then placed in a fire safe. According to Bluso, the fire safe was stored in a shed. Bluso said that Josh Ackerman, Research Wildlife Biologist, USGS, Dixon, CA usually transported the rocket net charges at the beginning of the season and made other deliveries if additional charges were needed.

Bluso described the fire safe as a two foot cube and added that it is the type of fire safe than can be purchased at "Home Depot". Bluso also stated that the charges would be transported to the field in coolers after removal from the fire safe. When asked, Bluso said coolers were used to keep the charges from getting wet and to keep them from hitting any other items.

When asked whether it was safe to store the rocket net charges in a fire safe in a shed, Bluso responded that the fire safe had a little lock on it, the shed is locked and she never thought the storage was unsafe. Bluso said the USGS shed is in a non-public area of the refuge and that the refuge gate, which she estimated was 2 miles away, is locked at night.

Bluso did not believe that there was any guidance pertaining to the transportation of the rocket net charges and said that Takekawa instructed them to use coolers. Bluso noted that the manufacturer of the rocket net charges ships them in cardboard boxes.

Bluso said that when she was using rocket nets in 2005 and 2006, they used coolers to transport rocket net charges to the field. She denied that they used cardboard boxes or tackle boxes. Bluso opined that it would not pose a hazard to use a cardboard box or a tackle box. However, she believed that it is better to consistently use the same container or type of container for storage of the charges.

Bluso opined that there is more risk in filling a car's gas tank than there is in handling the rocket net charges. Bluso explained that the rocket net charges are benign when they are not loaded into a rocket. However, once they are put in a rocket then the rocket and charge can be lethal.

Bluso stated that pedestrian use of the railroad trestle to access the salt ponds is safe with the realization or recognition that it is an active railroad. She said that pedestrians that cross the trestle should not take their time or "just hang out" along the train tracks. Bluso said that binoculars are used binoculars to look for approaching trains and added that there was good visibility because the area is flat. She believed that USFWS also may also use the trestle.

When asked, Bluso said the salt ponds might be reached using a small boat but noted that it would be more difficult to use a boat than to walk across the trestle. Bluso explained that the water is very shallow and it is a tidal area where a boat could get stuck in the mud.

Bluso, when asked whether there had been any incidents or problems resulting from pedestrian use of the trestle said she was aware of one incident that happened in 2006. Bluso explained that a woman was on the train tracks when a train approached. The woman, who had a lung problem, was frightened and had a lung collapse. Bluso was not a witness to the incident. Bluso said that nobody complained to her that crossing the trestle was unsafe although she and other employees talked about safety awareness issues because it was an active railroad track.



**United States Department of the Interior
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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 21, 2007
Report Subject Interview of Annie K. Schultz	

On September 5, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Annie Schultz, Biological Technician, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), in the conference room at the San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Schultz's inspection. Schultz read and signed a Garrity warning, and the interview was recorded.

Schultz has worked with WERC since September of 2004 and has capture experience with both mist and rocket netting. She explained how box nets are set up in rocket netting where birds are known to forage in the wetlands. The box nets are heavy, 40 to 50 pounds, and usually two people carry them and set them up; everyone on the team has a defined task during set up. During set up, she explained, box nets are staked down with three rockets that are connected to the net by chains. The charges are placed in the rockets and the wires from the charges are wired together to create a simple circuit, from which a wire is connected and run away from the nets to the detonator. Schultz explained that once the charge is in the rocket, no one is allowed to walk in front of it. Schultz said the charges consist of gun powder and a squib, but are not a hazard until they are enclosed; unless they are contained, the charges just burn.

Schultz said the charges are stored at the Dixon Field Station in a safe and are transported in a fire safe with a lock and key. The charges are sometimes transported in coolers in the field to avoid getting them wet. Normally charges are not stored for very long at the Vallejo office; however, they could be stored for a few days in the fire safe or cooler in the building next to the office, building 505. Schultz opined that the fire safe seems safer and provides "peace of mind for us," but she said she was not sure if it was any safer than transporting the charges in a cardboard box. When on travel, Schultz said she

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brings the fire safe into her hotel room with her for liability reasons; she did not want them stolen from the vehicle.

Schultz received explosives training in March 2006 from her boss, John Takekawa, Research Wildlife Biologist, and Jill Bluso, Biological Science Technician and grad student whose project involved frequent rocket netting. She said Takekawa explained all the safety rules and how to set up the charges and did "dummy set ups" at the Vallejo office, then Schultz did a few more practice set ups in the field with Bluso. She described the training as informal and noted that she was the only one being trained at the time. She said that there are only a few people that know how to perform this type of capture and there is no formal training. When asked if there should be, Schultz replied, "Maybe," but stated that she felt fine and well trained. She said that at first she was concerned about working with explosives, but after she learned how, she was comfortable. When asked if there was a record or certification process involved with the training, Schultz said, "no." She said it would be beneficial to have more formalized training, especially having one person conduct all the training to ensure it is consistent.

When asked if there were any complaints or problems with the explosives, Schultz replied that there had not been. She said, "I don't feel like there's any safety concerns."

Schultz had accessed the salt ponds using the train trestle that was mentioned in the allegations. If she needed to access the salt ponds, she would not use the trestle in the mornings or evenings because those are the periods with the most train traffic. She said there is visibility to see a train coming and the trains blow their horns nearby so they can be heard approaching, but "you have to be vigilant" and turn around to look. She described the length of the train tracks one would walk from the access point to the second salt pond as 200 meters. When asked if she was aware of any incidents on the trestle, she said she had once spoken to a PG&E employee that had been on the train trestle when a train came, he "just held onto the side." Schultz explained that she was initially scared of walking along the tracks to the salt pond, but once she mentioned it to Kathleen Henderson, Biological Technician, Henderson told Schultz she did not have to access those ponds and took over the work herself. Schultz said, "at this office, if you ever communicate" a concern they will change.



United States Department of the Interior
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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 11, 2007
Report Subject Interview of Angela Rex	

On September 6, 2007, Angela Rex, Biological Research Assistant, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA was interviewed at the USGS trailer located on the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR) by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Rex about her experiences relevant to anonymous allegations that SFBEFS employees were exposed to safety hazards.

The complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties, employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Rex read and signed a Garrity warning form. The interview was recorded.

Rex stated that she does not go to the salt ponds on a regular basis. However, Rex said that she has occasionally gone out to the salt ponds with the salt pond crew that visits the salt ponds once per month. Rex added that her work crew also went to the salt ponds to assess water levels and bird capture sites. Rex said that some of the work at the salt ponds required her to carry equipment weighing 50 to 60 pounds back and forth across a railroad trestle.

Rex was first taken across the railroad trestle to the salt ponds in about February or March 2005 by Jill Bluso who was a graduate student at the time. Rex said that Bluso is now employed by USGS. According to Rex, Bluso told her that the trestle was "scary" and that she (Bluso) had watched another USGS technician jump off the trestle because a train had caught the person unaware. Rex understood that the person jumped from the trestle because it was their only way to safety. Rex said that Bluso told her to be very careful around the railroad trestle. Rex stated that nobody had discussed safety issues pertaining to the railroad trestle until she was at the site with Bluso.

Rex said that USGS employees use binoculars to look both ways. She stated that there is a "blind curve" in one direction so visibility is limited. Rex said that she jogs across the bridge unless she is

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carrying about 50 pounds of equipment which necessitates going slower. Rex commented that train schedules are not effective because the trains are not always on time.

Rex stated that freight trains go slow and can be seen approaching the trestle. She said that the commuter trains are very fast and do not always blow their whistles because of the long expanse of salt ponds on either side of the trestle. Rex stated that the commuter trains are quieter than the freight trains and sometimes cannot be heard until they are close enough to feel the railroad start to shake.

When asked, Rex said she did not believe that anyone other than USGS personnel walk across the railroad trestle because it is a limited access area. However, she noted that she has observed unauthorized people at the salt ponds. Rex said that when this occurs, USGS personnel are supposed to report the sighting to SFBNWR law enforcement personnel.

Rex was asked if there was an alternative to crossing the trestle to access the salt ponds. In response, Rex said that USGS never offered an alternative. However, Rex stated that she has used a boat in the sloughs and speculated that the salt ponds could be accessed by boat if "you worked the tides". Rex said that Mud Slough might be a difficult access point but Coyote Creek Slough always has water in it.

Rex, when asked, said that she was not aware of anyone talking to Takekawa about safety concerns surrounding use of the railroad trestle. She added that she found an alternative location to conduct her work so that she would not have to walk across the railroad trestle.

Rex stated that Jennifer Maclean, another USGS employee, was caught unaware by a train while Maclean was walking across the railroad trestle as part of her duties. According to Rex, Maclean suffered a collapsed lung caused by running from the train. Rex believed that Maclean had suffered from a collapsed lung as a child but had not had any problems until she ran from the train.

Rex said that the SFBEFS uses rocket nets which utilize explosives to propel nets over birds to capture them. She said that there are two styles, box nets and linear nets. She added that SFBEFS also uses net launchers which do not utilize explosives. Rex related that an explosive charge is placed in a metal rocket body that has a chain to attach to a net. Rex said the explosive charges are then wired to a detonator that is used to ignite the explosives.

Rex said that during her first year at SFBEFS (2005) the explosives were stored in coolers or plastic tackle boxes that were about a foot in length. Rex said that her supervisor, Josh Ackerman, Research Wildlife Biologist, USGS, was not comfortable with use of the coolers and tackle boxes so he purchased a fireproof safe which was then used to store the rocket net charges. She described the safe as a black 18 to 20 inch square safe that was designed to transport explosives. Rex expressed a belief that the safe was also provided because the charges are susceptible to humidity and friction.

Rex said that at the beginning of this year she went to the SFBEFS at Vallejo, CA to retrieve some of the rocket net charges. She said the charges were stored in Building 505 in a tackle box in the middle of the floor along with other tackle boxes containing other equipment. Rex stated that she had to open all of the tackle boxes to locate the rocket net charges. Rex expressed concern that it would have been easy to have tripped over the tackle box containing the explosive charges or to have mistaken it for a tackle box that did not contain explosive charges. Rex said it made her nervous that the rocket net charges were stored in an unmarked tackle box in the middle of the floor.

Rex stated that when additional explosive charges were stored at the SFBEFS in Vallejo, CA they were stored in a cardboard box in a "side compartment" of Building 505 that had a lock on it. Rex opined that the explosive charges that were not used were returned to another safe at Davis, CA because Ackerman wanted them back.

Rex said that when the rocket net charges were at the USGS facility at the SFBNWR, Newark, CA they were kept in a cardboard box in the fireproof safe. She added that the fireproof safe was stored in a USGS shed.

Rex said that 2007 was the first year that she was in charge of the rocket net charges at Newark, CA and that she was the only one with a key to the fireproof safe. Although she was not directly involved with the rocket netting activities during 2005 and 2006, Rex believed that more personnel were involved in the storage, transportation and use of the rocket net charges because the graduate students would send different people out to set up the rockets.

Rex stated that there was not much guidance on how the rocket net charges should be transported. She said that after Ackerman provided the fireproof safe he told her to be careful, not to get the charges wet, avoid static electricity and not to toss them around in the vehicle. Based on this guidance, Rex put the fireproof safe on the passenger seat next to her to prevent it from being jostled during transport. Rex said that the rocket net charges were transported in the fireproof safe between Vallejo, CA and Newark, CA. She said the charges were transported in tackle boxes to the field sites.

Rex, when asked about training to use the rocket net charges, responded that there was none. Rex stated that in 2005 she assisted graduate students to set up rocket net equipment one time. Rex said that when she was put in charge of rocket netting this year that she had no idea how to do the rocket netting because she had only observed the set up the one time two years earlier. Rex noted that she had been present when other rocket nets were used but she did not participate in the set up during those occasions in 2005 and 2006. Rex said she was put in charge of the rocket netting in 2007 because the graduate students who had been responsible for rocket netting did not return.

Rex said that there is no certification for rocket net training nor is there a record of who has been trained to use the rocket nets and charges. She did not know how or whether other USGS personnel received training. Rex, when asked, said there should be a formal training process.

According to Rex, she told Ackerman that she did not know how to set up and use the rocket nets. Rex said that Ackerman told her to go to Annie Schultz, Biological Technician, for training. According to Rex, Schultz spent about five minutes with her. She said that Schultz' assistance consisted of drawing a diagram of how to do the wiring for the rocket net charges and how to stake the equipment.

In about March 2007, when it came time to use the rocket nets, Rex contacted Ackerman for verbal instructions on how to use the detonators because she had not received any training in their use. According to Rex, she told Ackerman that she did not know how to use the detonators and asked him if it mattered which end of the wire goes into each end of the detonator. Rex said that she actually had a set of instructions at the field site but someone had duct taped over them and her attempts to remove the duct tape to read the instructions ruined them. When asked, Rex said the instructions would have been of minimal use had she been able to read them.

Rex stated that the rockets failed about a third of the time that they were used between March 2007 and

May 2007. Rex attributed the failure rate to aging equipment and salt water corrosion. She stated that four rockets flew away because the restraining chains failed. Rex also said that on another occasion this year that the rocket net box blew up. Rex said she did not know what caused the rocket net box to explode and added that the rockets are not reliable.

Rex said that technicians helped her to set up the rocket net equipment in the field. However, she did not let them handle the charges. Rex stated that she did not want the technicians to get hurt because she had so little training and did not know what she was doing.

When asked, Rex said that rocket netting is a common way of catching birds.

Rex was provided a copy of Chapter 39, Wildlife Netting Safety, from the USGS Occupational Safety and Health Program Requirements Handbook. Rex said that she had never seen or read the document.



**United States Department of the Interior
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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 13, 2007
Report Subject Interview of Eric Williams	

On September 5, 2007, Eric Williams, Regional Health and Safety Manager, United States Geological Survey (USGS), Sacramento, CA was interviewed at his office by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Williams about the anonymous allegations that USGS San Francisco Bay Estuary Field Station (SFBEFS) employees were exposed to safety hazards.

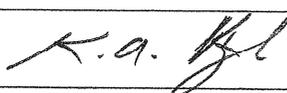
The complainant(s) alleged that SFBEFS employees were required to walk across a railroad bridge not designed for pedestrians while performing their assigned duties, employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Williams read and signed a Garrity warning form. The interview was recorded.

Williams stated that it is his understanding that some USGS employees must access areas with rough terrain and railroad tracks. Williams said that managers are required to complete a Job Hazard Analysis (JHA) for all jobs and functions in the field. Williams said the JHA should address all hazards associated with performing the job to include getting to the site. He added that it should also address methods of mitigation of hazards and the type of training that is needed for the task.

According to Williams, a JHA had been done for crossing the railroad trestle. Williams said that he has seen the JHA but did not have a copy of it. Williams opined that Kathryn Phelps, Physical Scientist, Western Ecological Research Center, USGS would have a copy of the JHA.

When asked, Williams said that the JHA, based upon his recollection, included steps for approaching railroad crossings, hazards associated with railroad crossings, being aware of surroundings and using a "buddy system".

Williams believed the railroad trestle used by USGS personnel to access salt ponds has a pedestrian walkway. Williams noted that he has not been to the site. Williams stated that his predecessor, William Fitzpatrick, and the USGS Geology Safety Manager, Edward Bunker, had conducted a safety review of the trestle with other USGS personnel "about a year ago" that included photographs of the

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trestle and area.

Williams opined that that after he viewed the photographs he believed there is more than adequate space for an individual to walk across the trestle. He added that if a train approached, it appeared from the photographs that there would be adequate area for an individual to take shelter although it might be unnerving. Williams also opined that, based upon his viewing of the photographs, that it did not look to him like anyone would be in imminent danger while using the trestle.

When asked if use of a boat to access the salt ponds might be an alternative to pedestrian use of the trestle, Williams responded that he had not been to the site but thought it might be possible. Williams said he would be more than willing to visit the site to help the manager assess alternatives but stated that he had not been asked for assistance. Williams speculated that there might be logistical issues to getting a boat out to the area. He said that John Takekawa, Research Wildlife Biologist, SFBESFS would know if a boat had been considered as an alternative to the trestle.

Williams was aware that there was an incident at the railroad trestle in which a USGS employee sustained an injury but did not know details because it occurred prior to him being assigned to his present position. He said that there would be a workplace injury report and agreed to provide a copy of it to OIG investigators after the interview. Williams, when asked, said that his workplace safety records showed that the aforementioned incident was the only safety related report for the SFBESFS for that year.

Note: Jennifer Maclean, a USGS employee, ran when a train approached as she was crossing the trestle in March 2006. As Maclean ran, she sustained a collapsed lung. The worker's compensation claim was approved because the [REDACTED] occurred while Maclean was on duty.

Williams expressed doubt that anyone would require an employee to engage in an unsafe activity because that is not part of the USGS "culture". Williams explained that USGS has many avenues for employees to report unsafe conditions either anonymously, through their supervisor or through Williams. He said that employees are strongly encouraged to report unsafe or unhealthful conditions and that he vigorously markets the safety program. Williams added that USGS has an Inspection and Abatement System (IAS) that includes a process for anonymous reporting of safety and health related concerns. Williams believed that the IAS has been in operation for about one and one half years.

Williams believed that there is only one manufacturer for procurement of the explosive charges used for rocket netting, which limits variances in operation and handling of the charges. He said that not many employees use rocket netting and noted that Takekawa is one of the primary trainers for using rocket netting equipment. Williams said that Takekawa had been doing rocket netting for about 20 years.

Williams said that USGS had an explosives magazine in Dixon, CA where the rocket charges are stored after purchase and when they are not being used. Williams said that the appropriate Occupational Safety and Health Administration (OSHA) and Bureau of Alcohol Tobacco and Firearms (BATF) regulations are cited in USGS regulations pertaining to storage and handling of the rocket net charges.

When asked whether there were inspection requirements for the explosives magazine, Williams said that there is an annual self-inspection required as part of the IAS. He added that the USGS safety staff

also conducts an external audit under the IAS every three years. He said the external audit is a follow-up to the self-inspections.

Williams said he assumed that the rocket net charges were a type 1.4 explosive which, according to Williams, means the explosive is a mass fire hazard. Williams said that he has not actually seen the rocket net charges.

Williams was informed that OIG investigators had been told that the rocket net charges were a type 1.3 explosive by other USGS employees and that the manufacturer packaging photographed by OIG investigators showed labels marked 1.3.

Williams was asked whether there would be a difference in storage requirements for type 1.3 and type 1.4 explosives. He responded that he would have to refer to the appropriate regulations but said that typically there would be some differences for storage and handling of different types of explosives.

Williams stated that he did not know the requirements for the magazine used to store the rocket net charges and would have to go to the regulations. Williams said that the magazine requirements would likely have been assessed when the magazine was put in use and would not typically be reviewed as part of the annual self-inspection. Williams said that type 1.3 explosives were a minor blast hazard.

Williams said that the first time he saw the USGS Occupational Safety and Health Program Requirements Handbook, Chapter 39, Wildlife Netting Safety he was surprised at the detail of the chapter. Williams explained that Chapter 39 provided specific guidance and steps on how "things were done". When Williams inquired about the specificity of the chapter, he was told that because USGS used only one type of rocket net charge from one manufacturer it was possible to include detailed procedures in the chapter.

When asked whether a reference to explosives training in Chapter 14, Safety and Health Training or Chapter 38, Blasting Safety applied to rocket net charges, Williams replied "not really". He explained that those references applied to the USGS Geology discipline where explosives are used for seismic work. Williams said that rocket netting is not blasting so the provisions of Chapter 38 are not applicable to rocket netting. Williams noted that the chapters are written as task specific. Williams said that employees should rely on their supervisors to provide direction on which sections of the handbook apply to their work.

Williams, when asked, said that the rocket net charges should not be stored anywhere other than in the explosives magazine at Dixon, CA. Williams was told that OIG investigators had learned that rocket net charges are, on occasion, stored temporarily at other locations. Williams responded that he did not know if that was acceptable and said he would have to research the regulations in order to make a determination. Williams said that there are provisions for temporary storage of hazardous chemicals in laboratories and opined that there may be similar provisions pertaining to the rocket net charges.

Williams said he did not know if rocket net charges were stored in cardboard boxes. Williams added that he did not know if it would be hazardous to store rocket net charges in a cardboard box. Williams explained that he did not know how the charges were shipped from the manufacturer and noted that fireworks are often stored in cardboard boxes at fireworks stands. Williams said it would not surprise him if the rocket net charges were stored in cardboard boxes. Williams stated that storage requirements typically include quantities, distances from buildings and proximity to fuels.

Williams, when asked, did not know whether rocket net charges were transported in plastic tackle boxes. Williams stated that his initial assumption or suggestion to employees would be to keep the rocket net charges in the manufacturer's packaging but he added that that might not be practical depending on how the rocket net charges are shipped and the quantities that are used by employees.

Williams opined that there it was not likely that placard requirements for vehicles used to transport explosives applied to rocket net charges due to the quantities that would be transported. He explained that placard requirements normally had high quantify thresholds applied to commercial transportation.

In response to the allegation that some crews use a safe to transport rocket net charges while others must use cardboard boxes or tackle boxes, Williams said that use of the safe seemed sensible to him. Williams explained that a safe would likely protect the charges from ignition sources and indicated that use of a safe would likely be a good safety practice to help separate the rocket net charges from ignition sources. Williams said he did not know if any work group would be forced to use one type of container over another unless funding prevented purchase of more safes.

Williams stated that employees receive on the job training from supervisors or other authorized employees on the safe use of rocket net charges. Williams said the training should be based on the JHAs and manufacturer supplied user manuals for safe handling and operation of the product.

Williams said that because rocket netting is such a localized specialty that it is currently up to the supervisors to provide appropriate on the job training to employees. However, he noted that because of the potential hazards associated with rocket net charges, it might be beneficial to address the training requirements at a higher lever and formalize them. When asked, Williams said that any documentation or record of who is approved to do rocket netting would be maintained by the local supervisor.

SMIS Accident Report

Details of the Accident

Accident Context: Standard Accident Report

Report Status: Pending Final Safety Review

Accident Date/Time: 03/11/2006 01:00 PM

Reporter: NICOLE D ATHEARN

Accident Zip: 94538

Reviewer: EDWIN R BUNKER

Accident Outcome: 01 - Personal Injury Only

Report Date: 19-Mar-06

Org Where Occurred: IN080993409300

Activity Desc: Sampling preparations, meter calibration.

What Happened: The Claimant Reported: I WAS ASKED TO GATHER WATER QUALITY DATA AT POND A20 BY CROSSING A RAILROAD DRAWBRIDGE. I CHECKED WITH BINOCULARS AND DIDN'T SEE ANY TRAINS, SO AN INTERN AND I BEGAN TO CROSS. A BULLET TRAIN CAME SUDDENLY, SO WE RAN BACK. WHILE RUNNING, MY LEFT LUNG COLLAPSED.

Place: RAILROAD DRAWBRIDGE NEXT TO PONDS A20 AND A21, OFF OF CUSHING BLVD. IN FREMONT

Corrective Actions: Awareness training for staff and alternate site access.

Activity: 20 - Maintenance Activities, Other

Unsafe Act: 16 - Inattention to Surroundings

Unsafe Condition: 04 - Hazardous Methods or Procedures

Management Causal Factor: 61 - Job procedure awkward, unsafe, or inefficient

Reviewer's Notes

Calibration equipment needs to be relocated, suggest contacting Rail Road as to schedule of trains and coordinated calibration along with one person used a spotter, until relocating metering /Calibration equipment.

Injuries/Ilnesses Related to this Accident JENNIFER C MACLEAN

Privacy Case: No

Recordable Injury/Ilness: Yes

OSHA 300 Case Number: 2006-0800239

Employee Stat: 02 - Temporary

Occ Code: 0404

Assigned Org: IN080993409300

Did injury result in Fatality? No

Date Work Stopped: 11-Mar-06

Date Work Resumed: 15-Mar-06

Time Began Work (on date Injured): 09:00 AM

Impairment Category: IN

What was Injured: The Claimant Reported: SPONTANEOUS PNEUMOTHORAX OF THE LEFT LUNG

Source of Injury: Running

Date On Light Duty 15-Mar-06

Body Part: V1 - Organs, lung, single

Type Inj: 600 - Exerted

Cause: 99 - Unclassified

Physician: WILLIAM CHENG

Emergency Room Treatment: No

Nature: T8 - Traumatic injury - unclass.
(except disease, illness)

Source: 0281 - Stress (physical)

Treatment Facility: Palo Alto Medical
Foundation

Overnight Hospital Stay: Yes

Scott Jackson/BRD/USGS/DOI

04/03/2006 12:03 PM

To

Steven E Schwarzbach/BRD/USGS/DOI@USGS

cc

John Y Takekawa/BRD/USGS/DOI@USGS, Bill E Fitzpatrick/OPS/USGS/DOI@USGS,
Edwin R Bunker/GD/USGS/DOI@USGS

Subject

Train Incident at Don Edwards Refuge

Steve,

Here are the site photos you ask for of the train trellis crossing at the Don Edwards refuge near Freemont. As you know, John Takekawa, Bill Fitzpatrick, Ed Bunker, and I visited the site last Thursday to determine what occurred and what could be done to prevent a similar situation from happening again.

We examined the site, photographed the trellis and tracks in both directions, and discussed the factors that lead to the incident. We considered (a) the trellis design and construction, (b) train approaches, (c) the track-bed (between the trellis and the parking lot trail) physical characteristics, (d) the need to use the crossing, (e) the employees judgment and/or physical condition, (f) management actions.

(a) We discovered that the trellis is designed and constructed with foot paths to facilitate foot traffic and is in itself not unsafe to use. While there, we encountered others using the trellis' foot path to cross and they encountered no difficulty. So, the design and construction of the trellis is not a contributing factor to the employee's injury.

(b) We determined that trains could be seen approaching the trellis and trail from great distances in both directions. Therefore, if an individual was cautious and used good judgment or a buddy to keep watch, he/she would have no difficulty approaching or crossing the trellis safely. The line of sight distance was not a contributing factor to the employee's injury.

(c) We determined that, if an individual used caution, they would have no difficulty in walking along the train track-bed approach to the trellis from either side. Typical train track-beds are designed for foot traffic to facilitate track maintenance and repair and do not present unsafe or impassible conditions when trains are present or approaching. We and others present used the track-bed approach without difficulty or impairment so, the approach to the crossing is not a contributing factor to the employee's injury.

(d) The need to use the crossing 'at all' would only be a questioned if the crossing itself were unsafe or the approach to it was unsafe. By virtue of its design and construction, the trellis and approach were intended and are expected to facilitate foot traffic. I might add that they both facilitate foot traffic regularly as a common practice. The need to use the trellis as a crossing is a mute point. Using the trellis as a crossing is not a contributing factor to the employee's injury.

(e) We discovered during our conversation that the individual who experienced the injury was not actually on or crossing the trellis at the

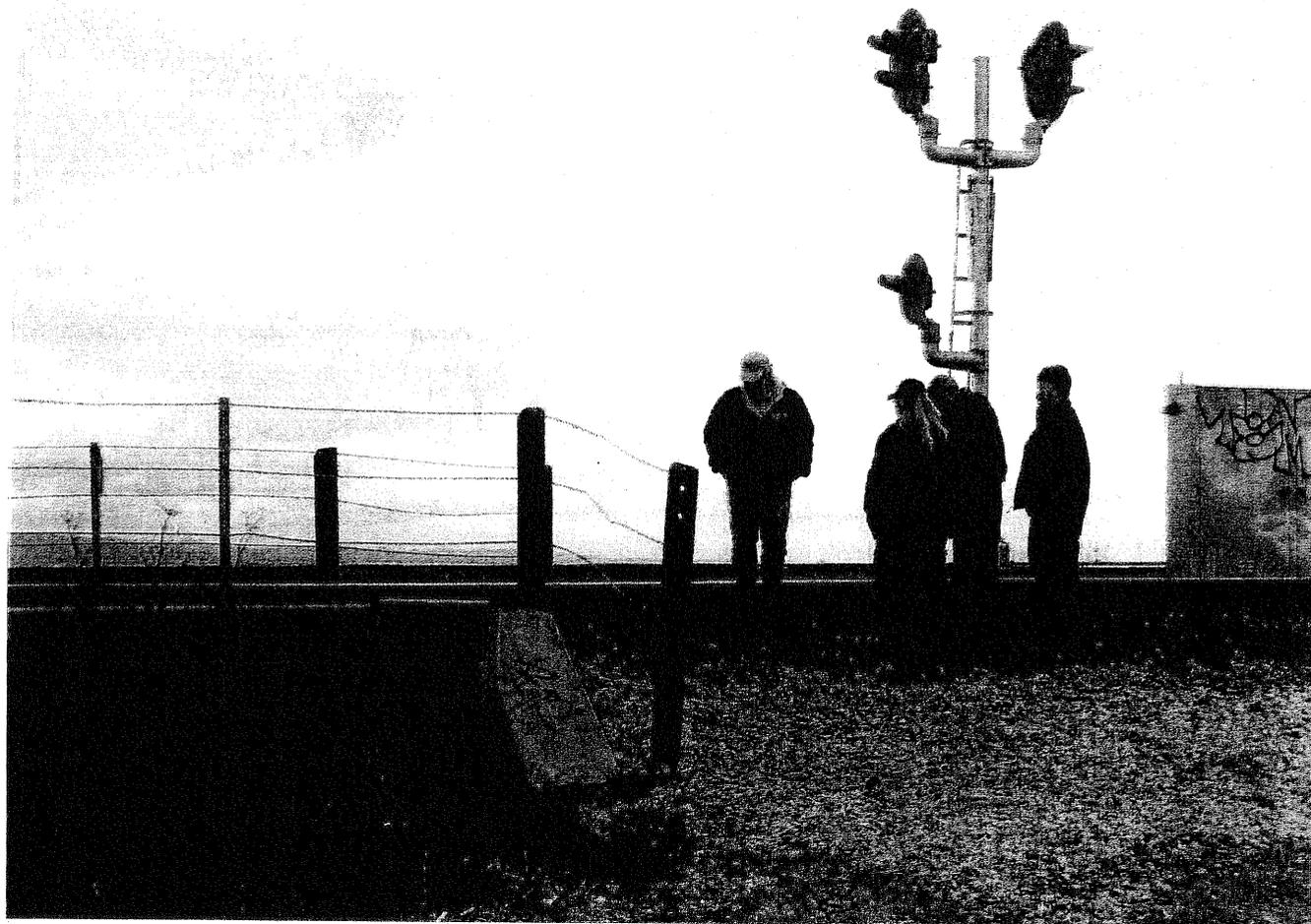
time the train approached. She was walking along the train track-bed toward the trellis, and when she saw the train approaching rapidly, she turned and hurried back to the access trail. The entire issue of the fitness of the trellis as a crossing is really irrelevant and since walking along the train track-bed should not have contribute to her excitement, we have to focus on the employee's judgment / physical condition at the time as being causal to the injury. The employee possesses a physical ailment that causes her to suffer lung collapse when she becomes overly excited. She did not become excited when crossing the trellis because she was not on the trellis or crossing it when the train approached. She became excited when she was "surprised" by the approaching train because she evidently was not mindful of its approach, even though, the approaching train could be seen for great distances and she should not have been surprised. So, the employee was acting absent-mindedly and, since she was not alone, her comrade was acting less than cautious as well. They were not mindful of danger even tough it was well within sight.

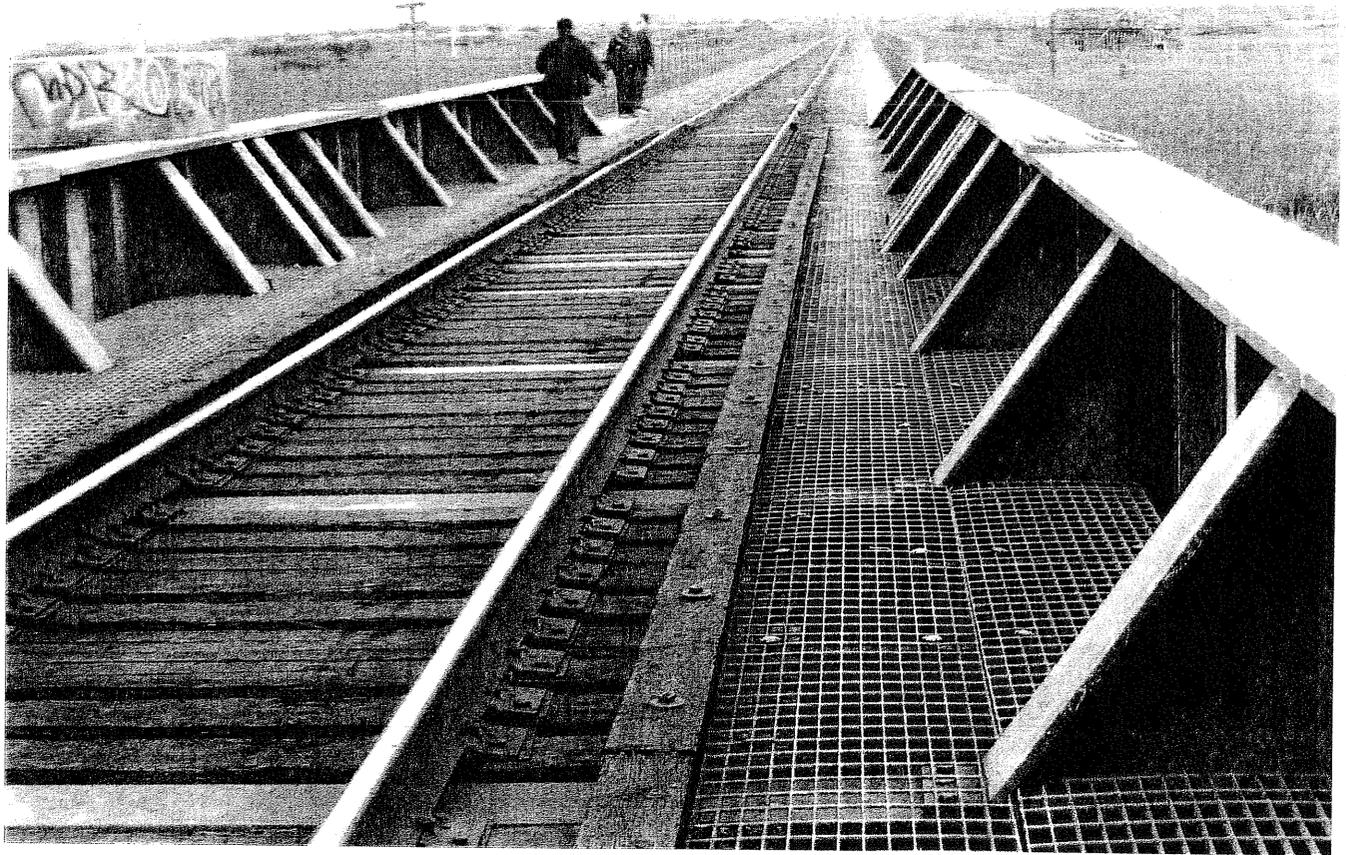
(f) The others and I discussed the site and the events and we reasoned that neither the trellis nor crossing were causal factors in the employee's injury. We all agreed that the employee's pre-existing physical ailment, coupled with her lack of awareness or absence of caution of the approaching train, caused her surprise, excitement, and subsequent injury.

However, we agreed that she was acting 'in the line of duty' and therefore, she should be covered under Workman's Compensation, however, she could have experienced excitement and subsequent physical impairment anywhere else at any time if presented with an unexpected surprise. As a result of our discussion, John decided to avoid placing the employee in a similar situation again by assigning her to "light duty" that does not require her to hurry or cause her to become overly excited. John offered to review the language (provisions) of the hiring document to discern if a pre-existing physical condition such as this is appropriately addressed. He intends to emphasize this type of situation when he hires others to work in the field. John offered to draft various Job Hazard Analyses that emphasize using good judgment and extra caution around high-risk work locations and conditions, extreme caution when crossing train tracks and trellises, implementation of "team or buddy" awareness practices when in the field and other considerations regarding safe working behavior.

I commend John Takekawa for being proactive in his management of his employees and for his cooperation in this safety review.

Scott Jackson
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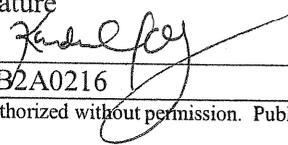
INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 17, 2007
Report Subject Interview of Mary Ellen Mueller	

On September 5, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Mary Ellen Mueller, P.h.D., Research Manager (GS-14), United States Geological Survey (USGS), Western Ecological Resource Center (WERC), in her office at 3020 State University Dr. East, Modoc Hall, Room 3006, Sacramento, CA (916) 278-9572. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Mueller's inspection. Mueller read and signed a Garrity warning, and the interview was recorded.

Mueller explained that USGS employees cross the railroad trestle to reach one of the study sites, which she never felt was a safety issue. The alternative to using the trestle to access the ponds would be to use a boat, but it takes quite a bit longer—double or triple the time—and would not always be available depending on the water levels. Mueller said the trestle is a more direct route and does not represent a safety concern. While Mueller could not say who else uses the trestle, she said she knows that there is a lot of foot traffic because it was designed for foot traffic.

Mueller has never been to the trestle herself, but is familiar with it and has seen pictures from the safety investigation. The safety investigation, she said, followed an incident in which an employee who had crossed the trestle had a panic attack, suffered a collapsed lung, and was admitted to the hospital. Mueller said she immediately called Nicole Athearn, WERC Biologist, to inquire how this incident happened, but neither Athearn nor she could determine how someone could not see a train coming. Mueller said, "It didn't add up." As a result, safety officers conducted an investigation. Mueller believed the safety officers involved in the investigation were Scott Jackson and Eric Williams. Mueller stated that she was satisfied with the report and that the trestle was not a safety concern. She said, "If you were a reasonable person and looked both ways, you had plenty of time to act in a cautious and safe manner." She was not certain but believed John Takekawa, Research

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OI-003 (04/07)

Wildlife Biologist, implemented safety procedures as a result of the investigation. She thought Takekawa provided train schedules, although she did not think it was necessary. Mueller referred to the level of risk at the trestle as "no more than walking across the street with cars."

She said that they had later learned that the employee had a preexisting condition that caused her lung to collapse and explained they would not have assigned her any strenuous work had they known that beforehand. Further when asked what would happen if an employee did not want to work near the train trestle, she replied that they would not have to.

Mueller did not have any experience with or information regarding wildlife netting or the use of explosives. She knew that wildlife netting is a routine procedure. She had not heard any complaints and said that most of the employees "enjoy it and look forward to it."

Mueller is not aware of any other incidents or safety concerns or complaints. She is confident that employees would feel comfortable enough to speak up if they had a concern. She described Takekawa as having high standards and that he expected his employees to write well and to complete projects on time and within the budget. While she said he is a "task master," she did not believe anyone had complaints.



United States Department of the Interior
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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date October 2, 2007
Report Subject Interview of Jill Bluso	

On October 2, 2007, Jill Bluso, Biological Science Technician, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Davis Field Station (DFS), Davis, CA was interviewed by telephone by Senior Investigator Keith Kuczka, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to ask Bluso whether she had observed another USGS employee jump from a railroad trestle to avoid being hit by a train as asserted by Angela Rex, Biological Research Technician, USGS when Rex was interviewed by OIG investigators. Bluso agreed to the telephonic interview and related the following:

Bluso stated that in approximately July 2003 she was with David Haines, then a USGS technician, were in the vicinity of an active railroad trestle that is used for pedestrian access to salt ponds located on the Don Edwards San Francisco National Wildlife Refuge, Newark, CA. Bluso said that Haines was walking on the railroad when a train approached. Haines was surprised by the approaching train. He ran off of the trestle along the tracks and jumped onto the path that they used to access the tracks.

According to Bluso, Haines "did not think much" of the incident. Bluso opined that Haines was surprised because he "was not looking back" while walking on the tracks. According to Bluso, she and Haines decided to start using binoculars to scan for trains and to be more careful when walking along the tracks and crossing the trestle.

Bluso, when asked why she did not report this incident during an earlier interview with OIG investigators, said she had forgotten about it because both she and Haines did not consider it to be a significant event. Bluso added that she attributed the incident to a learning experience after which they became more careful around the active railroad.

Reporting Official/Title
Keith A. Kuczka/Senior Investigator

Signature

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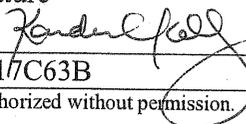
Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 17, 2007
Report Subject Interview of Kathryn Phelps	

On September 5, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Kathryn Phelps, Physical Scientist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), office at 3020 State University Dr. East, Modoc Hall, Sacramento, CA. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Phelps' inspection. Phelps read and signed a Garrity warning, and the interview was recorded.

Phelps works as a WERC safety officer as a collateral duty, a position she has held since October 2006. As a relatively new employee, Phelps did not have any information regarding the railroad trestle and said she was aware that there was an incident in 2006 that predated her employment. Phelps said she depends on the primary investigator (PI) to ensure safety precautions are taken in the field. She realized that their work does sometimes involve danger and believed that it is incumbent upon them to ensure individuals are informed. Phelps has not had any complaints about any safety issues to date and would hope that employees would feel comfortable coming to her with their concerns. She said that if an employee felt there was a safety issue that was important, then it would be important to her. Phelps also described John Takekawa, Research Wildlife Biologist, as approachable. She said both Takekawa and Isa Woo, Biologist, were concerned about and responsive to the findings of a recent audit that had been conducted in the field.

Phelps said they were in the process of creating job hazard analyses (JHA) for every job and that eventually the goal would be to have an employee sign a JHA for their position every review period. This project is still in process and will take time. Phelps did not know whether there was a JHA for the train trestle.

When questioned about the allegations pertaining to wildlife netting and explosives, Phelps again

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stated that she relies on the PIs to do her job and described herself as limited in her knowledge. She said she knew that the explosives used were "level three firecrackers," and not rockets that one might imagine, to propel nets to capture birds. She has not seen or worked with the explosives used in wildlife netting. Phelps stated that to the best of her knowledge from the people she works with, the charges are handled and stored properly in accordance with safety requirements. She said, "If they are not, I definitely want to know. We will make corrections immediately."

Phelps does not have any knowledge regarding the transport or storage of explosives. She said she believed the manufacturer's standards should be followed. When asked about training, Phelps said she did not know if there were any standard operating procedures but again stated that she relies on PIs in the field to ensure their employees are safe. She has not heard any complaints from the PIs or any complaints regarding the use or handling of explosives. Phelps was unable to answer several questions regarding the allegations and opined, "A lot of this job is dependent upon individuals who have a lot more knowledge than I do doing their job, unfortunately, and even if they did it, I wouldn't know."

Phelps said they are currently conducting an internal audit of safety and knowing about these allegations will assist them.



United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 12, 2007
Report Subject Interview of Michael Casazza	

On September 4, 2007, Michael Casazza, Research Wildlife Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Dixon Field Station (DFS), Dixon, CA was interviewed at the DFS by Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to query Casazza about his experiences relevant to anonymous allegations that San Francisco Bay Estuary Field Station (SFBEFS) employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees were required to handle explosives without sufficient training and explosives were stored in unsafe conditions. Casazza read and signed a Garrity warning form. The interview was recorded.

Casazza stated that rocket net charges are ordered from the manufacturer, Winn-Star, Inc. He said that the explosive charges are shipped in a heavy cardboard box that includes safe handling documents. Casazza estimated that each box contains 100 rocket net charges. According to Casazza, each charge is individually wrapped in plastic and has a squib (igniter) inside the wrapping. Casazza said that there are two wires protruding from the charge that are twisted together to prevent an accidental discharge. He noted that these wires are used to set up the charges for detonation when being used with the rocket nets.

Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife.

Casazza opined that the explosive rocket net charges are "relatively inert". However, Casazza said that the rocket net charges must be protected from fire and electrical charges. Casazza stated that if the charges are accidentally ignited, they burn but do not explode. He commented that the charges must be in a confined space such as a rocket in order to create an explosive force. Casazza believed that the charges are designated as Class 3 fireworks. Casazza added that prior to "9/11" the rocket net charges were shipped from the manufacturer via FedEx.

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
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Casazza said that the manufacturer sometimes delivers the charges to the DFS and that other times he picks them up at a central drop off location such as a university and brings the charges back in a government vehicle. The charges are then placed in the explosives magazine at the DFS; a laminated copy of the handling instructions is also kept in the magazine. According to Casazza, he is not aware of any requirements for transportation of the charges by USGS personnel. When asked, Casazza opined that perhaps there should be some type of official policy from USGS for handling of the charges. However, Casazza said that they currently follow the guidance provided by the manufacturer with each shipment.

Casazza, when asked, stated that he did not believe that the USGS Occupational Safety and Health Program Requirements Handbook reference to explosives in Chapter 14, Safety and Health Training or Chapter 38, Blasting Safety applied to rocket net charges. He opined that those portions of the handbook were not applicable to rocket netting. Casazza indicated that Chapter 39, Wildlife Netting Safety is the appropriate reference for rocket netting. Casazza was told that Chapter 39 did not provide much guidance about transportation of the rocket net charges. In response, Casazza said that Chapter 39 might be insufficiently detailed.

Casazza said that only a very small group of personnel use rocket nets and that they have been doing it for so long that the inherent safety issues are known. He added that little has changed for rocket netting in about 20 years. Casazza said that rocket net charges are a tool that is only slightly more risky than use of a shotgun shell.

Casazza acknowledged that he and Joe Fleskess, Wildlife Research Biologist, USGS, DFS, have access to the key for the explosives magazine. He said that when other USGS personnel desire to requisition or return charges they contact him by telephone or by e-mail prior to traveling to the DFS to arrange the transfer of charges.

Casazza said that they do not have a formal requisition process and that they do not keep track of every single charge. He added that "we don't have that running tally" to account for each explosive charge. Casazza stated that other USGS stations store their rocket net charges at the DFS explosives magazine and if they desire to take charges from their box of charges he is not counting what they remove from it. When asked, Casazza opined that someone would notice if an entire box of rocket net charges disappeared. He added that only a few people can open and access the explosives magazine so they "kind of keep control of it that way". Casazza added that "we know who is getting in there and when."

Casazza said that sometimes USGS can go an entire year without anyone accessing the explosives magazine. Casazza noted that recently there has been more rocket netting than in prior years and access may be as frequent as monthly.

Casazza was asked whether he believed any changes were needed pertaining to storage and transportation of rocket net charges. In response, Casazza said that everything has been working fine since he started in 1984 and speculated that if something was not working well they would have determined that by now.

Casazza said that the rocket net charges are sometimes transported to the field in the cardboard shipping box used by the manufacturer, but typically USGS personnel use a fiberglass tool box or tackle box to take the number of charges estimated to be needed in the field. He said USGS personnel attempt to use boxes that do not have any metal in them to minimize the risk of conducting electricity.

Casazza said that USGS employees avoid putting the charges in a tight metal container because, in his opinion, that increases the risk of explosion. He explained that if the charges are not confined they would just burn rather than explode.

When asked about the fire safe used by employees of the SFBEFS to transport rocket net charges, Casazza said he was unsure if that was a "good idea" and added that he was uncomfortable with it. Casazza said that John Takekawa, Wildlife Research Biologist, USGS, SFBEFS, began to use the fire safe to give his employees more confidence. Casazza believed that Takekawa was attempting to use what he believed was a safer transportation container. Casazza opined that the fire safe did not add a measurable risk but reiterated that he preferred to use the tackle boxes.

Casazza stated that he is present during rocket netting events unless another involved employee is experienced. He said that experience is gained through repetition and carefully passing along the knowledge of how to use the rocket nets to a very few number of employees.

Casazza, when asked, said that rocket net training is provided on the job by example. He estimated that an employee would be involved in approximately 4 or 5 rocket net shots at a minimum before being allowed to lead a rocket net shot. Casazza said the training is not formalized and that approval to lead a rocket net shot is at the discretion of the experts whom he named as himself; Takekawa; Fleskess; Mike Miller, Biologist, USGS; and others at the California Fish and Game Department.

Casazza stated that the rocket net training is an informal process but it is taken seriously. He added that safety is emphasized in the training. Casazza stated that there are a number of employees that he would never allow to conduct a rocket net shot on their own because of safety concerns.

When asked if there was a record or certification of employees allowed to do rocket net shots, Casazza responded that no record or certification was made. Casazza said that he did not "see a need for it" under their current system. He added that some sort of certification might be beneficial. However, Casazza expressed concern about formalizing such a certification because he did not believe that classroom training could replace observing and learning in the field.

Casazza opined that it is safe and acceptable for a new employee to handle the charges and to load the rockets under supervision and added that it is the expert who does the wiring and prepares them for firing. Casazza stated that it "is not rocket science" to handle the charges or to load the rockets. He indicated that it is an easy and safe process once an employee is shown how to do it. Casazza said that placing a charge in a rocket is similar to placing a shell into a shotgun. It is not dangerous unless the employee puts their finger on the trigger. Casazza added that the charges are safe until the wires are untwisted and wired to the detonator.

Casazza said that rocket net equipment is just like any other tool such as a jackhammer or saw. He said that there is some risk with use of any tool. Casazza stated that he and the other rocket net experts are very careful with the training because they recognize that they are ultimately responsible for the safety of their employees. He noted that this responsibility is a "pretty good motivator" to ensure that rocket net shots are done safely.

Casazza was not aware of any requirement or regulation for inspection of the explosives magazine. He said that rocket net charges were stored in a heavy duty file cabinet when he first began using rocket

net charges. Casazza stated that about 10 years ago USGS purchased the explosives magazine because they believed it was a safer way to store the charges.

Casazza said that he was not aware of any complaints or concerns expressed by employees regarding the use, storage or transportation of rocket net charges. He commented that rocket netting is the "fun part of the job" and that most employees are excited to be part of it.

Casazza, when apprised of the allegation that employees are required to handle explosives without sufficient training, said that he disagreed with the allegation. He added that nobody is forced to work with rocket net charges. Casazza further stated that if an employee expressed concerns that he would do his best to make them comfortable with the process and to alleviate the concerns.



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INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 21, 2007
Report Subject Interview of Joseph P. Fleskes	

On September 4, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Joseph (Joe) Fleskes, Wildlife Research Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), in his office at the Dixon Field Station located at 6924 Tremont Rd., Dixon, CA 95620. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Fleskes' inspection. Fleskes read and signed a Garrity warning, and the interview was recorded.

Fleskes said he has 25 years of experience using rocket net charges, from his positions with USGS and the Fish and Wildlife Service. He said that currently, when the charges are not being used in the field, they are stored in the explosives locker at the Dixon Field Station. Fleskes said it is the only explosives locker in the vicinity, it is labeled with the class of explosives it contains, and it is inspected as part of the periodic USGS safety inspections. The charges used to be shipped, by FedEx or UPS, but over the last several years the manufacturer has delivered them by vehicle. The charges arrive in a cardboard box and are stored in the explosives locker and either Fleskes or Mike Casazza, Senior Wildlife Biologist, keeps the key to the locker. When the charges are needed for rocket netting, employees contact Fleskes or Casazza. In Fleskes' experience, it has been John Takekawa or Josh Ackerman, Research Wildlife Biologists, who comes to the station to pick up charges and Fleskes accompanies them to the locker with the key. Takekawa and Ackerman load the charges into a plastic, fireproof safe to transport them, which Fleskes has not used. In his experience, in the field, the charges are transported in their cardboard box in a locked tool box on the government vehicle. Fleskes did not believe the plastic safes were specifically designed to hold explosives, rather he considered them added security for the charges. He said while out in the field, which can last a few days, the locked tool box located in the back of the trucks is a good, secure place to store the charges overnight while still in a plastic safe or cardboard box. If not all the charges are used in the field, they are returned to the explosives locker. When asked if there were any requirements to keep the charges locked, Fleskes said he was not aware of any but said, "It's common sense, I guess. You would want to be as secure as possible."

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According to Fleskes, only experienced people or people trained by experienced people use the rockets for wildlife trapping; there are only a handful of employees that have significant experience and they are trained in the safety and handling of the charges. Fleskes described the charge as an electrical squib that will spark when an electrical charge is applied to it, surrounded by a small bag of fine powder, and an outer bag of 3/4- inch cylinders of compressed powder. He said that if ignited outside the rocket, the charges do not explode, just smoke; the charges need containment to explode. To capture birds, the charges are loaded into iron rockets hooked to the nets during the last step in the net set up, and once loaded these rockets are treated "as a gun," and no one walks in front of a loaded rocket.

Fleskes received training from a more experienced biologist on how to set up the rocket nets, safety considerations (especially when rockets are charged), and storage and transport. Fleskes again compared a charged rocket to a loaded gun and said this level of safety is reinforced during training he has provided. He explained that no one is allowed in front of the net, loading the rockets is the last step, and if all the rockets do not go off, they are approached from behind to remove the wires (so there is not electrical charge) before being handled. He said that during the training, he provides a step-by-step on how to set up the charges and then provides "what if" scenarios. Fleskes stated that only experienced employees use the rocket nets, these experienced employees (trainers) accompany technicians in the field until the trainers feel the technician is ready to set up without them, usually for at least a year. Regarding secure storage and transport training, Fleskes said they try not to advertise that they have explosives and they store them in a locked place, preferably in a government facility. Fleskes was not aware of any records being kept regarding who has been trained to use the explosives.

Fleskes knew that there was a manual chapter pertaining to wildlife netting, but did not believe that chapters on blasting applied to rocket netting. He explained he had not used the charges in the field since 1999 and has not reviewed the manual recently.

Fleskes said there have never been any injuries or any problems related with the charges. He said he has not heard any complaints and claimed that all the employees are very well aware of safety. From his experience with charges Fleskes said, "I don't see any dangers in the way we handle them."



**United States Department of the Interior
Office of Inspector General**

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 20, 2007
Report Subject Interview of Joshua Ackerman	

On September 20, 2007, Joshua Ackerman, Research Wildlife Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Davis Field Station (DFS), Davis, CA was interviewed via telephone by Senior Investigator Keith Kuczka, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to obtain Ackerman's recollection of conversations with Angela Rex, Biological Research Assistant, USGS, in spring 2007 regarding rocket netting. Ackerman acknowledged that he understood the Garrity warning that he had read and signed during a previous interview and agreed to the telephonic interview.

Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife.

Ackerman said that Rex was hired by USGS in February 2005 and had been part of their rocket netting activities since that time. He stated that Rex would be assigned to lead portions of various projects in 2005 and 2006 but did not lead the rocket net shots. Ackerman said that he would have been comfortable with Rex leading the rocket net shots in 2005 and 2006 but she did not need to lead the shots because other personnel were assigned to do it. Ackerman said that Rex led rocket net shots in 2007 and reiterated that he was comfortable with her leading rocket net shots because she had been part of rocket netting activities since she was hired in 2005.

Ackerman stated that in approximately February 2007 or March 2007 he had "lots of conversations" with Rex about rocket netting. He said that the discussions involved how to catch birds and locations to set up rocket nets. Ackerman recalled that he asked Rex if she was comfortable with leading rocket net shots. According to Ackerman, Rex responded that she was comfortable with leading rocket net shots.

When asked, Ackerman said that Rex may have said that she would like refresher training for rocket netting in early 2007. Ackerman claimed he did not recall details of that conversation but remembered that he told Rex that she could obtain refresher training from Annie Schultz, contract biologist, since

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Rex would be picking up rocket netting equipment at the USGS San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA where Schultz was employed. Ackerman stated that Schultz is "really competent" in rocket netting. Ackerman said he did not receive any feedback from Rex or Schultz regarding refresher training for Rex.

Ackerman said that he, Rex and John Takekawa, Research Wildlife Biologist, SFBEFS worked together to set up the first rocket net shot for the 2007 season. The rocket net shot was intended to capture gulls for "radio marking".

Ackerman recalled that during the 2007 rocket net season (approximately March 2007 to May 2007), Rex attempted a rocket net shot and nothing happened. Rex attempted to troubleshoot the problem but was unsuccessful so she telephoned Ackerman for assistance in determining why the rocket net did not fire. Ackerman said he helped her to troubleshoot the problem. Ackerman said that he did not recall details of the conversation or the problem.

Ackerman stated that it was common to have rocket net failures. He also said that it was not uncommon for an employee in the field to call him for assistance to troubleshoot a failure. Ackerman said that troubleshooting often included discussion about the rocket net wiring and set up of the shot.



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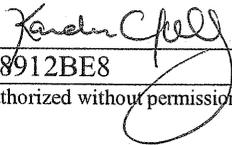
INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 10, 2007
Report Subject Interview of Sam Iverson	

On September 4, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Sam Iverson, Biologist (GS-09), United States Geological Survey (USGS), Western Ecological Resource Center (WERC), in the conference room at the San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Iverson's inspection. Iverson read and signed a Garrity warning, and the interview was recorded.

Iverson said charges are used in rocket netting to capture species of birds, by catapulting a net over feeding birds, in the San Francisco Bay and Central Valley for research purposes such as avian influenza surveillance. Iverson explained how the rocket nets are set up and operated in the field by crews of three to five USGS employees. The charges are placed in three canisters (rockets) connected the net facing the birds. The charges are then wired together to create a circuit and detonated from a remote position, approximately 50 meters away. The charges contain explosives and a cap that is "purpose built" for wildlife netting, said Iverson, but the charges themselves are "fairly inert" and need an electrical pulse to detonate. In case of damaged or wet charges, the standard procedure is to remove the cap, spread the explosives on the ground, and burn them.

According to Iverson, the charges are stored long term in a blast-proof locker in the Dixon field station. Before the crews leave to work in the field, they typically pick up a week's worth of charges—15 to 18 charges, which is enough for five or six captures—from the locker. He said for short term storage, the charges are kept in a portable safe during transport and when not in use. The charges can be kept between captures overnight, for a week, or up to 10 days in a portable safe stored in the building next to the Vallejo field station. Iverson feels better transporting the charges in a safe and said that 90 percent of the time the charges are kept in the safe; however, the charges are

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sometimes kept in cardboard boxes and cited the example that if another team is in the field with the safe, then a team would keep the charges in a cardboard box. Iverson explained that the charges are delivered from the manufacturer, Winn-Star, in cardboard boxes and he feels it is "perfectly safe" to keep them in the box—either the manufacturer's box or another cardboard box that is available. When asked if there was any guidance or training pertaining to the storage or transport of the charges, Iverson replied, "no," but said that his understanding was that the field station was allowed to keep charges up to a month at a time while doing field projects and to keep them in cardboard boxes if necessary. He said his crew had not used tackle boxes to transport the charges and explained that the biggest issue when transporting charges is not to keep them in a confined space; a tackle box is thin enough to blast apart similarly to a cardboard box. The safe, he explained, presumably can contain a blast. The worst means of transporting the charges, he opined, would be a metal tool box.

Iverson said the experienced crew provided the training, and he was trained by John Takekawa, Research Wildlife Biologist. He described the training as having standard operating procedures but "fairly informal," and compared it with previous chainsaw training he had taken with the Forest Service that included a 40-hour course. Before going out into the field, Iverson spent a day with Takekawa in his office, who discussed with him how charges work, how they are set up, safety issues. Then, Iverson and Takekawa spent a day in the field for hands-on training where they observed a project crew that was rocket netting. When asked if the training was sufficient, Iverson responded, "I would like more." Iverson explained that the first time he experienced rocket netting, he found it intimidating and would have liked something like the formal chainsaw training he had received with the Forest Service. Iverson said there was no documentation of training or training records; however, he explained that he would not have access to the charges without Takekawa's approval. In order for Iverson (or anyone else) to pick up charges, Takekawa would first have to call Mike Casazza, Senior Wildlife Biologist, and discuss with him that Iverson is trained and would pick up the charges. With regard to training, Iverson concluded, "We do rely a lot on just the experience of the people who have done it and we pass that on."

Iverson knew that there was a manual chapter that contained the standard operating procedures, but he did not have it; he had been provided something similar when he was trained. He had not looked at any of the manual chapters in any detail.

In the 1.5 years Iverson has been with WERC, he has not heard any complaints and said the crews he has worked with have all felt comfortable with wildlife netting. Iverson said, in general, he feels safe and would feel comfortable talking to Takekawa about safety concerns.

(Agent's Note: Following the conclusion of the interview, Iverson lead Kuczka and Kelly on a tour of building 505, which is adjacent to the Vallejo office, to show where the charges, rockets, and nets are stored.)



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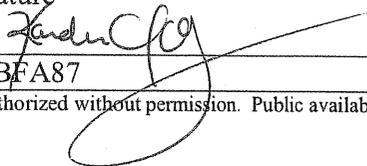
INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 10, 2007
Report Subject Interview of Isa Woo	

On September 4, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG), interviewed Isa Woo, Biologist (GS-11), United States Geological Survey (USGS), Western Ecological Resource Center (WERC), in the conference room at the San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA. The purpose of the interview was to obtain information pertaining to anonymous allegations that SFBEFS employees were exposed to safety hazards. Specifically, the complainant(s) alleged that SFBEFS employees, while performing their assigned duties, were required to walk across a railroad bridge not designed for pedestrians and were required to handle explosives without sufficient training and that these explosives were stored and transported in unsafe conditions. Kuczka and Kelly provided their credentials for Woo's inspection. Woo read and signed a Garrity warning, and the interview was recorded.

Woo has worked with USGS for over 5 years and is currently a collateral duty safety officer at the Vallejo field station; she acts as the safety officer in the absence of her direct supervisor, Principal Investigator John Takekawa. Woo explained that she has not been in the field to observe or provide training regarding explosives and wildlife netting and that Takekawa provides the training. She has seen the charges before, which she described as a small "bag of inert something." She also stated that explosives are stored at the Dixon field station, not at the Vallejo field station because they did not have the facilities, and so she had limited knowledge regarding their storage and transport. She did say that if the explosives were stored at the Vallejo station, they were kept in the vehicle overnight before they were taken out into the field the following morning. These vehicles are parked right next to the field station building. She could not estimate how often this occurred but believed the employees who did the field work would know, including: Sam Iverson; Josh Ackerman, who has supervised the South Bay crew; and Annie Schultz, contract biologist.

Woo was unaware of any complaints regarding the handling of explosives. She does hear from employees when there are problems or difficulties in the field; however, no one has ever complained to her about rocket netting. When asked, Woo said she believed people felt comfortable coming to her with complaints. She said the field station is small and the staff close, and she tries to keep in touch

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with how the field work is going and gain feedback from the crew. Likewise, Woo feels comfortable talking to her supervisor, Takekawa, and said, "I feel completely comfortable talking to him about anything, any issues that might come up." She described him as "willing" to make things better and "a great problem solver." Woo said there had not been any incidents or problems involving the explosives and noted that Mare Island, where the office is located, is patrolled by police cadets, which provides additional security.

When asked about the train trestle allegations, Woo said she works primarily in the North Bay area and Nicole Athearn supervises the South Bay crew. She was aware of an incident at the train trestle in the South Bay involving Jennifer MacLean, but Woo was not involved and said Takekawa oversaw the matter directly. She stated that as a result of the incident, WERC safety officers conducted an investigation at the train trestle and provided a report, but she could not speak to their findings.

Title 49: Transportation

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS **Subpart C—Definitions, Classification and Packaging for Class 1**

[Browse Next](#)

§ 173.50 Class 1—Definitions.

(a) *Explosive.* For the purposes of this subchapter, an *explosive* means any substance or article, including a device, which is designed to function by explosion (*i.e.*, an extremely rapid release of gas and heat) or which, by chemical reaction within itself, is able to function in a similar manner even if not designed to function by explosion, unless the substance or article is otherwise classed under the provisions of this subchapter. The term includes a pyrotechnic substance or article, unless the substance or article is otherwise classed under the provisions of this subchapter.

(b) Explosives in Class 1 are divided into six divisions as follows:

(1) *Division 1.1* consists of explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously.

(2) *Division 1.2* consists of explosives that have a projection hazard but not a mass explosion hazard.

(3) *Division 1.3* consists of explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.

(4) *Division 1.4* consists of explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.

(5) *Division 1.5*¹ consists of very insensitive explosives. This division is comprised of substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.

¹ The probability of transition from burning to detonation is greater when large quantities are transported in a vessel.

(6) *Division 1.6*² consists of extremely insensitive articles which do not have a mass explosive hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

² The risk from articles of Division 1.6 is limited to the explosion of a single article.

[Amdt. 173–224, 55 FR 52617 Dec. 21, 1990, as amended at 56 FR 66267, Dec. 20, 1991; 66 FR 45183, Aug. 28, 2001; 68 FR 48569, Aug. 14, 2003]



U.S. Geological Survey Manual

SM 445-2-H CHAPTER 39

Wildlife Netting Safety

39.1 Purpose and Scope.

- A. To specify the minimum Occupational Safety and Health Program (Program) requirements for Department of the Interior (Department or DOI) and U.S. Geological Survey (Bureau or USGS) wildlife netting safety requirements.
- B. This chapter applies to all situations involving the use of cannon and rocket net devices used to propel nets and entrap wildlife.

39.2 Definitions.

- A. Cannon and Rocket Net Devices. Devices used by agencies to propel nets through the air to quickly entrap various species of wildlife.
- B. Explosives. An explosive means any substance or article, including a device, which is designed to function by explosion (i.e., an extremely rapid release of gas and heat) or which, by chemical reaction within itself, is able to function in a similar manner even if not designed to function by explosion.
- C. Department of Transportation Hazardous Materials (Class 1 - Explosives) Divisions:
 - (1) Division 1.1. Consists of explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously. High explosives possessing a detonating capability such as dynamite, nitroglycerin, picric acid, lead azide, fulminate of mercury, black powder, blasting caps, and primers also known as boosters.
 - (2) Division 1.2. Consists of explosives that have a projection hazard but not a mass explosion hazard.
 - (3) Division 1.3. Consists of explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. Low explosives possessing a flammable capability such as propellant explosives, including

some smokeless propellants and display fireworks.

(4) Class 1.4. Consists of explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package. Certain type of manufactured articles containing Class 1.1 or 1.3 explosives, or both, but in restricted quantities, such as consumer fireworks.

(5) Class 1.5. Consists of very insensitive explosives. This division is comprised of substances that have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport. The probability of transition from burning to detonation is greater when large quantities are transported in a vessel.

(6) Division 1.6. Consists of extremely insensitive articles that do not have a mass explosive hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

(7) Match: Detonator for Division 1.3 explosives.

(8) Squib: Detonator for Division 1.1 explosives.

C. Cannon Net Devices. The original devices were actually large bore cannons that fired a loosely fitting weighted shell with shock cords and line to the perimeter of the net. Explosives used in these devices are largely Class 1.3 explosives (smokeless powder) and detonated with separately stored electric matches.

D. Rocket Net Devices. The newer devices propel the net directly instead with a propelled shell and functionally resemble a nonaerodynamic rocket. They have a blunt nosecone, a hollow tube body, a stabilizing fin (usually a long steel rod counterweight), and exhaust ports in the base. These devices have on occasion been referred to as recoilless cannons, but they are more correctly referred to as rockets because the entire chamber enclosing the explosion is lofted by the detonation of the charge contained within. These internal combustion rockets are connected to the nets with shock cords and ropes and are propelled by electrically fired 1.3 explosives.

39.3 Requirements. Those personnel involved in the use of cannon or rocket net devices shall follow the procedures in this chapter. Although the procedures are written to apply to rocket net devices, similar precautions apply to use of the older projected propulsion systems such as cannons. *Any directions provided by the manufacturer for the loading of their equipment shall take precedence over the procedures provided herein.*

A. Loading the Rocket.

- (1) Unscrew nozzle from rocket body.
- (2) Remove any debris from inside the rocket body; be certain rocket nozzles are clear of melted plastic and powder residues.
- (3) Insert rocket charge into rocket body.
- (4) Pass lead wire through one of the nozzle holes and take up slack lead wire.
- (5) Replace the nozzle on the rocket body and tighten securely (a minimum of three complete turns). Threads should be periodically cleaned with a steel brush and greased during storage.
- (6) Inspect connection with net, keeping attachment chord clear of the rocket.

B. Hook-up to Power Supply and Firing.

- (1) Blasting machines are a preferred power source, but they may not be practical in some situations.
- (2) Connect charges in series with the firing lines after making sure firing lines are disconnected from power supply and shunted.
- (3) Check electrical circuit for continuity with a blasting galvanometer after hook-up is complete.
- (4) Recheck electrical continuity just prior to each trapping attempt.
- (5) Firing is accomplished by completing the circuit to the power source with the firing lines.

C. Safety Requirements.

- (1) Rockets and rocket charges must be matched to type. Wildlife Material Incorporated, (WMI) type rockets have exhaust ports of 6.35 millimeters (.250 inch) or larger and will be used only with WMI-type charges. Rockets or charges that cannot be identified as to type cannot be used.

- (2) Personnel should never stand or work in front of a rocket during arming or in front of an armed rocket net. This applies to all testing of circuit continuity, net rearrangement work, etc.
- (3) The crank for the firing source (hellbox) must be carried on the person arming the rocket. If a blasting machine is used, keep it with you while loading. This prevents accidental discharge of firing source energies during loading.
- (4) Check all firing-circuit continuity with a blasting galvanometer. Some commercial ohm meters can conceivably fire explosive devices. Several large explosive companies make explosive circuit galvanometers. For example, the Atlas Powder Co. manufactures a Model No. 2 or equivalent.
- (5) All electrical connections must be of a firm and secure quality. Never skimp on the quality of electrical connections or firing cables.
- (6) Firing lines will always remain shunted until the area is cleared of personnel. Maintain a shunt at the lead wires of the cartridge and the ends of the firing cable. Immediately after firing, shunt the ends of the firing cable. If open (unshunted) lead wires are brushed against synthetic fiber clothing, especially in cold air, residual static electricity could be of such intensity to fire unshunted cartridges.
- (7) Remote-controlled sites shall be at least .80 kilometers (one-half mile) minimum distance from live circuits. Wattage outputs, climatic conditions, and energy requirements are so variable that it is impossible to establish a safe minimum area. Consideration must be given to the danger of an accidental radio frequency-caused firing. Low-flying aircraft and high-voltage transmission lines under ideal conditions can also emit enough energy to trigger electrical explosive devices.
- (8) In the event of an undetermined misfire, a minimum of 30 minutes will be allowed before proceeding to disarm the rocket.
- (9) Never expose explosive device cartridges to unnecessary heat or abuse.
- (10) Do not handle charges or get in front of an armed trap during an electrical or dust storm.
- (11) Only the number of charges necessary to perform the planned work will be carried to the netting site.
- (12) All charges should be stored in the shunted position with lead wires.

(13) All Division 1.5 low explosives, blasting agents, detonators, and charges shall be stored in a locked/secure Type 4 magazine/location as prescribed within 27 CFR 55.203. Additional requirements with regard to physical location, magazine construction, and storage minimums shall be in compliance with Sections 55.206(a), (b), and (c), 55.210(b), 55.211(b) and 55.213. (See Appendix 39.1)

(14) The location of the storage facility should meet the table of distances requirements of 27 CFR 55.219 (see Appendix 39.2) for low explosives.

(15) All charges should be transported following the requirements of 49 CFR 172.

39.4 Responsibilities.

A. Bureau Safety Manager.

(1) Develops appropriate policy, procedures, and plans and provide, Bureau-wide program oversight and direction.

(2) Conducts periodic evaluations of Regional Headquarters and samples regional science programs to determine the effectiveness and degree of rocket-netting safety program administration and implementation and make recommendations for improvements as appropriate.

(3) Develop template products to assist the field in meeting rocket-netting chapter requirements, as appropriate.

B. Regional Safety Managers.

(1) Assist Regional Safety Officers and Collateral Duty Safety Program Coordinators (CDSPC's) in identifying, developing, and approving rocket-netting safety training programs.

(2) Conduct assessments of regional science programs during formal reviews/inspections.

(3) Provide regional oversight and direction for the rocket-netting safety program.

C. Regional Safety Officers.

(1) Assist regional science program CDSPC's in identifying, developing, and approving

rocket-netting safety training programs.

- (2) Conduct assessments of regional field programs during formal reviews and inspections.

D. Collateral Duty Safety Program Coordinators (CDSPC's).

- (1) Assist organizational field-level line supervisors in establishing and implementing rocket-netting safety training programs.
- (2) Conduct assessments of local programs during formal reviews and inspections.

E. Organizational Managers and Supervisors.

- (1) Establish a local rocket-netting program that complies with this chapter's requirements and that includes personnel training to provide persons with the knowledge, skills, and ability to perform rocket-netting operations.
- (2) Provide personnel instruction on the use and handling of explosives.
- (3) Provide immediate supervision and direction of an individual of proven ability and experience in rocket-netting operations for personnel who do not have sufficient training and experience to perform explosive work.
- (4) Verify that personnel performing rocket-netting operations are trained in CPR and first aid.
- (5) Verify that personnel required to operate a motor vehicle for transporting explosives is qualified and trained. Should the vehicle be required to be placarded based on the quantity or hazardous nature of its contents, the operator of the vehicle shall have a valid State commercial driver's license.

F. Personnel.

- (1) Adhere to all basic rocket-netting safety procedures and to all additional safety procedures described in the explosives and rocket-netting chapter of this Handbook.
- (2) Complete required rocket-netting, blasting, or explosives safety training programs.

39.5 Additional Resources.

- A. Dill, H.H. 1969. A field guide to cannon net trapping. USDI. Bureau of Sport Fisheries and Wildlife. 18 pp.
- B. Grieb, J.R., and M.G. Sheldon. 1956. Radio-controlled firing device for the cannon-net trap. J. Wildl. Manage. 20:203-205.
- C. Peterle, T.J. 1952. The cannon projected net trap for capturing sharp-tailed grouse. Paper presented at 14th Midwest Wild. Conf., Des Moines, Iowa. 5 pp mimeo.
- D. Sharp, D.E., and J.T. Lokemoen. 1980. A remote-controlled firing device for cannon-net traps. J. Wildl. Manage. 44(4):896-898.
- E. Code of Federal Regulations Title 27, Part 55 and Title 49, Part 172.

Appendix 39.1

Appendix 39.2

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U.S. Department of the Interior, U.S. Geological Survey, Reston, VA, USA

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Title 27: Alcohol, Tobacco and Firearms

PART 555—COMMERCE IN EXPLOSIVES

Subpart K—Storage

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§ 555.203 Types of magazines.

For purposes of this part, there are five types of magazines. These types, together with the classes of explosive materials, as defined in §555.202, which will be stored in them, are as follows:

(a) *Type 1 magazines.* Permanent magazines for the storage of high explosives, subject to the limitations prescribed by §§555.206 and 555.213. Other classes of explosive materials may also be stored in type 1 magazines.

(b) *Type 2 magazines.* Mobile and portable indoor and outdoor magazines for the storage of high explosives, subject to the limitations prescribed by §§555.206, 555.208(b), and 555.213. Other classes of explosive materials may also be stored in type 2 magazines.

(c) *Type 3 magazines.* Portable outdoor magazines for the temporary storage of high explosives while attended (for example, a "day-box"), subject to the limitations prescribed by §§555.206 and 555.213. Other classes of explosives materials may also be stored in type 3 magazines.

(d) *Type 4 magazines.* Magazines for the storage of low explosives, subject to the limitations prescribed by §§555.206(b), 555.210(b), and 555.213. Blasting agents may be stored in type 4 magazines, subject to the limitations prescribed by §§555.206(c), 555.211(b), and 555.213. Detonators that will not mass detonate may also be stored in type 4 magazines, subject to the limitations prescribed by §§555.206(a), 555.210(b), and 555.213.

(e) *Type 5 magazines.* Magazines for the storage of blasting agents, subject to the limitations prescribed by §§555.206(c), 555.211(b), and 555.213.

Title 27: Alcohol, Tobacco and Firearms

PART 555—COMMERCE IN EXPLOSIVES

Subpart K—Storage

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§ 555.205 Movement of explosive materials.

All explosive materials must be kept in locked magazines meeting the standards in this subpart unless they are:

(a) In the process of manufacture;

(b) Being physically handled in the operating process of a licensee or user;

(c) Being used; or

(d) Being transported to a place of storage or use by a licensee or permittee or by a person who has lawfully acquired explosive materials under §555.106.



United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 14, 2007
Report Subject Site visit – USGS Explosives Magazine, Dixon, CA	

On September 4, 2007, Senior Investigator Keith Kuczka and Special Agent Karden Kelly, Department of the Interior (DOI), Office of Inspector General (OIG) examined the explosives magazine located at the United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Dixon Field Station (DFS), Dixon, CA as part of an investigation into allegations that USGS San Francisco Bay Estuary Field Station (SFBEFS) employees were exposed to safety hazards. Specifically, allegations were made that explosive charges used for rocket netting were stored in unsafe conditions. Michael Casazza, Research Wildlife Biologist, USGS, DFS was present during the visit and assisted investigators by opening the explosives magazine that is used to store rocket net charges.

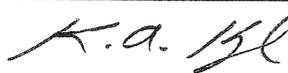
Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife. Details pertaining to procedures for storing explosive charges and access to the magazine were obtained during interviews of Casazza and other USGS personnel.

The explosives magazine is located in an open air equipment storage area adjacent to one of the DFS buildings. The equipment storage area is surrounded by chain link fences with locked access gates along the perimeter. Access to the equipment storage area can be made through the gates in the perimeter fence or through DFS building entry/exit doors.

A metal identification tag riveted to the explosives magazine is engraved with the following information:

Mfg. By Alpha Explosives
P. O. Box 310
Lincoln, Calif. USA 95648
916-645-3377
No. 21 Date 6/4/98

A yellow placard affixed to the door of the magazine reads "Explosives 1.3C 1"

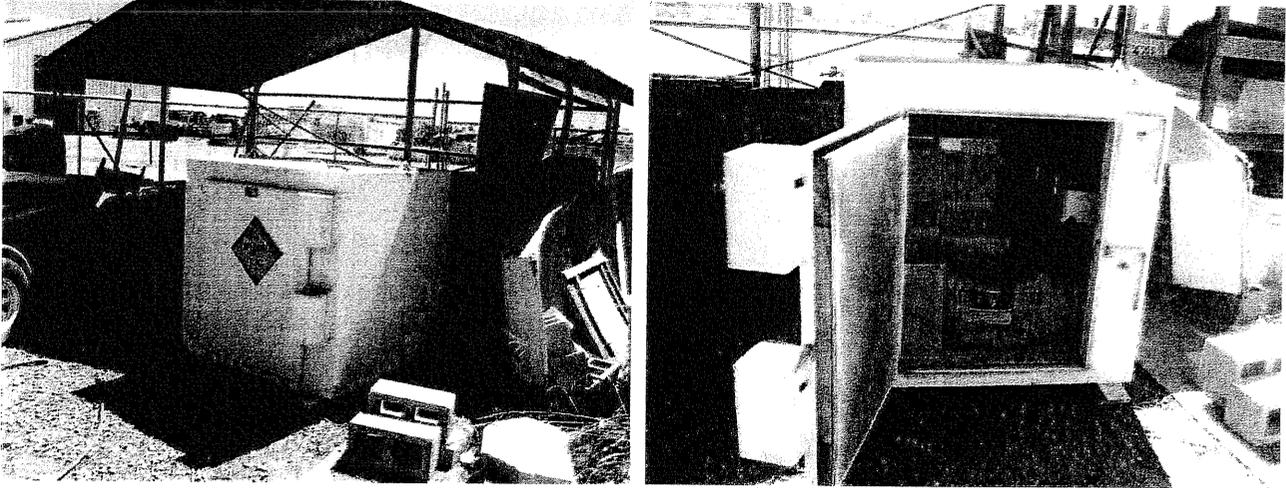
Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
Authentication Number: 50326D8907891B89CF087CA7CB9197DB	

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OFFICIAL USE ONLY

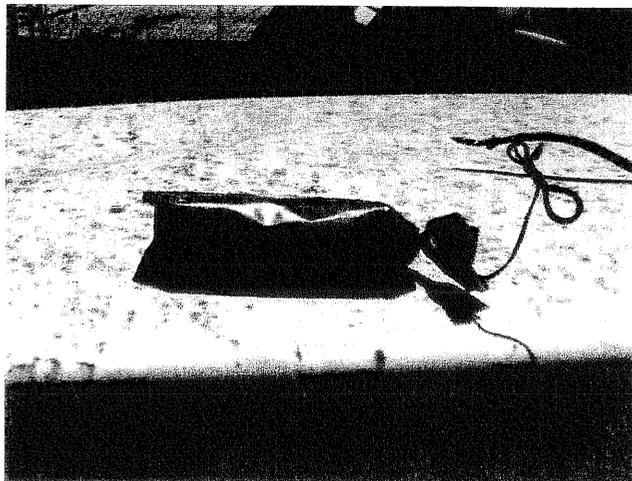
OI-003 (04/07)

The magazine is secured by a key lock. When asked, Casazza unlocked the magazine for investigators. The following two photographs show the explosives magazine at the DFS:

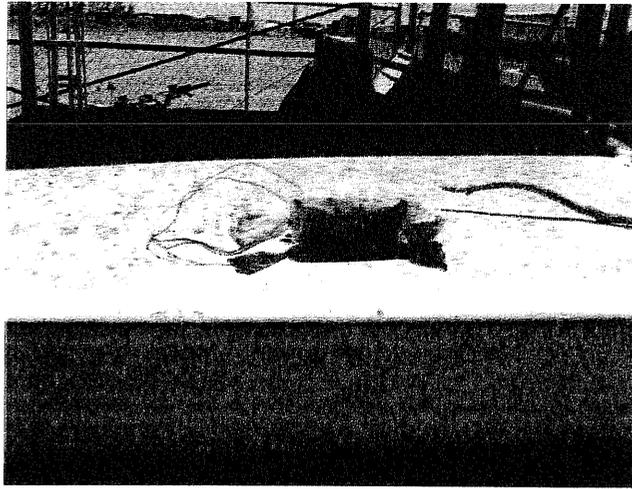


Inside the magazine were cardboard boxes with orange decals marked "Explosive 1.3C 1" and "Danger", plastic tool boxes and a Sentry fire safe with a strip of duct tape affixed to the front. The words "Caution Explosives Inside" were written on the duct tape.

Examination of one open cardboard box revealed that it contained semi-transparent red plastic bags with twisted wires protruding from the bag (rocket net charge). Gray/black pellets and a small device could be seen through the semi-transparent plastic. Also inside the bag was a small document. On that document were the words "WARNING USE ONLY IN A WINN-STAR ROCKET MODEL S-200 CHARGE LOT # ____ DATE SEP, 01, 1999". A photograph of one charge is inserted immediately below:

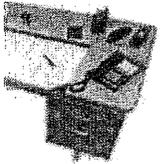


Examination of another open cardboard box revealed that it contained plastic bags similar to the ones found in the other box. However, these plastic bags were punctured in places, were muddy, and the wires protruding from them were untwisted. When asked, Casazza told investigators that the rocket net charges in that box had gotten wet and/or had failed to function in some way. A photograph of one of the failed charges is inserted immediately below:



After the explosives magazine was again locked and secured, Casazza was asked to show investigators one of the rockets used for rocket netting. He escorted investigators to a storage area in one of the DFS buildings and identified a rocket. A photograph of the rocket is inserted immediately below:





Eric D
Williams/ORS/USGS/DOI@U
SGS
10/03/2007 05:05 PM

To Keith Kuczka/DEN/OIG/DOI@OIG
cc
bcc
Subject Re: Fw: Safety Reporting site

Hello Keith,
Based on the information below that we provided to the manufacturer (Alpha Explosives) they told us this was a type 2 magazine.

We sent the following pictures and description to the manufacturer.

The locker is a total of 3 1/2 inches wide. This is composed of 3/4" steel plate on the outside, 2 1/4" solid wood core in the middle and 1/2" plywood on the inside.



Explosives Locker 001.jpg



Explosives Locker 004.jpg



Explosives Locker 006.jpg

The following is the response from the manufacturer. "That is an outdoor, Type 2 magazine."

Eric Williams
USGS, Western Region Safety Manager
3020 State University Dr. East, Suite 4005
Sacramento, CA 95819

Tel.: (916) 278-9429
Cell: (916) 870-9680
Fax: (916) 278-9430
<http://owrs.wr.usgs.gov>

Keith Kuczka/DEN/OIG/DOI@OIG



Keith
Kuczka/DEN/OIG/DOI@OIG
09/19/2007 03:05 PM

To Eric D Williams/ORS/USGS/DOI@USGS
cc
Subject Re: Fw: Safety Reporting site

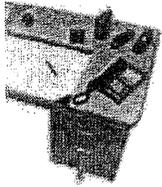
Eric,

Thanks once again for this information. I look forward to seeing the response/info from the magazine manufacturer.

When you have an opportunity, would you please send me the annual self-inspection for the San Francisco Bay Estuary Field Station, Vallejo, CA for the last two years?

Keith Kuczka
Senior Investigator
Department of the Interior
Office of Inspector General

Program Integrity Division
970-282-1899
970-282-1893 (fax)
Eric D Williams/ORS/USGS/DOI@USGS



Eric D
Williams/ORS/USGS/DOI@U
SGS

09/18/2007 02:42 PM

To Keith Kuczka/DEN/OIG/DOI@OIG

cc

Subject Re: Fw: Safety Reporting site

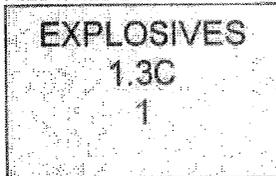
We are unable to locate any paperwork from the purchase of the magazine. The manufacturer found the following entry in their sales log.

396	4x4x4	SOLD	12/30/2003	SOLD TO USGS
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The following is the information on the plate on the side of the magazine.

Alpha Explosives
P.O. Box 310
Lincoln, CA 95648
916-645-3377
No. 21 6-4-98

Also it has a label which says:



We are going to take pictures of the magazine including the plate and send them to the manufacturer so they can identify the magazine and send us a specification sheet.

Eric Williams
USGS, Western Region Safety Manager
3020 State University Dr. East, Suite 4005
Sacramento, CA 95819

Tel.: (916) 278-9429
Cell: (916) 870-9680
Fax: (916) 278-9430
<http://owrs.wr.usgs.gov>

Keith Kuczka/DEN/OIG/DOI@OIG

Title 49: Transportation

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

Subpart A—XXX

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§ 171.1 Applicability of Hazardous Materials Regulations (HMR) to persons and functions.

Federal hazardous materials transportation law (49 U.S.C. 5101 *et seq.*) directs the Secretary of Transportation to establish regulations for the safe and secure transportation of hazardous materials in commerce, as the Secretary considers appropriate. The Secretary is authorized to apply these regulations to persons who transport hazardous materials in commerce. In addition, the law authorizes the Secretary to apply these regulations to persons who cause hazardous materials to be transported in commerce. The law also authorizes the Secretary to apply these regulations to persons who manufacture or maintain a packaging or a component of a packaging that is represented, marked, certified, or sold as qualified for use in the transportation of a hazardous material in commerce. Federal hazardous material transportation law also applies to anyone who indicates by marking or other means that a hazardous material being transported in commerce is present in a package or transport conveyance when it is not, and to anyone who tampers with a package or transport conveyance used to transport hazardous materials in commerce or a required marking, label, placard, or shipping description. Regulations prescribed in accordance with Federal hazardous materials transportation law shall govern safety aspects, including security, of the transportation of hazardous materials that the Secretary considers appropriate. In 49 CFR 1.53, the Secretary delegated authority to issue regulations for the safe and secure transportation of hazardous materials in commerce to the Pipeline and Hazardous Materials Safety Administrator. The Administrator issues the Hazardous Materials Regulations (HMR; 49 CFR Parts 171 through 180) under that delegated authority. This section addresses the applicability of the HMR to packagings represented as qualified for use in the transportation of hazardous materials in commerce and to pre-transportation and transportation functions.

(a) *Packagings.* Requirements in the HMR apply to each person who manufactures, fabricates, marks, maintains, reconditions, repairs, or tests a packaging or a component of a packaging that is represented, marked, certified, or sold as qualified for use in the transportation of a hazardous material in commerce, including each person under contract with any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal government who manufactures, fabricates, marks, maintains, reconditions, repairs, or tests a packaging or a component of a packaging that is represented, marked, certified, or sold as qualified for use in the transportation of a hazardous material in commerce.

(b) *Pre-transportation functions.* Requirements in the HMR apply to each person who offers a hazardous material for transportation in commerce, causes a hazardous material to be transported in commerce, or transports a hazardous material in commerce and who performs or is responsible for performing a pre-transportation function, including each person performing pre-transportation functions under contract with any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal government. Pre-transportation functions include, but are not limited to, the following:

- (1) Determining the hazard class of a hazardous material.
- (2) Selecting a hazardous materials packaging.
- (3) Filling a hazardous materials packaging, including a bulk packaging.
- (4) Securing a closure on a filled or partially filled hazardous materials package or container or on a package or container containing a residue of a hazardous material.
- (5) Marking a package to indicate that it contains a hazardous material.
- (6) Labeling a package to indicate that it contains a hazardous material.
- (7) Preparing a shipping paper.
- (8) Providing and maintaining emergency response information.
- (9) Reviewing a shipping paper to verify compliance with the HMR or international equivalents.
- (10) For each person importing a hazardous material into the United States, providing the shipper with timely and complete information as to the HMR requirements that will apply to the transportation of the material within the United States.
- (11) Certifying that a hazardous material is in proper condition for transportation in conformance with the requirements of the HMR.

(12) Loading, blocking, and bracing a hazardous materials package in a freight container or transport vehicle.

(13) Segregating a hazardous materials package in a freight container or transport vehicle from incompatible cargo.

(14) Selecting, providing, or affixing placards for a freight container or transport vehicle to indicate that it contains a hazardous material.

(c) *Transportation functions.* Requirements in the HMR apply to transportation of a hazardous material in commerce and to each person who transports a hazardous material in commerce, including each person under contract with any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal government who transports a hazardous material in commerce. Transportation of a hazardous material in commerce begins when a carrier takes physical possession of the hazardous material for the purpose of transporting it and continues until the package containing the hazardous material is delivered to the destination indicated on a shipping document, package marking, or other medium, or, in the case of a rail car, until the car is delivered to a private track or siding. For a private motor carrier, transportation of a hazardous material in commerce begins when a motor vehicle driver takes possession of a hazardous material for the purpose of transporting it and continues until the driver relinquishes possession of the package containing the hazardous material at its destination and is no longer responsible for performing functions subject to the HMR with respect to that particular package. Transportation of a hazardous material in commerce includes the following:

(1) *Movement.* Movement of a hazardous material by rail car, aircraft, motor vehicle, or vessel (except as delegated by Department of Homeland Security Delegation No. 0170 at 2(103)).

(2) *Loading incidental to movement of a hazardous material.* Loading of packaged or containerized hazardous material onto a transport vehicle, aircraft, or vessel for the purpose of transporting it, including blocking and bracing a hazardous materials package in a freight container or transport vehicle, and segregating a hazardous materials package in a freight container or transport vehicle from incompatible cargo, when performed by carrier personnel or in the presence of carrier personnel. For a bulk packaging, loading incidental to movement is filling the packaging with a hazardous material for the purpose of transporting it when performed by carrier personnel or in the presence of carrier personnel (except as delegated by Department of Homeland Security Delegation No. 0170 at 2(103)), including transloading.

(3) *Unloading incidental to movement of a hazardous material.* Removing a package or containerized hazardous material from a transport vehicle, aircraft, or vessel; or for a bulk packaging, emptying a hazardous material from the bulk packaging after the hazardous material has been delivered to the consignee when performed by carrier personnel or in the presence of carrier personnel or, in the case of a private motor carrier, while the driver of the motor vehicle from which the hazardous material is being unloaded immediately after movement is completed is present during the unloading operation. (Emptying a hazardous material from a bulk packaging while the packaging is on board a vessel is subject to separate regulations as delegated by Department of Homeland Security Delegation No. 0170 at 2(103).) Unloading incidental to movement includes transloading.

(4) *Storage incidental to movement of a hazardous material.* Storage of a transport vehicle, freight container, or package containing a hazardous material by any person between the time that a carrier takes physical possession of the hazardous material for the purpose of transporting it until the package containing the hazardous material has been delivered to the destination indicated on a shipping document, package marking, or other medium, or, in the case of a private motor carrier, between the time that a motor vehicle driver takes physical possession of the hazardous material for the purpose of transporting it until the driver relinquishes possession of the package at its destination and is no longer responsible for performing functions subject to the HMR with respect to that particular package.

(i) Storage incidental to movement includes—

(A) Storage at the destination shown on a shipping document, including storage at a transloading facility, provided the original shipping documentation identifies the shipment as a through-shipment and identifies the final destination or destinations of the hazardous material; and

(B) A rail car containing a hazardous material that is stored on track that does not meet the definition of "private track or siding" in §171.8, even if the car has been delivered to the destination shown on the shipping document.

(ii) Storage incidental to movement does not include storage of a hazardous material at its final destination as shown on a shipping document.

~~(d) Functions not subject to the requirements of the HMR. The following are examples of activities to which the HMR do not apply:~~

(1) Storage of a freight container, transport vehicle, or package containing a hazardous material at an offeror facility prior to a carrier taking possession of the hazardous material for movement in transportation in commerce or, for a private motor carrier, prior to a motor vehicle driver taking physical possession of the hazardous material for movement in transportation in commerce.

(2) Unloading of a hazardous material from a transport vehicle or a bulk packaging performed by a person employed by or working under contract to the consignee following delivery of the hazardous material by the carrier to its destination and departure from the consignee's premises of the carrier's personnel or, in the case of a private carrier, departure of the driver from the unloading area.

(3) Storage of a freight container, transport vehicle, or package containing a hazardous material after its delivery by a carrier to the destination indicated on a shipping document, package marking, or other medium, or, in the case of a rail car, storage of a rail car on private track.

(4) Rail and motor vehicle movements of a hazardous material exclusively within a contiguous facility boundary where public access is restricted, except to the extent that the movement is on or crosses a public road or is on track that is part of the general railroad system of transportation, unless access to the public road is restricted by signals, lights, gates, or similar controls.

(5) Transportation of a hazardous material in a motor vehicle, aircraft, or vessel operated by a Federal, state, or local government employee solely for noncommercial Federal, state, or local government purposes.

(6) Transportation of a hazardous material by an individual for non-commercial purposes in a private motor vehicle, including a leased or rented motor vehicle.

(7) Any matter subject to the postal laws and regulations of the United States.

(e) *Requirements of other Federal agencies.* Each facility at which pre-transportation or transportation functions are performed in accordance with the HMR may be subject to applicable standards and regulations of other Federal agencies.

(f) *Requirements of state and local government agencies.* (1) Under 49 U.S.C. 5125, a requirement of a state, political subdivision of a state, or an Indian tribe is preempted, unless otherwise authorized by another Federal statute or DOT issues a waiver of preemption, if—

(i) Complying with both the non-Federal requirement and Federal hazardous materials transportation law, the regulations issued under Federal hazardous material transportation law or a hazardous material transportation security regulation or directive issued by the Secretary of Homeland Security is not possible;

(ii) The non-Federal requirement, as applied or enforced, is an obstacle to accomplishing and carrying out Federal hazardous materials transportation law, the regulations issued under Federal hazardous material transportation law, or a hazardous material transportation security regulation or directive issued by the Secretary of Homeland Security;

(iii) The non-Federal requirement is not substantively the same as a provision of Federal hazardous materials transportation law, the regulations issued under Federal hazardous material transportation law, or a hazardous material transportation security regulation or directive issued by the Secretary of Homeland Security with respect to—

(A) The designation, description, and classification of hazardous material;

(B) The packing, repacking, handling, labeling, marking, and placarding of hazardous material;

(C) The preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents;

(D) The written notification, recording, and reporting of the unintentional release of hazardous material; or

(E) The design, manufacturing, fabricating, marking, maintenance, reconditioning, repairing, or testing of a package or container represented, marked, certified, or sold as qualified for use in transporting hazardous material.

(iv) A non-Federal designation, limitation or requirement on highway routes over which hazardous material may or may not be transported does not comply with the regulations in subparts C and D of part 397 of this title; or

(v) A fee related to the transportation of a hazardous material is not fair or is used for a purpose that is not related to transporting hazardous material, including enforcement and planning, developing, and maintaining a capability for emergency response.

(2) Subject to the limitations in paragraph (f)(1) of this section, each facility at which functions regulated under the HMR are performed may be subject to applicable laws and regulations of state and local governments and Indian tribes.

(3) The procedures for DOT to make administrative determinations of preemption are set forth in subpart E of part 397 of this title with respect to non-Federal requirements on highway routing (paragraph (f)(1)(iv) of this section) and in subpart C of part 107 of this chapter with respect to all other non-Federal requirements.

(g) *Penalties for noncompliance.* Each person who knowingly violates a requirement of the Federal hazardous material transportation law, an order issued under Federal hazardous material transportation law, subchapter A of this chapter, or a special permit or approval issued under subchapter A or C of this chapter is liable for a civil penalty of not more than \$50,000 and not less than \$250 for each violation, except the maximum civil penalty is \$100,000 if the violation results in death, serious illness or severe injury to any person or substantial destruction of property, and a minimum \$450 civil penalty applies to a violation relating to training. When a violation is a continuing one and involves transporting of hazardous material or causing them to be transported, each day of the violation is a separate offense. Each person who knowingly violates §171.2(f) or willfully or recklessly violates a provision of the Federal hazardous material transportation law, an order issued under Federal hazardous material transportation law, subchapter A of this chapter, or a special permit or approval issued under subchapter A or C of this chapter, shall be fined under title 18, United States Code, or imprisoned for not more than 5 years, or both, except the maximum amount of imprisonment shall be 10 years in any case in which a violation involves the release of a hazardous material which results in death or bodily injury to any person.

[68 FR 61937, Oct. 30, 2003; 70 FR 20031, Apr. 15, 2005, as amended at 70 FR 73162, Dec. 9, 2005; 71 FR 8488, Feb. 17, 2006; 71 FR 44931, Aug. 8, 2006]



Occupational Safety, Health and Environmental Inspection and Abatement System IAS Audit Edit Dixon Field Station - WERC

Logon:
Eric Williams
WR ORS/BMS Staff
345 Middlefield Road
Bldg 1
Menlo Park, CA 94025

SAFSELA329

Question Number	Question Text	Requirement	Response	Comments
36	Are annual action plans developed and goals established that focus on accident prevention and improving program weaknesses?	SM 445-2-H Ch 3	YES	
37	Does management support workplace safety and health policy?	SM 445-2-H Ch 1	YES	
38	Are safety and health responsibilities included in supervisory, manager and collateral duty position descriptions and performance plans?	-	YES	
39	Do managers support the safety and health training of employees?	-	YES	
40	Has the Collateral Duty Safety Program Coordinator received: * orientation to the USGS safety program within 45 days of appointment, and a minimum of 24 hours of formal training within 6 months of appointment, (new CDSPC's), or * a minimum of 16 hours per year of additional safety and health training? (CDSPC's in the position a year or more)	1960.58 and USGS 445-2- H, Chapter 12/13	NA	
41	Do individuals with assigned safety and health responsibilities have the authority and resources to perform their duties?	SM 445-2-H Ch 2	YES	
42	Do you have an Awards Program in place?	SM 445-2-H Ch 10	YES	
43	Does your facility have a Safety Committee?	SM 445-2-H Ch 9	YES	
44	Do employees know how to report unsafe conditions, such as through IAS or using the USGS In Forms package for printing out a hard copy USGS Form 9-3074?	1960.28 & USGS 445-2- H, Chapter 8	YES	
45	Do you use safety awareness and promotional programs?	SM 445-2-H Ch 2	YES	
46	Is the OSHA 300A completed annually and posted as required by 29 CFR 1960 requirements?	29 CFR 1960	YES	
47	Are hazards being eliminated and tracked through final abatement?	-	YES	
48	Are contractor, concessionaire, volunteer, public and off-the-job safety programs established that provide equivalent safety protections for subject personnel?	SM 445-2-H Ch 32	YES	
49	Is emergency equipment (such as fire extinguishers, personal protective equipment, chemical spill containment equipment and materials) well maintained and properly located	USGS 445-2- H, Chapter 36 and NPFA, 29 CFR 1910	YES	
50	Are all accidents involving personal injury and/or property damage reported in SMIS and investigated, and are corrective action(s) taken, as appropriate to prevent recurrence?	-	YES	
51	Have employees, supervisors, and executives (GS14 and above) completed the required DOIU Orientation Safety Training?	-	YES	
	Are all areas and operations of the workplace, including office			



52	operations, inspected at least annually?	-	YES
53	What is your cost center's annual safety budget?	-	BLANK
56	Does the cost center have a written safety plan which includes office call-in procedures and that is updated annually?	USGS 445-3-H Topic 18	YES
57	If required, do you have a written Chemical Hygiene Plan?	1910.1450	NA
58	If required, do you have a Confined Space Program?	1910.146	NA
59	If required, do you have an Emergency Response Plan (for release of hazardous substances)?	1910.120	NA
60	If required, do you have a Bloodborne Pathogen (BBP) Exposure Control Plan?	1910.1030	NA
61	If required, do you have a Fall Protection Plan?	USGS 445-2-H, Chapter 44	NA
62	If required, do you have a Hazard Communication Program?	1910.1200	NA
63	If required, do you have a Health and Safety Plan (HASP) for hazardous waste cleanup operations?	1910.120	NA
64	If required, do you have a Hearing Conservation Program?	1910.95	NA
65	If required, do you have a Lockout/Tagout Program for employees who service or maintain machines or equipment in which the unexpected energization or start-up of the machines or equipment, or release of stored energy, could cause injury to employees?	1910.147	NA
66	Do you have a Occupant Emergency Plan and has it been updated annually? (Fire Prevention Plan required as part of OEP if using ethylene oxide.)	SM 445-2-H Chapter 36 and 1910.39	NA
67	Have you conducted an annual fire evacuation or shelter in place drill to test your Occupant Emergency Plan?	-	YES
68	If required, do you have a Respiratory Protection Program?	1910.134	NA
69	If required, do you have Traffic Control Safety Plans (Workzone Safety)?	SM 445-2-H Ch 17	NA
70	Are personnel who participate in blasting operations trained in basic explosives safety and have annual refresher training?	SM 445-2-H Ch 38	NA
71	Are employees who are rocket netting trained in explosives use?	SM 445-2-H Ch 39	YES
72	Are employees who transport explosives qualified and trained in accordance with Department of Transportation requirements?	SM 445-2-H Ch 39	NA
73	Are all cylinders securely fastened, secure, and capped except when in use?	1910.101	YES
74	Are personnel instructed in the correct use of compressed gas cylinders (i.e., how to connect, proper order of opening and closing valves, storage incompatibilities)?	1910.101	YES
75	Are oxygen cylinders stored separately from fuel/gas cylinders or combustible materials (specifically oil and grease) by a minimum distance of 20 feet or by a non-combustible barrier at least 5 feet high and having a fire resistance of 1/2 hour?	1910.253	NA
76	Upon identification of workplace confined spaces, has a subsequent assessment been done to determine permit or non permit entry as applicable for each space?	1910.146	NA
77	Are signs posted to inform employees of the existence and hazards of identified confined spaces?	1910.146	NA
78	Is all electrical equipment inspected prior to use?	1910.333	YES
79	Is all electrical equipment grounded?	1910.304	YES
80	Is wiring permanent (no extension cords used beyond 90 days)?	1910.305	YES
81	Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?	1910.304	YES
82	Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs, or plates?	1910.305	YES
83	Is electrical equipment listed, labeled, installed, and used according to an approved testing authority (i.e., Underwriters Laboratory)?	1910.303	YES
84	Is sufficient access and working space maintained around electrical equipment, including electrical panels?	1910.303	YES
	Are flexible cords used and installed correctly (not used as substitutes for fixed wiring; run through holes in walls, ceilings,		



85	floors, doorways, or windows, attached to building surfaces; or concealed behind building walls, ceilings, or floors)?	1910.305	YES
87	Is at least one person in each electrofishing field crew certified in an approved electrofishing course?	SM 445-2-H Ch 42	YES
88	Is electrofishing equipment scheduled for annual preventive maintenance inspections?	SM 445-2-H Ch 42	YES
92	Is training provided to employees in jobs that have been identified as having ergonomic hazards?	SM 445-2-H Ch 43	YES
93	Are appropriate fire extinguishers being used in facilities, inspected and maintained?	1910.157	YES
94	Are safeguards designed to protect employees during an emergency in working order? (e.g. sprinkler system, alarm system, fire doors not blocked open, exit lighting)	1910.37	YES
95	Are building exits adequately marked and unlocked, routes kept free and clear, and supplied with emergency lighting?	1910.37	YES
96	Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?	1910.106	YES
97	Do storage rooms for flammable and combustible liquids have explosion-proof lights and mechanical or gravity ventilation?	1910.106	NA
98	Are "NO SMOKING" signs posted in areas where flammable or combustible materials are used or stored and on liquefied petroleum tanks?	1910.106 and .110	YES
99	Are all tools and equipment used by employees at their workplace in good condition and only used by employees trained in their use?	1910.242	YES
100	Are machines that are designed for a fixed location (e.g., floor-mounted drill or grinder) anchored to prevent them from walking or moving ?	1910.212	PARTIAL
102	Is powered moving equipment provided with appropriate safety guards or attachments?	1910.243 and 1910.212 -.219	PARTIAL
104	Are all cord-connected, electrically operated tools and equipment effectively grounded or of the approved double-insulated type? Where injury to operator might result if motors were to restart after power failure, has provision been made to prevent machines from automatically restarting upon restoration of power (e.g., magnetic starters)?	1910.243	YES
105	Is compressed air used for cleaning purposes reduced to less than 30 psi?	1910.213	PARTIAL
106	Have employees who operate chain saws been trained in the safe use, operation and maintenance of chain saws, and the appropriate personal protective equipment? Have they received first-aid and CPR training? Has the training been verified by a certificate?	1910.242	NA
107	Are employees who operate powder-actuated tools trained in their use?	1910.266	NA
108	Are all worksites clean, sanitary, and orderly?	1910.243	NA
109	Are work surfaces kept dry, or are appropriate means taken to ensure that surfaces are slip-resistant?	1910.22	YES
121	Are laboratory employees provided with information and training to ensure that they are apprised of the hazards of chemicals present in their work area?	1910.22	YES
122	Are fume hoods inspected annually for proper airflow and for clean working surfaces (e.g., fume hoods are not to be used as storage areas for hazardous chemicals)?	1910.1450	YES
123	Are ladders in good condition with no broken, crooked, or missing steps, rungs, or cleats?	1910.1450	YES
124	Are metal ladders prohibited in areas where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures, or circuit conductors?	1910.25	YES
126	Is a Lyme Disease Awareness and Prevention program developed and implemented if the organization is within specified Centers for Disease Control (CDC) "Lyme disease risk areas?"	1910.333	YES
127	Have all cranes been inspected and tested within the last year?	SM 445-2-H Ch 24	NA
	Is material on elevated surfaces piled, stacked or racked in a	1910.179	NA



	manner to prevent it from tipping, falling, collapsing, rolling or spreading?	1910.176	YES
	Have all powered industrial truck (e.g. forklift) operators been trained, evaluated, and a certification of that training made within the last 3 years?	1910.178	NA
130	Are powered industrial trucks (forklifts) maintained in good condition (e.g., tires, brakes, hydraulics, and forks in good condition, seatbelts installed, nameplates with load limits affixed)?	1910.178	NA
131	Does the cost center have an effective plan for providing competent emergency medical care to employees, visitors, and the public?	-	YES
132	Are members in the field crew certified in First Aid and CPR?	1910.151	PARTIAL
133	Are first aid supplies available at each work site and each government vehicle used for field work?	1910.151	YES
134	Are eye wash facilities and a quick drench shower within the work area where employees are exposed to injurious corrosive materials?	1910.151	YES
144	Do employees have a valid State driver's license for the class vehicle to be operated and maintain and annually update the Motor Vehicle Operator's Certification Form?	SM 445-2-H Ch 16	YES
145	Are all weights, compressed gas cylinders, and other heavy or large items in each vehicle secured and gasoline and other hazardous materials transported in leak-proof containers and secured to prevent movement?	SM 445-2-H Ch 16	YES
146	Do all USGS employees who operate a motor vehicle receive defensive driving training no less than once every 3 years?	SM 445-2-H Ch 16	YES
147	Do employees who operate All Terrain Vehicles (ATVs) and cycles successfully complete an accredited All Terrain Vehicle/Cycle Operator's course?	SM 445-2-H Ch 16	YES
148	Are your vehicles that are used to transport cargo equipped with safety screens between the passenger compartment and cargo area?	SM 445-2-H Ch 16	NA
149	Are routine visual inspections of vehicle safety components (i.e., tires, windshield wipers, headlights, tail lights, turn signals, mirrors, etc.) performed prior to vehicle use?	SM 445-2-H Ch 16	YES
150	Has noise monitoring been conducted in areas where noise levels may exceed 85 dBA?	1910.95	NA
151	Are all affected employees included in an audiometric testing program per 29 CFR 1910.95(g) in areas and occupations where noise exposure cannot be reduced below an 8-hour time-weighted average (TWA) of 85 dBA?	1910.95	NA
152	Do employees in a Hearing Conservation Program receive annual training on the effects of exposure to hazardous noise and in the proper use of hearing protection?	1910.95	NA
153	Has a Job Hazard Analysis (JHA) been performed, signed, and certified that identifies the hazards and appropriate PPE to protect the employee?	1910.132	BLANK
154	Have employees received the appropriate PPE training?	1910.132	YES
155	Have employees wearing respirators been medically cleared, trained and fit-tested on the use of their assigned respirator?	1910.134 and USGS 445-2-H, Chapter 18	NA
163	Are signs posted, when appropriate, showing the elevated surface load capacity?	1910.22	NA
164	Where standard railings are not available along an elevated working surface or walkway, are alternate methods such as personal fall arrest systems used?	1910.22	NA
165	Are dock boards or bridge plates used when transferring materials between docks and trucks or rail cars?	1910.30	NA
166	Are open-sided floors or platforms 4 feet or more above ground level guarded by a standard railing?	1910.23	NA
201	Are employees, volunteers, or cooperators using aircraft for mission work (except seat fares on Part 121--Alaska, Delta, United, etc.)?	-	YES
202	If performing aviation activity, does the center/office/unit have an Center Aviation Plan?	USGS 445-2- H, Chapter 27	YES



203	Are all projects that use aviat. resources required to submit a Project Aviation Plan?	-	YES
	Is prior authorization by management required for Special Use Operations?	-	YES
205	Does the Collateral Duty Aviation Coordinator provide or arrange for requisite training for organizational staff; maintain a record of all training and inform personnel of recurrency requirements?	350-354DM	YES
206	Do project chiefs check the currency of aviation training of all personnel on their projects that will use aircraft?	-	YES
207	Do station personnel know that the Bureau Aviation Manager and the Aviation Management Directorate can be contacted through information contained in the USGS Safety homepage and Aviation Management Directorate homepage?	-	YES
208	Are all aircraft services procured through the Aviation Management Directorate, per 353 DM 1.2?	-	YES
209	Is Aviation Management Directorate approval obtained prior to flights on cooperator aircraft (military, other public agency, or affiliate) per 351 DM 4?	-	YES
210	Are flights hours reported to the Aviation Management Directorate, in accordance with 350 DM 1.8?	-	YES
211	Do persons who fly missions or supervise aviation activities understand the use of correct billee codes?	-	YES
212	Are all flights for which the USGS is not charged (including affiliate, cooperator, or volunteer aircraft) reported as non-revenue via an OAS-23 form?	-	YES
213	Have all persons who fly missions or supervise aviation activities received the required aviation user safety training?	-	YES
214	Have supervisors of persons who use aircraft received the required Aviation Management Training for Supervisors (M3)?	-	YES
215	Is Flight Following being conducted and recorded as per DM? [Note: Vendor flight following must be Agency approved to meet requirements.]	-	YES
216	Are Mishap Response Plans completed for each mission?	-	YES
217	Does your station have current local area hazard maps for all areas to be flown at less than 500 feet above the surface, per 352 DM 1.9(D)(2)?	-	NA
218	Prior to each mission, do personnel visually inspect the pilot qualification and aircraft data cards for current authorization by Aviation Management Directorate to fly the mission, in accordance with 353 DM 2.5(B)(4)?	-	YES
219	Do station personnel use personal protective equipment (fire-retardant clothing and gloves, aviator's helmet, and leather boots extending above the ankle) on all special-use flights, per the Aviation Management Directorate Aviation Life Support Equipment Handbook (ALSE)?	-	YES
220	If station personnel use alternate personal protective equipment, is a written waiver available on request?	-	YES
221	Do station personnel use personal flotation devices on all over-water flights conducted in single-engine aircraft, as stipulated in the ALSE Handbook?	-	YES
222	Is an aircraft weight and balance calculation performed before each flight per 352 DM 1.9H?	-	YES
223	Per 351 DM 1.5B, is a crew and passenger safety briefing given prior to each flight encompassing the following? (1) enplaning/deplaning passengers, (2) smoking policy, (3) seat belt/shoulder harness, (4) oxygen equipment, (5) Emergency Locator Transmitter, (6) fire extinguisher, (7) first aid kit, (8) emergency exits, (9) gear and cargo security, (10) survival equipment, and (11) fuel and electrical shut-off? [Capitalization changes only.]	-	YES
224	Is hazardous material transported in accordance with the Interagency Aviation Transport of Hazardous Materials Handbook and are employees trained in Hazardous Materials Transportation?	350-354DM	NA
225	Are all aircraft accidents or serious mishaps reported immediately to the Aviation Management Directorate at the 24-hour number, 1-888-4MISHAP, per 352 DM 6?	-	YES
226	Do all personnel who use aircraft know about and use the	-	YES



SAFECOM system (www.safecom.gov)?

Does your unit ever write end-product contracts for products procured through aviation (air photos, animal tagging, etc.)?

NA

Has the organization established an obstruction evaluation program and use of structural aircraft warning markers in compliance with Title 14, Code of Federal Regulations (CFR), Part 77?

NA

Has the organization compiled with obstruction standards that pertain to structural height and proximity to airports (structures that exceed an overall height of 200 feet above the surrounding terrain or of lesser height located within 20,000 feet of an airport or 5,000 feet of a heliport) by submitting a request for an Federal Aviation Administration (FAA) aeronautical study via completion of FAA Form 7460-1, Notice of Construction or Alteration, to the respective FAA Regional Office, along with a list of existing marked or unmarked structures and necessary actions or modifications made to conform to FAA recommendations, and are results of FAA aeronautical studies retained in permanent files?

NA

Do personnel use firearms for defense against dangerous wildlife or for specimen collection?

SM 445-2-H Ch 29 YES

Do certain personnel use or plan on using pepper spray for defense against dangerous wildlife?

SM 445-2-H Ch 44 NO

Do you have personnel that use firearms, capture nets, or dart guns for specimen collection in their biological research?

USGS 445-2-H, Chapter 29 YES

For all employees authorized to use a firearm as part of their official duties, is a Certificate of Need issued only for the timeframe required and, at no time, issued to cover more than a 12-month period?

SM 445-2-H Ch 29 YES

Are general guidelines for Sensitive Property for firearms followed; i.e., is the item stored in locked facilities when not in use, removed from public view when left in an unattended area for even short periods of time, and safeguarded when on travel status?

SM 445-2-H Ch 29 YES

Do employees that use a firearm on official business complete a Qualification Inquiry self-certifying they have not been convicted of felony crimes prior to approval of the Certificate of Need or participation in firearms training, and that a new Qualification Inquiry is submitted for each new Certificate of Need or firearms training course?

SM 445-2-H Ch 29 YES

Do employees successfully complete an appropriate USGS-approved Basic Firearms Safety Course, which includes the 24-hour Basic Firearms Safety Course for Defense Against Wild Animals (Basic-Defense Course) prior to being certified to use a firearm?

SM 445-2-H Ch 29 YES

Are employees, volunteers, or cooperators using watercraft for mission work?

SM 445-2-H Ch 31 YES

How many motorized watercraft less than 26 feet are onsite?

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How many motorized watercraft greater than 26 feet are onsite?

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How many non-motorized watercraft (e.g., canoes, kayaks, row boats, rafts) are onsite?

12

Do you have any other specialized watercraft (e.g., airboats, hovercraft, jet skis, etc.) onsite?

NO

How many Motorboat Operator Certification Course (MOCC) certified Operators are onsite?

BLANK

How many MOCC certified Instructors are onsite?

BLANK

Provide a name, title, and phone number for the person responsible for maintaining MOCC Training records.

Keith Miles,
Supervisory
Research Wildlife
Biologist, 530-752-
5365

Are USGS watercraft outfitted with the necessary equipment for safe operation in all expected conditions to include, as a minimum, validated visual distress signals, bailing device, operational dead man's switch, and functional navigational lights for Class A watercraft (less than 16 feet) and Class 1 watercraft (16 feet to less than 26 feet)?

SM 445-2-H Ch 31 YES

Do all watercraft have an anchor and line, first aid kit, tool kit,

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communications equipment (i.e., operated on open waters), navigation aids for operation outside sight of land, and a compliance checklist for each state in which the watercraft will be operated with special consideration given for the use of emergency location devices such as an EPIRB or a PLB where situations warrant (such as large bodies of water, remote rivers and coastal areas)?

SM 445-2-H
Ch 31 YES

611 Is special lighting that meets specifications of 33 CFR 88.12 placed on the watercraft when the watercraft is being used in the performance of public safety activities or when the activity may pose a hazard to the public, such as when making tag-line measurements or when towing?

SM 445-2-H
Ch 31 NA

612 Do all persons wear a properly fitted U.S. Coast Guard approved personal floatation device (PFD) at all times while on board Class A or Class 1 vessels?

SM 445-2-H
Ch 31 YES

613 Are all operators of USGS watercraft properly trained, tested and MOCC Certified or are employees practicing motorboat operation under the supervision of a certified MOCC Operator aboard the watercraft?

SM 445-2-H
Ch 31 YES

614 Are personal floatation devices (PFD's) international orange in color, equipped with retro-reflective tape, inspected by the wearer prior to and after each use, and destroyed if damaged or defective or not meeting code?

SM 445-2-H
Ch 31 YES

615 Are all auto-inflating Suspender Type Floatation Devices (STFDs) U.S. Coast Guard approved and international orange in color, and are maintenance logs being kept by the individual wearers, according to USGS Policy?

SM 445-2-H
Ch 31 NA

616 Are STFDs that are not U.S. Coast Guard approved used in non-boating situations only (e.g., wading streams, making measurements from cableways and bridges, and working from docks and piers)?

SM 445-2-H
Ch 31 NA

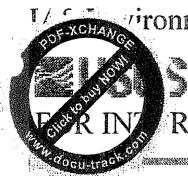
617 Is cold-water protective equipment (e.g., exposure suits, coveralls, jackets, and/or immersion suits) provided where cold-water conditions pose a hypothermia hazard (water temperature of less than 21 degrees Celsius [70 degrees Fahrenheit]) during watercraft operations, and are all personnel on board trained in the use of this equipment?

SM 445-2-H
Ch 31 NA

618 Are periodic inspection and maintenance programs established for all USGS watercraft made by qualified personnel, with U.S. Coast Guard inspection services utilized to the maximum extent available and deficiencies corrected before the watercraft is returned to service and appropriate records of service maintained?

SM 445-2-H
Ch 31 YES





INTERNAL ACCESS ONLY



Occupational Safety, Health and Environmental Inspection and Abatement System

IAS Audit Edit

Dixon Field Station - WERC

Logon:

Eric Williams
WR ORS/BMS Staff
345 Middlefield Road
Bldg 1
Menlo Park, CA 94025

SAFSEL951

Question Number	Question Text	Requirement	Response	Comments
36	Are annual action plans developed and goals established that focus on accident prevention and improving program weaknesses?	SM 445-2-H Ch 3	YES	
38	Are safety and health responsibilities included in supervisory, manager and collateral duty position descriptions and performance plans?	-	YES	
41	Do individuals with assigned safety and health responsibilities have the authority and resources to perform their duties?	SM 445-2-H Ch 2	YES	
42	Do you have an Awards Program in place?	SM 445-2-H Ch 10	YES	
43	Does your facility have a Safety Committee?	SM 445-2-H Ch 9	YES	
45	Do you use safety awareness and promotional programs?	SM 445-2-H Ch 2	YES	
46	Is the OSHA 300A completed annually and posted as required by 29 CFR 1960 requirements?	29 CFR 1960	YES	
47	Are hazards being eliminated and tracked through final abatement?	-	N/A	
48	Are contractor, concessionaire, volunteer, public and off-the-job safety programs established that provide equivalent safety protections for subject personnel?	SM 445-2-H Ch 32	N/A	
50	Are all accidents involving personal injury and/or property damage reported in SMIS and investigated, and are corrective action(s) taken, as appropriate to prevent recurrence?	-	YES	
51	Have employees, supervisors, and executives (GS14 and above) completed the required DOIU Orientation Safety Training?	-	YES	
52	Are all areas and operations of the workplace, including office operations, inspected at least annually?	-	YES	
886	Did the Collateral Duty Safety Program Coordinator (CDSPC) receive orientation to the USGS safety program within 45 days of appointment?	-	YES	
887	Has the CDSPC received a minimum of 24 hours of formal health and safety training within 6 months if newly hired?	-	YES	
888	For a person who has been in a CDSPC position 1 year or more, has he or she received a minimum of 16 additional hours of formal safety and health training per year?	-	N/A	
889	Do employees know how to report unsafe conditions through the IAS system?	-	YES	
892	Is emergency personal protective equipment well maintained and properly located?	SM 445-2-H Ch 36	YES	
893	Are emergency chemical spill equipment and materials well maintained and properly located?	SM 445-2-H Ch 36	N/A	

150.00 - Other
finances are

Does your site have an annual safety budget? Need to be able to

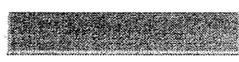
			provided as needed.
894	capture if they have one or, estimate what has been spent on safety over the past year.	-	
47	Is electrofishing equipment inspected before each use?	SM 445-2-H Ch 42	N/A
56	If required, do you have a written Chemical Hygiene Plan?	1910.1450	N/A
57	If required, do you have a Confined Space Program?	1910.146	N/A
58	If required, do you have an Emergency Response Plan (for release of hazardous substances)?	1910.120	N/A
59	If required, do you have a Bloodborne Pathogen (BBP) Exposure Control Plan?	1910.1030	N/A
60	If required, do you have a Fall Protection Plan?	USGS 445-2-H, Chapter 44	N/A
61	If required, do you have a Hazard Communication Program?	1910.1200	N/A
62	If required, do you have a Health and Safety Plan (HASP) for hazardous waste cleanup operations?	1910.120	N/A
63	If required, do you have a Hearing Conservation Program?	1910.95	N/A
64	If required, do you have a Lockout/Tagout Program for employees who service or maintain machines or equipment in which the unexpected energization or start-up of the machines or equipment, or release of stored energy, could cause injury to employees?	1910.147	N/A
67	Have you conducted an annual fire evacuation or shelter in place drill to test your Occupant Emergency Plan?	-	YES
68	If required, do you have a Respiratory Protection Program?	1910.134	N/A
895	Does the cost center have a written safety plan that includes office call-in procedures?	USGS 445-3-H 3.2	YES
896	What is the dollar figure of your cost center's annual safety budget?	SM 445-2-H Ch 2	150.00
897	Is the safety plan updated annually?	SM 445-2-H Ch 2	YES
898	Do you have an Occupant Emergency Plan?	SM 445-2-H Ch 36	YES
899	Is the OEP updated annually?	SM 445-2-H Ch 36	YES
71	Are employees who are rocket netting trained in explosives use?	SM 445-2-H Ch 39	YES
72	Are employees who transport explosives qualified and trained in accordance with Department of Transportation requirements?	SM 445-2-H Ch 39	YES
900	Have all personnel who participate in blasting operations attended annual refresher training?	SM 445-2-H Ch 38	N/A
904	Are personnel who participate in blasting operations initially trained in basic explosives safety prior to their use?	SM 445-2-H Ch 38	N/A
88	Is training provided to employees in jobs that have been identified as having ergonomic hazards?	SM 445-2-H Ch 43	YES
901	Are fire extinguishers inspected monthly?	1910.157	YES
902	Are the extinguishers serviced annually?	1910.157	YES
903	4. Are the extinguishers properly maintained (i.e., fully charged and in good repair)?	1910.157	YES
906	Are sprinkler-system safeguards in working order?	1910.37	N/A
907	Are alarm system safeguards in working order?	1910.37	N/A
908	Are fire door safeguards in working order?	1910.37	N/A
909	Are exit lighting safeguards in working order?	1910.37	YES
910	Are building exits adequately marked?	1910.37	YES
911	Are all exits provided with unrestricted access, i.e., unlocked or equipped with an emergency exit bar on the door that when pushed unlocks and opens the door?	1910.36	YES
912	Are all exit routes kept free and clear of all obstructions?	1910.37	YES
913	Are exit routes supplied with emergency lighting, where required, in the event of a power failure?	1910.37	YES
95	Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?	1910.106	YES
735	Are fire extinguishers selected and provided for the types of	1910.157	YES



	materials in areas where they to be used?		
	Do storage rooms for flammable and combustible liquids have explosive-proof lighting fixtures installed?	1910.106	N/A
	Is the storage room for flammable and combustible liquids equipped with a mechanical or gravity based ventilation system?	1910.106	N/A
916	Are NO SMOKING signs posted in areas where flammable or combustible materials are used or stored?	1910.106	YES
917	Are NO SMOKING signs posted on liquid petroleum tanks?	1910.106	N/A
99	Are machines that are designed for a fixed location (e.g., floor-mounted drill or grinder) anchored to prevent them from walking or moving ?	1910.212	N/A
102	Are all cord-connected, electrically operated tools and equipment effectively grounded or of the approved double-insulated type?	1910.243	YES
104	Where injury to operator might result if motors were to restart after power failure, has provision been made to prevent machines from automatically restarting upon restoration of power (e.g., magnetic starters)?	1910.213	N/A
105	Is compressed air used for cleaning purposes reduced to less than 30 psi?	1910.242	N/A
107	Are employees who operate powder-actuated tools trained in their use?	1910.243	N/A
918	Have employees who use chain saws been trained in the appropriate personal protective equipment (PPE) needed to be worn while operating a chain saw?	1910.266	N/A
919	Is the first aid and CPR training current as evidenced by a certification card?	1910.266	PARTIAL
922	Are all tools used by employees in good working order?	1910.242	YES
923	Are employees properly trained in the use of hand and power tools and other equipment?	1910.242	YES
924	Is powered moving equipment provided with appropriate safety guards or attachments?	1910.243	N/A
925	Are employees using all appropriate safety guards while operating powered moving machinery?	1910.243	N/A
926	Have employees who operate chain saws been trained in the safe use, operation, and maintenance of chain saws?	1910.266	N/A
927	Have employees who operate chain saws received first aid and CPR training?	1910.266	N/A
108	Are all worksites clean, sanitary, and orderly?	1910.22	YES
109	Are work surfaces kept dry, or are appropriate means taken to ensure that surfaces are slip-resistant?	1910.22	YES
121	Are laboratory employees provided with information and training to ensure that they are apprised of the hazards of chemicals present in their work area?	1910.1450	N/A
122	Are fume hoods inspected annually for proper airflow and for clean working surfaces (e.g., fume hoods are not to be used as storage areas for hazardous chemicals)?	1910.1450	N/A
753	Are the written Chemical Hygiene Plan (CHP) and Standard Operating Procedures (SOPs) for lab activities reviewed and updated whenever laboratory operations change or at least annually?	1910.1450	BLANK
123	Are ladders in good condition with no broken, crooked, or missing steps, rungs, or cleats?	1910.25	YES
124	Are metal ladders prohibited in areas where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures, or circuit conductors?	1910.333	YES
131	Does the cost center have an effective plan for providing competent emergency medical care to employees, visitors, and the public?	-	YES
132	Are members in the field crew certified in First Aid and CPR?	1910.151	PARTIAL
134	Are eye wash facilities and a quick drench shower within the work area where employees are exposed to injurious corrosive materials?	1910.151	N/A
931	Are first aid supplies available at each work site?	1910.151	YES
932	Are first aid supplies available in each government vehicle used for field work?	1910.151	YES



146	Are all weights, compressed cylinders, and other heavy or large items in each vehicle secured and gasoline and other hazardous materials transported in leak-proof containers and secured to prevent movement?	SM 445-2-H Ch 16	N/A
147	Do all USGS employees who operate a motor vehicle receive defensive driving training no less than once every 3 years?	SM 445-2-H Ch 16	YES
148	Do employees who operate All Terrain Vehicles (ATVs) and cycles successfully complete an accredited All Terrain Vehicle/Cycle Operator's course?	SM 445-2-H Ch 16	YES
149	Are your vehicles that are used to transport cargo equipped with safety screens between the passenger compartment and cargo area?	SM 445-2-H Ch 16	N/A
921	Are routine visual inspections of vehicle safety components (i.e., tires, windshield wipers, headlights, tail lights, turn signals, mirrors, etc.) performed prior to vehicle use?	SM 445-2-H Ch 16	YES
933	Does the employee maintain and annually update the Motor Vehicle Operator's Certification Form?	SM 445-2-H Ch 16	YES
158	Do employees possess a valid State driver's license for the class of vehicle they are required to operate?	SM 445-2-H Ch 16	YES
	Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?	1910.24	YES



U.S. Geological Survey, a bureau of the
 U.S. Department of the Interior.
http://130.11.8.41/IAS_USGS_Audit_Print.asp, 5/2/2007, Feedback



USGS Western Region WRD Safety Inspection Dixon, CA

The Western Region Safety Office conducted a safety assistance visit on October 19th, 2005 for the Dixon Water District offices. The purpose of this visit was to familiarize the new Collateral Duty Safety Officer, Scott Jackson, with safety inspection techniques.

A through inspection was conducted in August by Cynthia Duffield of the Bureau's Safety office. This facility was found to be well maintained and had improved safety and security issues greatly from the prior year's visit. The following is a list of safety inspection findings identified during this visit:

Main Building

- Lab fume hood labeled "Do Not Use" however there were chemicals stored in it. This unit should be removed because it does not meet standards.
- Stove in the lab area – Food should not be prepared or stored in a laboratory.
- Tall shelves and bookcases should be mounted to the wall to prevent tip over in the event of seismic activity.
- Fire Extinguisher not labeled – All extinguishers should have a sign posted on the wall above them.
- OSHA Postings need to be updated.

Main Bldg. Storage/Shop Area

- Fire extinguisher blocked by tool chest – Fire extinguishers must be kept clear at all times. All fire extinguishers must be mounted on the wall, readily accessible and identified with a sign.
- Electrical Panels blocked – All electrical panels must have 36 inches of clearance around them.
- Storage around flammable storage cabinet – This area around flammable storage cabinets must remain clear of flammable material.
- Guards missing on drill press – The drill press pulleys must have covers on them and the unit must be bolted to the floor. The drill press had indications of recent use.
- Table saw not bolted to the floor – Floor standing power tools must be bolted to the floor.
- Power tools must have an anti-restart switch to prevent automatic starting when power is restored following a power outage.
- Flammable storage cabinet next to emergency exit – Emergency exits should be clear of any hazards that could prevent evacuation.
- General clutter of paper and trash – The shop area should be kept clean and clear of excess paper and trash to reduce fire fuel sources.
- Overhead storage area not load tested – Overhead storage must be tested and labeled to ensure load limits are not exceeded.

General Machine Shop and Warehouse Safety Issues

Note: Employees must be trained on proper use and safety hazards of powered tools and equipment – This training must be documented.

- All powered shop machinery must be bolted to the floor. Most notably the drill press. These machines are notoriously top heavy and prone to tip over.

Trailer Lab

- Material Safety Data Sheets (MSDS) need to be updated. Employers shall have a material safety data sheet in the workplace for each hazardous chemical which they use.
- Fire extinguisher blocked – Fire extinguishers must be kept clear at all times.
- Food and water samples are stored in the same refrigerator. Ensure all refrigerators used to store samples and chemicals are labeled “No Food”.
- Emergency Shower blocked and no eyewash solution in the eye wash station – Emergency showers and eyewash stations must remain clear and accessible at all times and inspected weekly.

Outside Storage Facility

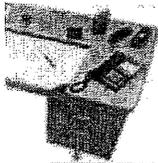
- Batteries should be stored in secondary containment such as a “Rubbermaid” tote in case of leakage.

Compound

- Gas cans stored on the ground by storage shed – Flammables must be stored in an approved flammable storage cabinet. Measures should be taken to contain any leaks that may occur inside these facilities. They should also be labeled “Flammable storage – Keep Fire Away”.

Conclusion

For improvement, I recommend that a more proactive ergonomic program be implemented to address computer users who utilize older office furniture that is not adjustable. Not having an ergonomically correct workstation can lead musculoskeletal disorders that often take a long time to recover from. A good ergonomic chair is the most important part of a workstation because it supports and positions the body properly to prevent injury. Also, good housekeeping is important in keeping important areas clear and reducing hazards throughout the facility. For questions or further information please contact Eric Williams at (916) 278-9429.



Eric D
Williams/ORS/USGS/DOI@U
SGS
09/17/2007 03:38 PM

To Keith Kuczka/DEN/OIG/DOI/OIG
cc
bcc
Subject Re: Fw: Safety Reporting site

History

This message has been forwarded.

No problem.

The IAS system has only been in place for this year. Last year was a beta test of the new system. However, Dixon did participate in the audits.



IAS_USGS_Dixon_2006_Audit.pdf IAS_USGS_Dixon_2007_Audit.pdf

Here is the most recent external audit. I performed this audit and remember looking at the explosives magazine. I did not note any discrepancies so there is no mention of it in the audit. The audit only lists noted discrepancies.



Dixon WRD Safety Inspection.doc

I'll see if the center can find any documentation from the acquisition.

Eric Williams
USGS, Western Region Safety Manager
3020 State University Dr. East, Suite 4005
Sacramento, CA 95819

Tel.: (916) 278-9429
Cell: (916) 870-9680
Fax: (916) 278-9430
<http://owrs.wr.usgs.gov>

Material Safety Data Sheet

Cartridges; Power Device

Rocket Chi

QUICK IDENTIFIER

Common Name: (Used on label and list)

May be used to comply with OSHA's Hazard Communication Standard, 29CFR 1910.1200. Standard must be consulted for specific requirements.

SECTION 1 -

Manufacturer's Name: **Winn-Star, Inc.**

Address: **P.O. Box 213**

City, State, ZIP: **Carbondale, IL 62959**

Emergency Telephone No.: **618-964-1811**

Other Information Calls: **618-964-1811**

Signature of Person Responsible for Preparation (Optional): _____

Date Prepared: **8/17/92**

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	% (optional)	OSHA PEL	ACGIH TLV	Other Exposure Limits	CAS NO.
Class 2F Goex Black Powder	N/A	Unknown	Unknown	N/A	N/A
M-6 Howitzer Propellant	N/A	Unknown	Unknown	N/A	N/A
Double Base Nitrocellulose Compound					

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: **N/A**

Vapor Density (Air = 1): **N/A**

Specific Gravity (H₂O = 1): **N/A**

Vapor Pressure (mm Hg): **N/A**

Solubility in Water: **N/A**

Reactivity in Water: **N/A**

Appearance and Odor: **N/A**

Melting Point: **N/A**

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point: **350 F. C.** Method Used: _____

Auto-Ignition Temperature: **350 F**

Flammable Limits in Air % by Volume: **N/A**

LEL Lower: **N/A**

UEL Upper: **N/A**

Extinguisher Media: **N/A**

Special Fire Fighting Procedures: **Do not attempt to extinguish. Allow to burn out**

Unusual Fire and Explosion Hazards: **Keep away from flame, fire and stray electrical currents**

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability Unstable Stable Conditions to Avoid **TEMPERATURES IN EXCESS OF 200 DEGREES F. STRAY ELECTRICAL CURRENTS**

Incompatibility (Materials to Avoid) **N/A**

Hazardous Decomposition Products **N/A**

Hazardous Polymerization May Occur Will Not Occur Conditions to Avoid **N/A**

SECTION 6 - HEALTH HAZARDS

1. Acute (Immediate) **N/A** 2. Chronic (Delayed Effect) **N/A**

Signs and Symptoms of Exposure **N/A**

Medical Conditions Generally Aggravated by Exposure **N/A**

Chemical Listed as Carcinogen or Potential Carcinogen **N/A** National Toxicology Program Yes No I.A.R.C. Monographs Yes No OSHA Yes No

Emergency and First Aid Procedures **N/A**

ROUTES OF ENTRY

1. Inhalation	N/A
2. Eyes	N/A
3. Skin	N/A
4. Ingestion	N/A

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage **STORE IN A COOL ENVIRONMENT. KEEP DRY**

Other Precautions **N/A**

Steps to be Taken in Case Material is Released or Spilled **GENERAL SWEEP UP AND DISPOSAL**

Waste Disposal Methods (Consult federal, state, and local regulations) **OPEN AIR BURNING**

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type) **N/A**

Ventilation Local Exhaust **N/A** Mechanical (General) **N/A** Special **N/A** Other **N/A**

Protective Gloves **YES** Eye Protection **YES**

Other Protective Clothing or Equipment **COTTON CLOTHING PREFERRED TO REDUCE STATIC ELECTRICITY**

Work/Hygienic Practices **N/A**

ATTACHMENT A

SAFETY PROCEDURES FOR TRANSPORTING ROCKET NET CHARGES

1. Vehicles used for the transportation of explosives shall not be loaded beyond the rated hauling capacity of the vehicle. The explosives shall be secured to prevent shifting of the load or dislodgement from the vehicle. Loads will not extend above the walls of the vehicle.
2. All vehicles used for transportation of explosives shall be in the charge of and operated by a person who is physically fit, careful, reliable, able to read and understand English instructions, and not addicted to the use of intoxicants and narcotics. The person must be properly licensed by the state to operate the type of vehicle driven and the vehicle must be in good repair and mechanically sound. Note: Youth Corps enrollees shall not operate a vehicle involved in the transportation of explosives.
3. No spark producing tools, oils, matches, firearms, electric storage batteries, flammable substances, acids, or oxidizing or corrosive compounds shall be carried next to the explosives. No person may carry a flame or spark producing device on or within 25 feet of a motor vehicle which contains explosives.
4. Vehicles transporting explosives shall be equipped with two fire extinguishers having a rating of 10 B:C placed at strategic points.
5. A vehicle containing explosives shall not be taken into a garage or repair shop or parked in congested areas or stored overnight, or at any other time, in a public garage or similar building.
6. Vehicles transporting explosives shall be operated with extreme care. Full stops shall be made at approaches to all RAILROAD CROSSINGS and main highways. The vehicles shall not proceed until it is known that the way is clear.
7. If the vehicle does not have a closed body, the open bed must be covered by a moisture proof and flameproof cover to protect the explosives against sparks and moisture while being transported.
8. Persons handling explosives are encouraged to wear cotton clothing to reduce the buildup of static electricity and subsequent sparking.
9. All vehicles shall be inspected before transporting to ensure that all electrical wiring is securely fastened to prevent short circuits.
10. When a motor vehicle which contains hazardous materials is being refueled:
 - (a) Its engine must not be operating; and
 - (b) A person must be in control of the fueling process at the point where the tank is filled.

THIS IS BY NO MEANS A COMPLETE AND ALL ENCOMPASSING LIST AND SHOULD BE USED ONLY AS A GUIDE. THIS LIST MAY BE MODIFIED AS NECESSARY TO IMPROVE THE SAFETY OF THE OPERATION.

ATTACHMENT B

USE OF ROCKET NET CHARGES

Loading the rocket:

1. Unscrew nozzle from rocket body.
2. Remove any debris from inside the rocket body; be certain rocket nozzles are clear.
3. Insert rocket charge into rocket body.
4. Pass lead wire through one of the nozzle holes and take up slack lead wire.
5. Replace the nozzle on the rocket body and tighten securely (a minimum of three complete turns).
6. Inspect connection with net.

Hook -up to Power Supply and Firing:

1. Connect charges in parallel with the firing lines after making sure firing lines are Disconnected from power supply.
2. Check circuit continuity with a galvanometer after hook-up is complete.
3. It is desirable to re-check continuity just prior to each trapping attempt.
4. Firing is accomplished by completing the circuit to the power source with the firing lines.

Placement and Use

For actual placement and use of rocket-netting techniques for various species, refer to Dill (1969) as well to Peterle (1952) for sharp-tailed grouse, Webb (1960) for turkeys, and Hawkins et al (1968) for white-tailed deer. If it is necessary to use remote controlled firing devices, refer to Grieb and Sheldon (1956) or Sharp and Lokemon (1980).

Safety Rules

1. Never stand or work in front of a cannon during arming or in front of a loaded rocket.
This applies to all testing of circuit continuity, net arrangement work, etc.
2. The crank for the firing source, or "hellbox" should be carried by the person doing the arming of the cannon. If a blasting machine is used, keep it with you while loading. This prevents accidental discharge of firing source energies during loading.
3. All firing-Circuit continuity should be checked with a blasting galvanometer, Some commercial ohm meters can conceivably fire explosive devices. Several large explosive companies make explosive circuit galvanometers; Atlas Powder Co., Model No. 2 or equivalent.
4. All electrical connections should be of a firm and secure quality. Never skimp on the quality of electrical connections or firing cables.

5. Firing lines should always remain shunted * until the area is cleared of personnel. Shunting should be maintained at the lead wires of the cartridge and at the ends of the firing cable. Immediately after firing, shunt the ends of the firing cable. If open (unshunted) lead wires are brushed against synthetic fiber clothing, especially in cold weather, residual static electricity could be of such intensity to fire unshunted cartridges.
 6. Remote controlled sites should be at least one-half mile minimum distance from live circuits. Wattage outputs, climatic conditions and energy requirements are so varied that is impossible to establish a safe minimum area. The paramount consideration should be: Never be in such a position as to be in danger if an accidental firing does occur. Low flying aircraft and high voltage transmission lines under ideal conditions can also emit enough energy to trigger electrical explosive devices .
 7. In the event of an undetermined misfire, a minimum of 30 minutes should be allowed before proceeding to disarm the rocket.
 8. Never expose explosive devices to unnecessary heat or abuse.
 9. Do not handle charges or get in front of an armed rocket during an electrical or dust storm.
 10. Only the required number of charges necessary to perform the planned work should be carried to the netting site.
- Shunting means clipping or twisting the ends of the lead wires firmly together.

GUIDE 112

EXPLOSIVES - DIVISION 1.1, 1.2, 1.5, OR 1.6; CLASS A OR B
(Click To See CFR 49)

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- MAY EXPLODE AND THROW FRAGMENTS 1600 meters (1 MILE) OR MORE IF FIRE REACHES CARGO.
- For information on Compatibility Group" letters, refer to Glossary" section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire

- If rail car or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 1600 m (1 mile) in all directions; also, initiate evacuation including emergency responders for 1600 m (1 mile) in all directions.
- When heavily encased explosives are not involved, evacuate the area for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CARGO Fires

- DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!
- Stop all traffic and clear the area for at least 1600 meters (1 mile) in all directions and let burn.
- Do not move cargo or vehicle if cargo has been exposed to heat.

TIRE or VEHICLE Fires

- Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from

maximum distance to prevent fire from spreading to cargo area.

- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- **DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.**
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.



U.S. Geological Survey Manual

SM 445-2-H CHAPTER 14

Safety And Health Training

14.1 Purpose. To specify the minimum Occupational Safety and Health Program (Program) requirements for safety and health training for Department of the Interior (Department or DOI) and U.S. Geological Survey (Bureau or USGS) managers, supervisors, safety and health committee members, safety and occupational health personnel, inspectors, employees, and employee representatives.

14.2 Reference.

- A. 29 CFR 1960, Subpart H, Training.
- B. OSHA Pub. 2254, Training Requirements in OSHA Standards and Training Guidelines.
- C. USGS SF 182, Training Codes.

14.3 Requirements. The USGS will develop and implement an annual safety and health training plan that encompasses the following:

- A. All personnel will receive orientation training in the safety, health program, including their rights and responsibilities under the program, and applicable information on the Occupational Safety and Health Act of 1970, Executive Order 12196, 29 CFR 1960, this document and other applicable regulations.
- B. Personnel will be given specialized on-the-job or classroom training, or if approved, demonstrate proficiency through work experience or education to equip them with the knowledge and skills to safely perform assigned tasks for each hazardous work activity and to respond effectively to recognized emergencies, such as fires, injuries, or other types of accidents. Certification procedures for high-hazard tasks such as the use or transporting of explosives will be documented and carried out by certified examiners.
- C. Formal classroom training and certification that is given for high-hazard activities will be recorded by the USGS and maintained at least 5 years. Collateral Duty Safety Program Coordinator (CDSPC) and occupational health officers and supervisors will be given appropriate hazard recognition training within 6 months of being selected for the task. Safety and health

committee members should be given similar training.

D. Formal training and certification programs will be evaluated periodically.

14.4 Organizational Collateral Duty Safety Program Coordinator Training.

A. Within 45 days of appointment, CDSPC's shall receive an orientation to the USGS safety program, reviewing basic duties and responsibilities, organization, available resources, and USGS safety policies from the respective Regional Safety Manager or Regional Safety Officer as appropriate. A USGS safety orientation package will be developed by the Bureau Safety Manager, in conjunction with the Regional Safety Managers to facilitate meeting this requirement.

B. Within 6 months of appointment CDSPC's shall receive and document a minimum of 24 hours of training from one of the following sources:

- (1) OSHA Collateral Duty Safety Program Coordinator/Officer Course # 600 or equivalent.
- (2) OSHA sanctioned 10-hour 1910/1926 Standard Overview Course.
- (3) DOI Annual Safety and Health Seminar.
- (4) Bureau Safety Manager approved/Regional Safety Manager/Officer sponsored and/or conducted CDSPC training.
- (5) Any basic safety management course offered by an accredited college, university, or Federal agency.
- (6) Any safety management seminar or class sponsored by a professional safety organization (i.e., American Society of Safety Engineers).
- (7) After initial formal training, CDSPC's shall receive and document a minimum of 16 hours per year of additional formal safety training.

(C) The Department's Safety and Occupational Health Seminar will provide training for full-time and Collateral Duty Safety Program Coordinator health officers, managers, supervisors, employees and employee representatives.

14.5 Personnel Training Requirements.

A. Animal Awareness. Personnel working in field locations where dangerous wild animals may be encountered shall receive animal awareness and avoidance training. Training shall include at a minimum: type of dangerous wild animals, behavioral traits, recognition of signs of animal activity, how to avoid attracting or provoking, and how to react during encounters or if attacked. Training shall be provided before work begins in such locations and at least every 3 years thereafter.

B. Aviation Training. Personnel shall receive training prior to riding in noncommercial type aircraft and shall maintain currency as specified by the Office of Aircraft Services and Chapter 27 of this Handbook.

C. Bloodborne Pathogens. Personnel who are designated first aid providers will receive training upon initial assignment and annually thereafter in the hazards of and prevention of exposure to bloodborne pathogens. Subject training may be in conjunction with organizational first aid and/or CPR training. All designated first aid responders shall also be trained in the hazards of bloodborne pathogens and shall be provided with appropriate personal protective equipment. If they render assistance in a first aid accident, they shall be offered the hepatitis B vaccine within 24 hours of the time they rendered assistance. If they experience exposure to a bloodborne pathogen (e.g., a splash to the eyes or exposure of mucous membrane), they shall be provided with a follow-up medical evaluation (see Chapter 25).

D. Chemical Hygiene. Personnel using hazardous materials in a laboratory environment shall receive chemical hygiene training as described in Chapter 21 of this Handbook, with refresher training every 3 years.

E. Confined Space Entry. Personnel entering a confined space or serving as attendants shall receive training prior to performance of confined space entry duties as required described in Chapter 40.

F. Diving. Personnel who conduct diving activities shall be certified and receive initial and refresher training as described in Chapter 28 of this Handbook.

G. Electrical Work. Through education, certification, or training, personnel shall have knowledge of the hazards of electrical energy. Personnel who repair, modify, or work on any energized electrical system, instrument, or machinery shall be aware of the training requirements of lockout/tag out procedures as described in Chapter 37 of this Handbook.

H. Emergency Response Hazardous Material Spill Containment and Cleanup. Personnel or contractors designated to take defensive measures or contain hazardous material spills shall receive first responder operational level certification as defined by OSHA (see 29 CFR 1910.120). A minimum of 8 hours of training is required. Personnel who are members of organized USGS spill teams shall receive training appropriate for the tasks to be completed as

part of the emergency response. Personnel assigned to entry team or decontamination duties shall be certified to the hazardous materials technician level as specified by OSHA (see 29 CFR 1910.120). A minimum of 24 hours of training is required. Personnel who fill support roles shall receive certification to at least the first responder operational level as defined by OSHA. Eight hours of refresher training shall be provided to personnel of organized USGS spill teams every year, as a minimum. Personnel shall not attempt clean up any hazardous material spill without appropriate training, personal protective and cleanup equipment, and knowledge of the material's hazards. The amount spilled, degree of toxicity, and resources available to clean up the spill must be properly evaluated.

I. Explosives Work. Personnel shall receive a minimum of 24 hours of initial training in basic explosives safety, with refresher training provided every 3 years as described in Chapter 38 of this Handbook. Topics shall include, as a minimum, hazards of each class of explosives, dangers of static electricity, storage and transportation requirements, initiation devices, and personal protective devices.

J. Field Work. Personnel who conduct work where the location of the work is greater than 15 minutes from professional medical services should receive basic first-aid and CPR. For locations where medical services are greater than 1 hour away, personnel shall also have advanced first-aid or wilderness first-aid training. Where multiple personnel are assigned to a specific field location, at least two shall be certified in first-aid and CPR. Personnel shall receive refresher training in first aid every 3 years, and CPR annually or as required by the organization administering the training and certification program (e.g., American Red Cross). Personnel shall receive additional training commensurate with the fieldwork location. Training to address hazards associated with extreme temperatures, coldwater survival, wilderness conditions, and high altitude shall be given to employees likely to encounter these conditions. Subject field hazard training shall be conducted upon initial employment and every 3 years thereafter.

K. Firearm Use. No personnel shall be issued a firearm unless a certificate of need has been authorized by the personnel's supervisor and the personnel have met all firearms training requirements as described in Chapter 29 of this Handbook.

L. Hazard Communication (HAZCOM). Personnel with the potential for being exposed to and handling or using hazardous materials shall receive initial Hazard Communication Training with refresher training every 3 years (see Chapter 20).

M. Hazardous Environments. Training shall be provided to all personnel working in hazardous environments to enable them to deal with the problems and working environments they may encounter. Such activities will include but are not limited to the following:

- (1) Arctic Survival.

- (2) Electrofishing.
- (3) In-Around Water/Ice Covered Water Locations.
- (4) Rocketnetting/Blasting Operations.
- (5) Fire Fighting.
- (6) Powder Actuated Equipment.
- (7) Rock Climbing and Repelling.
- (8) Special Vehicles: watercraft, airboats, hovercraft, personal watercraft, water, garbage and heavy trucks, snow machines/mobiles, tracked vehicles, and mowers.
- (9) Stationary or Mobile Machinery and Equipment.
- (10) Biological Hazards (e.g., zoonotic diseases).

N. Hazardous Waste Sites. Personnel entering any hazardous waste site must receive training as required by the Occupational Safety and Health Administration (OSHA), prior to initial assignment and annually thereafter (see 29 CFR 1910.120). Only personnel listed on approved site plans will be allowed to perform work on hazardous waste sites.

O. Materials Handling. Personnel who use manual or motorized forklift trucks shall have supervisory authorization and receive initial and refresher training every 3 years in their operation. Personnel required to routinely lift objects of greater than 35 pounds as part of their job assignment shall be instructed in proper lifting techniques, proper back care, and exercises upon initial assignment and every 3 years thereafter.

P. Machine Shop and Woodworking and Portable Power Tools. Supervisors shall certify that personnel are experienced and knowledgeable in the safe operation of machine shop tools, portable power tools, and other equipment prior to their operating such equipment. New personnel should serve an apprenticeship or receive formal training under an experienced senior employee before unsupervised use of power tools and equipment. Refresher certification or formal training is required every 3 years.

Q. Mines. Personnel shall not enter any active mine without the approval of the mine owner and shall receive training to meet 30 CFR (Mine Safety and Health Administration) requirements. If personnel are to work in abandoned mines, they shall receive training in how to test for oxygen content of the air, toxic or explosive atmospheres, and roof and wall integrity.

R. Motor Vehicle Operation. Personnel operating any type of motor vehicle shall receive defensive driving. Specific requirements may be found in Chapter 16 of this Handbook.

S. Occupant Emergency Plan (OEP). Personnel who serve in emergency evacuation positions such as floor, area, stairwell, or elevator monitors shall receive training on the elements of the OEP plan and basic emergency evacuation procedures for the facility. Length of training should be commensurate with the scope and complexity of the OEP. All personnel shall receive training in the facility's OEP, including at least one evacuation drill per year and training covering basic fire prevention, "hands-on" fire extinguisher training, etc. Such training can usually be obtained from the local fire department (see Chapter 36).

T. Over-the-Water Activities Safety Training. All personnel who perform duties in this environment will receive safety training to include at a minimum the use of job hazard analyses (JHA's), the proper care of PFD's, and in-the-water training simulating the use of PFD's. Training will be provided for these employees prior to initial over-water work assignment with refresher training every 5 years. The office responsible for the work of these employees will conduct the training. The in-the-water training is to be conducted in a controlled environment. The In and Around Water/Ice Covered Water Location Safety Training Instructional Guidebook developed by the Water Resources South Dakota Office is provided as a minimum requirement syllabus for USGS Safety Training for Over-Water Activities. Instructional information presented in this manual, is intended for use as a guide for preparing a basic training program. Additional training materials specific to organizational standard operating procedures and practices are encouraged. Training sessions may also be supplemented with programs on swimming skills assessment, motorboat-operators certification, water survival, CPR, or water rescue.

U. Radiation. Personnel who use Nuclear Regulatory Commission (NRC) licensable ionizing radiation material shall receive appropriate training to maintain compliance with the NRC license authorizing the material and as described in Chapter 30 of this Handbook.

V. Respiratory Protection Program. Personnel who have the need to use respirators shall receive appropriate training and fit testing prior to use as described in Chapter 18 of this Handbook.

W. Watercraft Operation. Personnel operating any class watercraft shall receive initial training through the DOI, Motorboat Operator Certification Course (MOCC), with refresher training every 5 years, inclusive of PFD information, as described in Chapter 31 of this Handbook.

14.6 Responsibilities.

A. Bureau Safety Manager.

- (1) Develop a template personnel development plan (PDP) for use within the USGS.

- (2) Develop a template Collateral Duty Safety Program Coordinator PDP for use within the USGS.
- (3) Assist Regional Safety Managers in identifying, developing, or coordinating training programs.
- (4) Developing a Bureau system for documenting and tracking safety, health, and environmental training.
- (5) Promote cost effective means (i.e., Web-based/CD-ROM training) to assist regional and field components in meeting safety, health, and environmental needs.

B. Regional Safety Managers/Officers.

- (1) Conduct or coordinate safety, health, and environmental training within the Regions, such as Collateral Duty Safety and Environmental Coordinator Training, Defensive Driving, CPR/First Aid.
- (2) Assist field science program management in identification of resources to meet local training needs.
- (3) Review Regional Headquarters and science program training in conjunction with annual program assessments to evaluate compliance and address existing and future field-specific training needs.
- (4) Assist the Bureau Safety and Environmental Management Branch (SEMB) in establishment of a system to document and track safety, health, and environmental training at all organizational levels.

C. Organizational Managers and Supervisors.

- (1) Supervisors provide the resources to accomplish personnel training required in this Handbook for all applicable personnel under their control.
- (2) Document training accomplishments and forecasted training needs annually using the training codes listed in Appendix 14-1, USGS Safety Training Codes of this chapter.
- (3) Assist in identification of additional personnel safety training requirements through job hazard analysis or researching mandatory requirements that personnel must receive prior to carrying out unique job activities.

(4) Certify that personnel are experienced, knowledgeable, and technically qualified prior to assignment in potentially hazardous occupations (i.e., electrician, machinist) or operations (use of power tools, complex operations with high hazard materials) where personnel safety may depend on skill. New personnel should serve an apprenticeship or receive formal training under an experienced senior personnel allowing unsupervised performance of such tasks. Conduct program orientation of all personnel under their jurisdiction.

(5) Explain the policies, rules, and regulations, emergency procedures, and any special condition peculiar to personnel working environment during each new employee's first week on the job. This information will include the following:

(a) Presentation and discussion of the USGS, regional, and local organizational head safety and health policies.

(b) Identification and demonstration of safe working procedures related to personnel responsibilities, carefully pointing out inherent hazards.

(c) Discussion of any physical limitations to be considered before assignment of duties.

(d) Issuance of hard hats, gloves, or other personnel protective equipment needed for work. Explanation of the proper use and where to get other personnel protective equipment.

(e) Arrangements for required and needed training, including hazard communications, prior to the employee being assigned to a task involving hazardous materials and potential exposures.

(6) Obtain medical approval, fit testing, and training for personnel required to don respirators.

(7) Provide the following information to personnel involved in motor vehicle or special purpose vehicle operations:

(a) Authorized vehicle use

(b) Vehicle accident reporting kit (DOI Form DI-135)

(c) Emergency equipment required

(d) Vehicle inspection procedures

(8) Provide the following information to all personnel:

(a) Accident reporting responsibility and reporting procedures

(b) Hazardous condition reporting procedures

(c) Fire hazards and fire plan

(d) Protective equipment policy

(e) Local safety plan

(9) Include safety and environmental program elements, employee rights and responsibilities under the Program, applicable information on the Occupational Safety and Health Act (OSHAct) of 1970, Executive Order 12196, 29 CFR 1960, the DOI and USGS Safety manuals, and other related regulations, per 485 DM Chapter 13.3 as part of new personnel orientation.

D. Collateral Duty Safety Program Coordinators.

(1) Maintain a resource library of local safety and environmental training sources and assist local supervisors and training officers in identifying, coordinating, scheduling, conducting, and documenting personnel training.

(2) Assist management in meeting this requirement in identifying previous fiscal year training accomplished and forecast upcoming fiscal year training needs/requirements as part of the USGS Annual Action Plan and Accomplishment Program Planning process, as described in Chapter 3 of this Handbook.

E. Personnel.

(1) Attend safety training programs, providing feedback to supervisors on quality and content of the program.

(2) Assist supervisors in the determination of safety training requirements.

F. Contracting Officer Representatives. Review contractor training programs to assure contractors provide training for personnel in accordance with OSHA, EPA, and DOI/USGS requirements.

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[U.S. Department of the Interior, U.S. Geological Survey, Reston, VA, USA](#)

URL: <http://www.usgs.gov/usgs-manual/handbook/hb/445-2-h/ch14.html>

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United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date October 1, 2007
Report Subject Voicemail Message from Eric Williams	

On September 26, 2007, Eric Williams, Regional Health and Safety Manager, United States Geological Survey (USGS), Western Region, Sacramento, CA responded to a request from OIG investigators to provide a copy of a Job Hazard Analysis (JHA) for rocket netting by leaving a voicemail message.

In that message, Williams stated that the USGS Western Ecological Research Center (WERC) did not have a JHA for rocket netting. He added that the WERC Safety Officer was working on a JHA for rocket netting but it was not done. Williams said that there was no JHA for rocket netting on file at his office.

Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife. USGS creates JHA documents to address hazards associated with performing the job. The JHA also addresses methods of mitigation of hazards and the type of training that is needed for the task.

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
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OI-003 (04/07)



United States Department of the Interior
Office of Inspector General

INVESTIGATIVE ACTIVITY REPORT

Case Title USGS Workplace Safety	Case Number PI-PI-07-0488-I
Reporting Office Program Integrity Division	Report Date September 20, 2007
Report Subject Interview of Joshua Ackerman	

On September 20, 2007, Joshua Ackerman, Research Wildlife Biologist, United States Geological Survey (USGS), Western Ecological Resource Center (WERC), Davis Field Station (DFS), Davis, CA was interviewed via telephone by Senior Investigator Keith Kuczka, Department of the Interior (DOI), Office of Inspector General (OIG). The purpose of the interview was to obtain Ackerman's recollection of conversations with Angela Rex, Biological Research Assistant, USGS, in spring 2007 regarding rocket netting. Ackerman acknowledged that he understood the Garrity warning that he had read and signed during a previous interview and agreed to the telephonic interview.

Note: Rocket netting is a procedure used by USGS personnel to propel nets over wildlife in order to capture them. An explosive charge is used to propel the reusable rockets that carry the net over the targeted wildlife.

Ackerman said that Rex was hired by USGS in February 2005 and had been part of their rocket netting activities since that time. He stated that Rex would be assigned to lead portions of various projects in 2005 and 2006 but did not lead the rocket net shots. Ackerman said that he would have been comfortable with Rex leading the rocket net shots in 2005 and 2006 but she did not need to lead the shots because other personnel were assigned to do it. Ackerman said that Rex led rocket net shots in 2007 and reiterated that he was comfortable with her leading rocket net shots because she had been part of rocket netting activities since she was hired in 2005.

Ackerman stated that in approximately February 2007 or March 2007 he had "lots of conversations" with Rex about rocket netting. He said that the discussions involved how to catch birds and locations to set up rocket nets. Ackerman recalled that he asked Rex if she was comfortable with leading rocket net shots. According to Ackerman, Rex responded that she was comfortable with leading rocket net shots.

When asked, Ackerman said that Rex may have said that she would like refresher training for rocket netting in early 2007. Ackerman claimed he did not recall details of that conversation but remembered that he told Rex that she could obtain refresher training from Annie Schultz, contract biologist, since

Reporting Official/Title Keith A. Kuczka/Senior Investigator	Signature 
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OI-003 (04/07)

Rex would be picking up rocket netting equipment at the USGS San Francisco Bay Estuary Field Station (SFBEFS), Vallejo, CA where Schultz was employed. Ackerman stated that Schultz is "really competent" in rocket netting. Ackerman said he did not receive any feedback from Rex or Schultz regarding refresher training for Rex.

Ackerman said that he, Rex and John Takekawa, Research Wildlife Biologist, SFBEFS worked together to set up the first rocket net shot for the 2007 season. The rocket net shot was intended to capture gulls for "radio marking".

Ackerman recalled that during the 2007 rocket net season (approximately March 2007 to May 2007), Rex attempted a rocket net shot and nothing happened. Rex attempted to troubleshoot the problem but was unsuccessful so she telephoned Ackerman for assistance in determining why the rocket net did not fire. Ackerman said he helped her to troubleshoot the problem. Ackerman said that he did not recall details of the conversation or the problem.

Ackerman stated that it was common to have rocket net failures. He also said that it was not uncommon for an employee in the field to call him for assistance to troubleshoot a failure. Ackerman said that troubleshooting often included discussion about the rocket net wiring and set up of the shot.