



Nevada Site Specific Advisory Board Table of Contents

Full Board Meeting Handouts for Wednesday, September 18, 2019

***Please note: For your convenience, this Table of Contents
has a link to the first page of each handout.***

Page 2	Attendance Spreadsheet
Page 3	Release of Radiological Control at the Operation Roller Coaster Sites
Page 12	NSSAB Recommendation and DOE Response to Approach for Pahute Mesa Completion ~ Work Plan Item #2
Page 16	NSSAB Recommendation and DOE Response to Liaison Participation
Page 18	NSSAB Recommendation and DOE Response to Pahute Mesa Groundwater Sampling Well Prioritization ~ Work Plan #1
Page 20	Long-Term Monitoring, Soils, and Industrial Sites FY 2019 Wrap Up and FY 2020 Planned Activities Briefing
Page 41	Underground Test Area FY 2019 Wrap Up and FY 2020 Planned Activities Briefing
Page 56	Waste Management FY 2019 Wrap Up and FY 2020 Planned Activities Briefing
Page 74	EM Work Plan Status FY 2019 Wrap Up and FY 2020 Planned Activities Briefing
Page 78	DOE Proposed Work Plan Tasks
Page 80	Draft Work Plan Recommendation Letter
Page 81	Calendar with Proposed NSSAB Meetings/Event Dates

NSSAB FULL BOARD MEETING ATTENDANCE

October 2018 through September 2019 (FY 2019)

Name	11/7/18	1/16/19	3/20/19	4/24/19	7/17/19	9/18/19	Max Terms
MEMBERS							
Amina Anderson	√	√	√	√	√		2020
Francis Bonesteel	√	√	√	√	√		2022
William DeWitt	√	√	√	√	√		2024
Pennie Edmond	√	√	√	√	√		2020
Karen Eastman	√	√	√	√	√		2022
Raymond Elgin	E						2022
Charles Fullen	√	√	√	√	√		2022
Richard Gardner	√	√	√	√	√		2022
Anthony Graham	√	√	√	√	√		2024
Tanya Henderson	√	√	√	√	√		2024
Hepburn Klemm	√	√	√	√	E		2024
Donald Neill	√	√	√	√	√		2020
Steve Rosenbaum	√	√	√	√	√		2020
Janice Six	√	√	√	E	√		2024
Richard Stephans	√	√	√	√	√		2022
Richard Twiddy	√	√	√	E	√		2022
Dina Williamson-Erdag	√	√	√	√	√		2022
C.J. Wissmiller	√	√	√	√	E		2024
LIAISONS							
Clark County	√	E	√	√	√		
Consolidated Group of Tribes & Organizations	E	√	E	E	√		
Esmeralda County Commission	√	√	U	E	E		
Lincoln County Commission	E	√	E	√	E		
Nye County Commission	U	E	√	√	E		
Nye County Emergency Management	√	√	√	√	√		
Nye Co. Nuclear Waste Repository Project Office	√	√	√	√	√		
State of NV Division of Env Protection	√	√	√	√	√		
U.S. Natl Park Service	√	E	E	√	E		
White Pine County Commission		E	E	E	U		
KEY: √ - Present E - Excused V - Vacant U - Unexcused							

Release of Radiological Control at the Operation Roller Coaster Sites



Bill Wilborn

Deputy Program Manager, Operations
Environmental Management (EM) Nevada Program
September 18, 2019



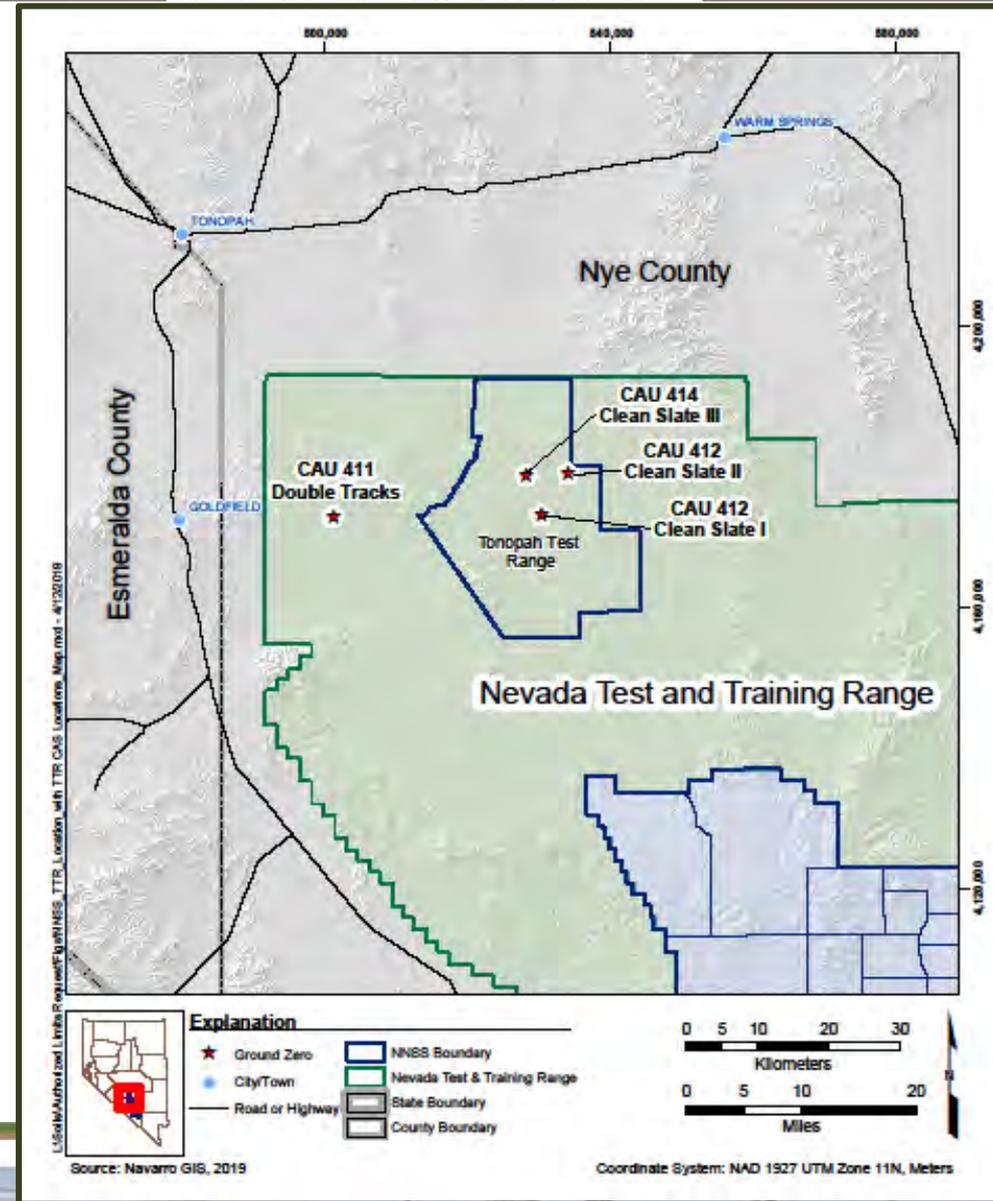
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Background

- In May/June of 1963, the United Kingdom, the U.S. Department of Defense, and the Atomic Energy Commission conducted tests at four (4) locations on the Nevada Test and Training Range as part of Operation Roller Coaster:
 - Double Tracks
 - Clean Slate I
 - Clean Slate II
 - Clean Slate III



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2273 – 9/18/2019 – Page 2
2019-148-EMRP

Current Use

- The U.S. Air Force (USAF) and others perform work in the area as it is an active test and training range
 - Remote desert environment
 - No public access
 - Access to sites will be restricted for the foreseeable future



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Current Conditions

- Remote from the Nevada National Security Site (more than 210 miles from Mercury via public roads)
- Undergone extensive remediation to a level less than the 25 millirem/year (mrem/yr) dose for clean closure under the current Federal Facility Agreement and Consent Order
- Requires monitoring to demonstrate compliance with 10 Code of Federal Regulations (CFR) 835 Occupational Radiation Protection Program (inspection and maintenance)
 - U.S. Department of Energy (DOE) proposes to release Operation Roller Coaster sites from radiological control



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Purpose and Benefits of Radiological Release

- Removes impediments to use of the area by the USAF or other national security activities
- Reduces long-term Federal liability



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

DOE Order 458.1

- This order defines DOE's process for the release of radiological controls
 - Ensures exposures are as low as reasonably achievable (ALARA) and the environment is protected
 - Requires notification of the public
 - No action by the public is required



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Approach

- DOE Order 458.1 requires that residual radioactivity is not present in a dose greater than 25 mrem/yr
 - Site-specific conservative assumption for dose is that the potential receptor is a resident farmer
 - Past characterizations show that Americium-241 and Plutonium-239/240 account for over 95 percent of the dose
- Compliance is accomplished by a final status survey with verification by an independent organization that concentrations do not exceed authorized limits



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Implementation Strategy

- Conduct final status survey
- Perform independent verification
- Approval by DOE of authorized limits and final status survey report
- Removal of radiological controls
- Approval by DOE of real property clearance

Note: Even after the radiological release process, the Operation Roller Coaster sites will remain in government control



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

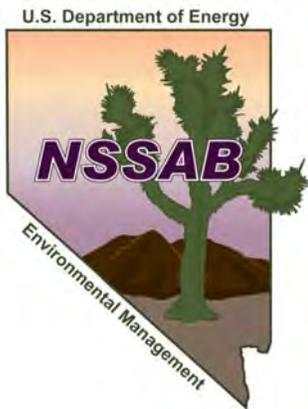
www.nnss.gov

Questions



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



Nevada Site Specific Advisory Board

April 24, 2019

Mr. John Myers, UGTA Activity Lead
U.S. Department of Energy, Environmental
Management (EM) Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Recommendation for Approach for Pahute Mesa Completion
(Work Plan Item #2)

Dear Mr. Myers,

The Nevada Site Specific Advisory Board (NSSAB) was asked to provide a recommendation, from a community perspective, to the U.S. Department of Energy (DOE) regarding if the more pragmatic approach for completion of Pahute Mesa is supported by the NSSAB and/or how it could be improved.

In support of this work plan item, Bill Wilborn, Deputy Program Manager, Operations for the EM Nevada Program, provided a briefing at the March 20, 2019 NSSAB Meeting on the Approach for Pahute Mesa Completion work plan item. The NSSAB also received a tour of Pahute Mesa and Rainier Mesa on April 10, 2019 in order to hear briefings, ask additional questions on the work plan item, and view in-person the geologic formations of the area.

After additional discussion at the April 24, 2019 NSSAB meeting, the NSSAB supports the more pragmatic approach for completion for Pahute Mesa, including DOE's consideration of the following improvements:

- Add new wells and monitoring at the Nevada Test and Training Range
- Set early warning monitoring standards
- Continue researching cleanup technologies
- Investigate possibility of a separate lower standard for tritium than the Safe Drinking Water Act standard

The NSSAB thanks Mr. Wilborn for his time in briefing and answering questions regarding this work plan item. Special thanks to Jeff Wurtz from Navarro for providing in-depth discussions on the complexities of the hydrogeology of the Pahute Mesa and Rainier Mesa areas and to Joseph Johnston from Navarro for sharing his historical knowledge of the Nevada National Security Site during the Pahute Mesa and Rainier Mesa tour.

Sincerely,

Frank Bonesteel, Chair

Members

Amina Anderson
Frank Bonesteel (Chair)
William DeWitt
Karen Eastman
Pennie Edmond
Charles Fullen
Richard Gardner
Anthony Graham
Tanya Henderson
Hepburn Klemm
Donald Neill
Steve Rosenbaum (Vice-Chair)
Janice Six
Richard Stephans
Richard Twiddy
Dina Williamson-Erdag
Connie Wissmiller

Liaisons

Clark County
Consolidated Group of Tribes
and Organizations
Esmeralda County Commission
Lincoln County Commission
Nye County Commission
Nye County Emergency
Management
Nye County Nuclear Waste
Repository Project Office
State of Nevada Division of
Environmental Protection
U.S. National Park Service
White Pine County Commission

Administration

Kelly Snyder, Deputy Designated
Federal Officer (DDFO)
U.S. Department of Energy,
EM Nevada Program
Barbara Ulmer, Administrator
Navarro, Contractor for the U.S.
Department of Energy,
EM Nevada Program

Page 2
April 24, 2019
Recommendation for Approach for Pahute Mesa Completion
(Work Plan #2)

cc: David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Chuck Russell, DRI
Ken Rehfeldt, Navarro
Barbara Ulmer, Navarro
Jeff Wurtz, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Kelly Snyder, EM
Bill Wilborn, EM



.U.S. Department of Energy
Environmental Management
Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

JUL 18 2019

Frank Bonesteel, Chair
Nevada Site Specific Advisory Board
232 Energy Way
North Las Vegas, NV 89030

RESPONSE TO THE NEVADA SITE SPECIFIC ADVISORY BOARD (NSSAB)
RECOMMENDATION FOR APPROACH FOR PAHUTE MESA COMPLETION (WORK
PLAN ITEM #2)

Reference: Ltr Bonesteel to Myers, dtd 4/24/2019

I would like to thank the NSSAB for its recommendation on the Approach for Pahute Mesa Completion work plan item in the above-mentioned letter. The U.S. Department of Energy (DOE), Environmental Management (EM) Nevada Program appreciates the time that the NSSAB spent in review and tour of Pahute Mesa, and its subsequent support of the more pragmatic approach for completion for Pahute Mesa.

Below are responses to NSSAB recommendations for improvements to the Approach for Pahute Mesa Completion:

NSSAB Recommendation: Add new wells and monitoring at the Nevada Test and Training Range (NTTR).

DOE Response: DOE currently has 13 wells with a combined 38 intervals available for sampling on the NTTR. Of those sampling locations, no wells on the NTTR have tritium concentrations above the Safe Drinking Water Act (SDWA) standard. At the present time, DOE has confidence that the existing wells on the NTTR are sufficient to monitor radionuclide migration. At the completion of the Pahute Mesa investigation, DOE will conduct a needs assessment for new wells to be drilled on the NTTR.

NSSAB Recommendation: Set early warning monitoring standards.

DOE Response: DOE proposes to use an early warning monitoring standard for tritium of 1,000 picocuries per liter (pCi/L). At current rates of radionuclide migration observed on Pahute Mesa, an early warning level of 1,000 pCi/L will provide at least ten years warning that the tritium concentration at a location may exceed the SDWA standard in the future.

JUL 18 2019

NSSAB Recommendation: Continue researching cleanup technologies.

DOE Response: During the corrective action decision process for Pahute Mesa, DOE will be conducting an evaluation of alternative remedial strategies to include searching for innovations in cleanup technologies.

NSSAB Recommendation: Investigate possibility of a separate lower standard for tritium than the Safe Drinking Water Act standard.

DOE Response: Along with an early warning monitoring standard already mentioned, DOE intends to continue adhering to the SDWA standard for tritium of 20,000 pCi/L. In 1991, the U.S. Environmental Protection Agency (EPA) used improved calculations to conclude that more than three times the standard for tritium would yield a radiation dose still below where there is no known or expected risk to public health. At that time, the EPA decided to keep in its regulations the conservative 20,000 pCi/L standard for tritium.

Again, thank you for your willingness to going more in-depth regarding the more pragmatic approach for Pahute Mesa and providing recommendations for improvements. The EM Nevada Program was happy to learn that the special tour of Pahute Mesa and Rainier Mesa was helpful in providing these recommendations for improvements.

Please contact Kelly K. Snyder at (702) 295-2836 if further information on this matter is needed.

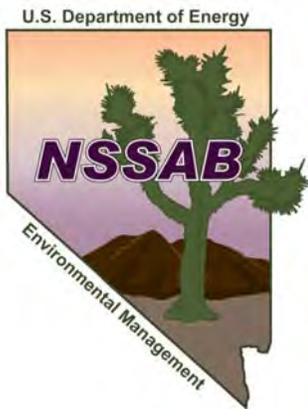


John R. Myers
UGTA Activity Lead
EM Nevada Program

EMO:13292.JM

cc via email:

David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Chuck Russell, DRI
Ken Rehfeldt, Navarro
Barbara Ulmer, Navarro
Navarro Central Files
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Kelly Snyder, EM
Bill Wilborn, EM



Nevada Site Specific Advisory Board

July 17, 2019

Ms. Kelly Snyder, Deputy Designated Federal Officer
U.S. Department of Energy
Environmental Management (EM) Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Recommendation for Liaison Participation

Dear Ms. Snyder,

In November 2018, I appointed two ad hoc committees to address liaison participation on the Nevada Site Specific Advisory Board (NSSAB). The NSSAB values the input and perspectives of its liaisons. One of the committee's missions was to conduct an assessment to determine whether liaisons have sufficient resources to continue participation and attendance at future NSSAB meetings.

In support of this effort, Committee Chair Richard Twiddy, Member Karen Eastman, and Vice-Chair Steve Rosenbaum interviewed liaisons currently engaged on the NSSAB. During these visits, a majority of the liaisons responded that they do have sufficient resources to continue participation and attendance at NSSAB meetings. However, liaisons in the outlying counties, such as Lincoln, Esmeralda, and White Pine, represent large geographical areas with small populations, so they do not have the resources as the larger counties or organizations.

After Board deliberation during the July 17, 2019 meeting, the NSSAB recommends that the EM Nevada Program conduct an evaluation and determine if funding could ever be provided for liaison's travel expenses.

A special thanks for Committee Chair Twiddy and his committee for contacting liaisons and bringing this forward for the Board's consideration.

Sincerely,

Frank Bonesteel, Chair

cc: David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Barbara Ulmer, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Bill Wilborn, EM

Members

Amina Anderson
Frank Bonesteel (Chair)
William DeWitt
Karen Eastman
Pennie Edmond
Charles Fullen
Richard Gardner
Anthony Graham
Tanya Henderson
Hepburn Klemm
Donald Neill
Steve Rosenbaum (Vice-Chair)
Janice Six
Richard Stephans
Richard Twiddy
Dina Williamson-Erdag
Connie Wissmiller

Liaisons

Clark County
Consolidated Group of Tribes
and Organizations
Esmeralda County Commission
Lincoln County Commission
Nye County Commission
Nye County Emergency
Management
Nye County Nuclear Waste
Repository Project Office
State of Nevada Division of
Environmental Protection
U.S. National Park Service
White Pine County Commission

Administration

Kelly Snyder, Deputy Designated
Federal Officer (DDFO)
U.S. Department of Energy,
EM Nevada Program
Barbara Ulmer, Administrator
Navarro, Contractor for the U.S.
Department of Energy,
EM Nevada Program



U.S. Department of Energy
Environmental Management
Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

AUG 14 2019

Frank Bonesteel, Chair
Nevada Site Specific Advisory Board
232 Energy Way
North Las Vegas, NV 89030

RESPONSE TO THE NEVADA SITE SPECIFIC ADVISORY BOARD (NSSAB)
RECOMMENDATION FOR LIAISON PARTICIPATION

Reference: Ltr Bonesteel to Snyder, dtd 7/17/2019

I would like to thank the NSSAB for its recommendation on liaison participation in the above-mentioned letter. The U.S. Department of Energy (DOE), Environmental Management (EM) Nevada Program appreciates the time that the NSSAB spent reviewing this topic with special thanks to Committee Chairs Richard Twiddy and Dina Williamson-Erdag and their committees who gathered pertinent information prior to recommendation development.

The EM Nevada Program has determined that travel assistance may be available to liaisons in the form of invitational travel. Invitational travel is subject to additional restrictions and is dependent on if funds are available. Before invitational can be offered to liaisons, the EM NV Program will develop eligibility requirements and liaison responsibilities that will be required for liaison's to request travel assistance. The target date for distributing that information is September 30, 2019.

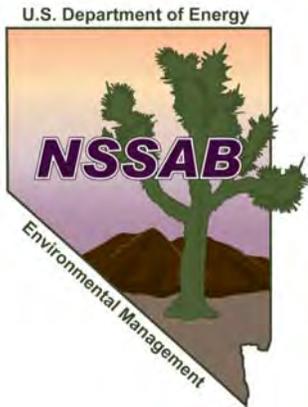
Again, thank you for your recommendation. Like the NSSAB, the EM Nevada Program values the liaisons' input and perspectives and wants to continue fostering that communication. Please contact me at (702) 295-2836 if further information on this matter is needed.

Kelly K. Snyder
Deputy Designated Federal Officer
EM Nevada Program

EMOS:13343.KKS

cc via email:

David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Barbara Ulmer, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Bill Wilborn, EM



Nevada Site Specific Advisory Board

July 17, 2019

Mr. John Myers, UGTA Activity Lead
U.S. Department of Energy
Environmental Management (EM) Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Recommendation for Pahute Mesa Groundwater Sampling
Well Prioritization (Work Plan Item #1)

Dear Mr. Myers,

The Nevada Site Specific Advisory Board (NSSAB) was asked to provide a recommendation, from a community perspective, to the U.S. Department of Energy on prioritizing the factors used by the EM Nevada Program to prioritize proposed well locations for Pahute Mesa.

In support of this work plan item, Ken Rehfeldt, Navarro's Underground Test Area (UGTA) Project Manager, provided a briefing and answered questions at the July 17, 2019 NSSAB Meeting.

After Board dialogue during the meeting, the NSSAB prioritized the factors from highest to lowest, as follows:

1. Expand knowledge of the flow system
2. Refine monitoring network
3. Support modeling

Special thanks to Mr. Rehfeldt for his time in briefing and answering questions regarding this work plan item.

Sincerely,

Frank Bonesteel, Chair

cc: David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Ken Rehfeldt, Navarro
Barbara Ulmer, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Kelly Snyder, EM
Bill Wilborn, EM

Members

Amina Anderson
Frank Bonesteel (Chair)
William DeWitt
Karen Eastman
Pennie Edmond
Charles Fullen
Richard Gardner
Anthony Graham
Tanya Henderson
Hepburn Klemm
Donald Neill
Steve Rosenbaum (Vice-Chair)
Janice Six
Richard Stephans
Richard Twiddy
Dina Williamson-Erdag
Connie Wissmiller

Liaisons

Clark County
Consolidated Group of Tribes
and Organizations
Esmeralda County Commission
Lincoln County Commission
Nye County Commission
Nye County Emergency
Management
Nye County Nuclear Waste
Repository Project Office
State of Nevada Division of
Environmental Protection
U.S. National Park Service
White Pine County Commission

Administration

Kelly Snyder, Deputy Designated
Federal Officer (DDFO)
U.S. Department of Energy,
EM Nevada Program
Barbara Ulmer, Administrator
Navarro, Contractor for the U.S.
Department of Energy,
EM Nevada Program



U.S. Department of Energy
Environmental Management
Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

AUG 21 2019

Frank Bonesteel, Chair
Nevada Site Specific Advisory Board
232 Energy Way
North Las Vegas, NV 89030

RESPONSE TO THE NEVADA SITE SPECIFIC ADVISORY BOARD (NSSAB)
RECOMMENDATION FOR PAHUTE MESA GROUNDWATER SAMPLING WELL
PRIORITIZATION (WORK PLAN ITEM #1)

Reference: Ltr Bonesteel to Myers, dtd 7/17/2019

I would like to thank the NSSAB for its recommendation on the Pahute Mesa Groundwater Sampling Well Prioritization work plan item in the above-mentioned letter. The U.S. Department of Energy (DOE), Environmental Management (EM) Nevada Program appreciates the time that the NSSAB spent in providing the prioritization of the factors.

The technical Well Selection Subcommittee and the EM Nevada Program will consider your prioritization in making decisions on future well locations in the Pahute Mesa area. Again, thank you for your time in discussing and providing insights on this work plan item.

If you have any questions or comments, please contact Kelly K. Snyder at (702) 295-2836.

A handwritten signature in blue ink that reads 'John Myers'.

John R. Myers
UGTA Activity Lead
EM Nevada Program

EMO:13351.JM

cc via email:

David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Ken Rehfeldt, Navarro
Barbara Ulmer, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Kelly Snyder, EM
Bill Wilborn, EM

Long-Term Monitoring Fiscal Year (FY) 2019 Wrap Up and FY 2020 Planned Activities



Tiffany Gamero

Long-Term Monitoring Lead
Environmental Management (EM) Nevada Program
September 18, 2019



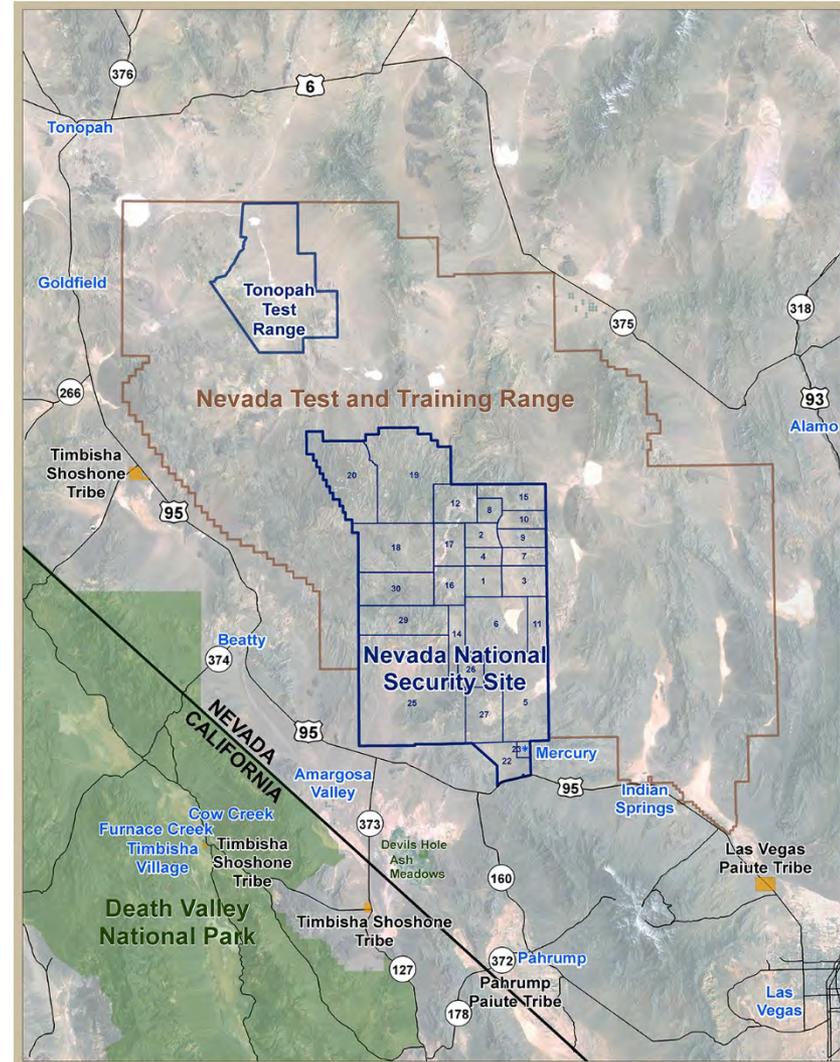
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Background

- Long-Term Monitoring sites include Corrective Action Sites that are now closed under the Federal Facility Agreement and Consent Order and require some form of reporting, maintenance, monitoring, or inspections
 - Closed Soils Sites
 - Closed Industrial Sites
 - Closed Underground Test Area Sites



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2217/2218 – 9/18/2019 – Page 2
2019-149-EMRP

Long-Term Monitoring FY 2019 Wrap Up

- Planned: Submit Resource Conservation Recovery Act (RCRA), Non-RCRA, and Tonopah Test Range (TTR) Post-Closure Reports to the State of Nevada Division of Environmental Protection (NDEP)
 - Status – no significant items were identified:
 - RCRA Post-Closure Report - submitted May 2019
 - TTR Post-Closure Report - submitted June 2019
 - Non-RCRA Post-Closure Report - submitted June 2019



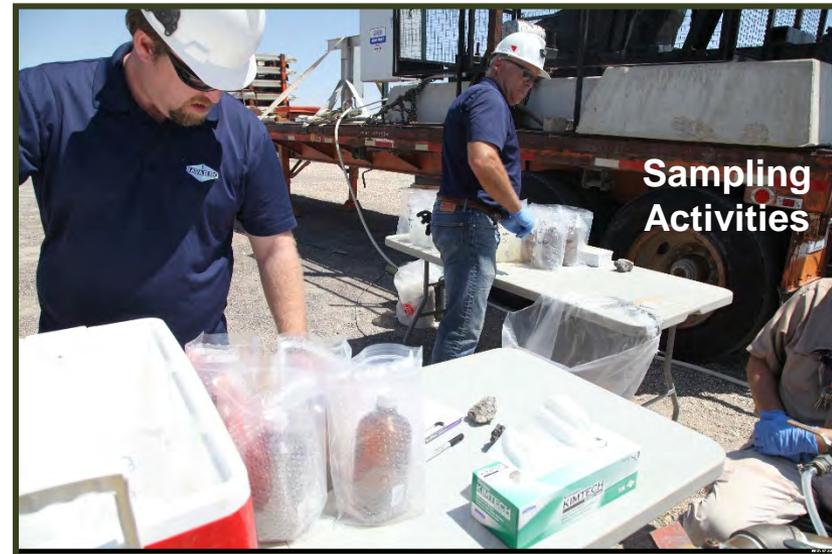
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Long-Term Monitoring FY 2019 Wrap Up (continued)

- Frenchman Flat:
 - Planned: Conduct annual closure sampling
 - Status: Completed throughout FY 2019; results consistent with modeling; no concerns identified
 - Planned: Submit calendar year (CY) 2018 monitoring report
 - Status: Submitted June 2019; monitoring did not identify any concerns



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Long-Term Monitoring FY 2019 Wrap Up

(continued)

- Planned: Continue tribal evaluation of Corrective Action Unit (CAU) 111 revegetation test plots through end of FY 2019; EM Nevada Program and NDEP will then discuss path forward
 - Status: Monthly monitoring completed throughout FY 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Long-Term Monitoring FY 2020 Planned Activities



- Submit RCRA, Non-RCRA, and TTR Post-Closure Reports to NDEP
- Conduct quarterly, bi-annual, and annual monitoring at closed sites
- Determine path forward for CAU 111 revegetation



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Long-Term Monitoring FY 2020 Planned Activities

(continued)

- Conduct Frenchman Flat annual CY 2020 closure monitoring
- Submit Frenchman Flat CY 2019 closure monitoring report
- Conduct Rainier Mesa annual CY 2020 closure monitoring



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Soils

Fiscal Year (FY) 2019 Wrap Up and FY 2020 Planned Activities



Tiffany Gamero

Long-Term Monitoring Lead

Environmental Management (EM) Nevada Program

September 18, 2019



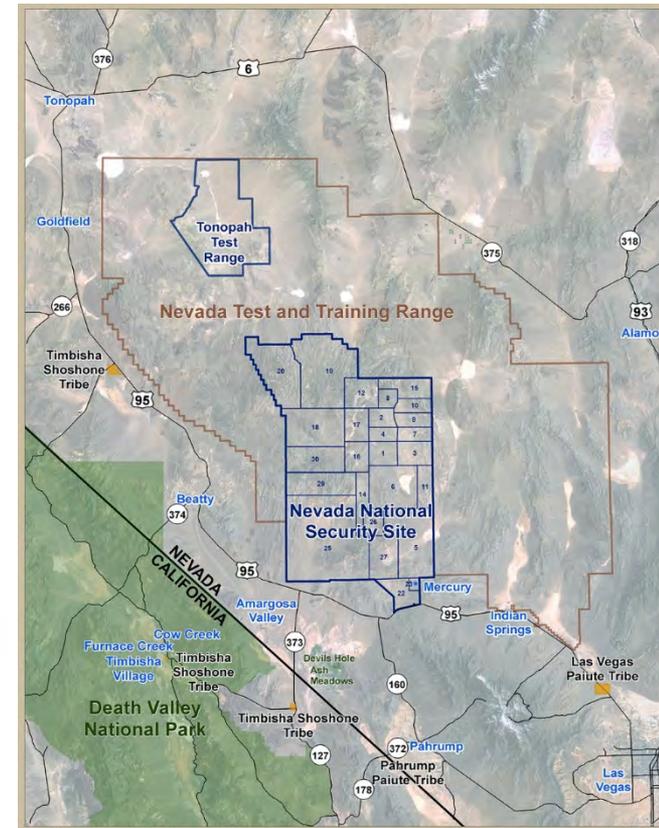
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Soils Background

- Atmospheric nuclear weapons tests, nuclear safety experiments, and evaluation tests for peaceful uses of nuclear explosives conducted at the Nevada National Security Site (NNSS) and the Nevada Test and Training Range (NTTR) resulted in radioactive contamination of surface and near surface soils
 - Fenced and/or posted radiation/contamination area of the NNSS is less than one percent
- 147 Soils sites have been closed in accordance with the Federal Facility Agreement and Consent Order
- One Soils site remains



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2217/2218 – 9/18/2019 – Page 11
2019-149-EMRP

Soils FY 2019 Wrap Up

- Clean Slate III Plutonium Dispersion (Corrective Action Unit [CAU] 414)
 - Planned: Complete soil removal; estimate 217,000 cubic feet (ft³)
 - Status: Over 224,000 ft³ of soil removal generated and packaged into 916 containers as of August 30, 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Soils FY 2019 Wrap Up

(continued)

- Clean Slate III Plutonium Dispersion (CAU 414) - continued
 - Planned: Complete waste shipments from Tonopah Test Range to NNSS; estimated 450 shipments
 - Status: 457 waste shipments completed and shipped to the Area 3 Radioactive Waste Management Site as of August 30, 2019
 - Planned: Submit the final Closure Report (CR) to the State of Nevada Division of Environmental Protection (NDEP)
 - Status: Due to NDEP in December 2019



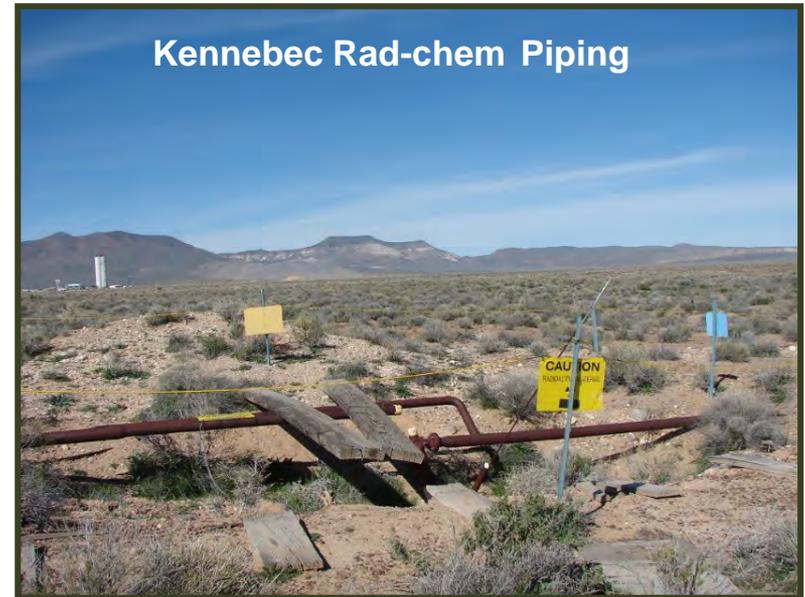
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Soils FY 2019 Wrap Up (continued)

- Miscellaneous Radiological Sites and Debris (CAU 576)
 - Planned: Submit the final Corrective Action Decision Document/CR to NDEP
 - Status: Approved by NDEP in February 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2217/2218 – 9/18/2019 – Page 14
2019-149-EMRP

Soils FY 2020 Planned Activities



Employees Conducting
Field Activities

- Double Tracks (CAU 411) and Clean Slate I (CAU 412)
 - Planned: Conduct final confirmation radiological surveys ~November 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Soils FY 2020 Planned Activities

(continued)



- Clean Slate II (CAU 413) and Clean Slate III (CAU 414)
 - Planned: Revegetation of disturbed areas ~Fall 2019
 - Planned: Conduct final confirmation radiological surveys ~Spring 2020



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Industrial Sites FY 2020 Planned Activities



Tiffany Gamero

Long-Term Monitoring Lead
Environmental Management (EM) Nevada Program
September 18, 2019



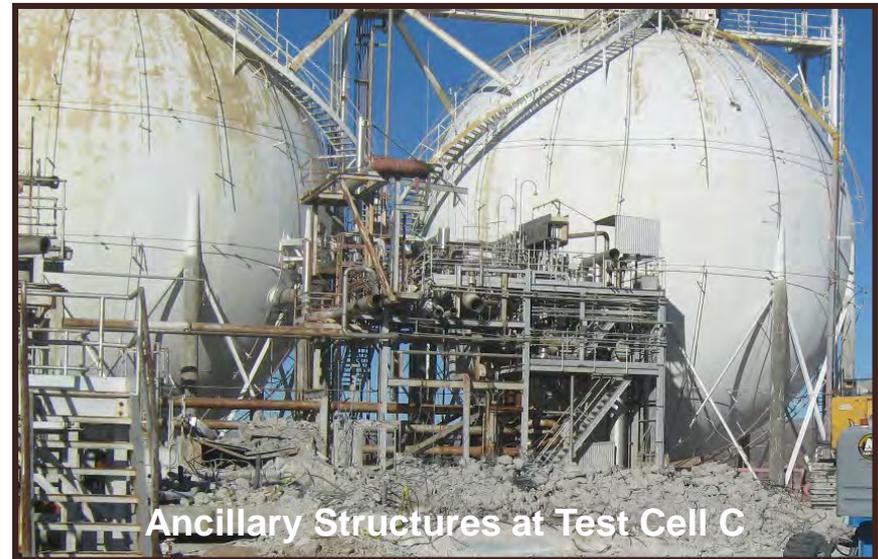
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Industrial Sites FY 2020 Planned Activities

- Test Cell C Ancillary Building and Structures – originally supported Nuclear Rocket Development Station activities on the NNSS
 - Complete cultural resources activities in conjunction with Nevada State Historic Preservation Office



Ancillary Structures at Test Cell C



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Proposed FY 2020 NSSAB Work Plan Item



- Test Cell C
Path Forward



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Underground Test Area (UGTA) Fiscal Year (FY) 2019 Wrap Up and FY 2020 Planned Activities



John Myers

UGTA Activity Lead

Environmental Management (EM) Nevada Program

September 18, 2019



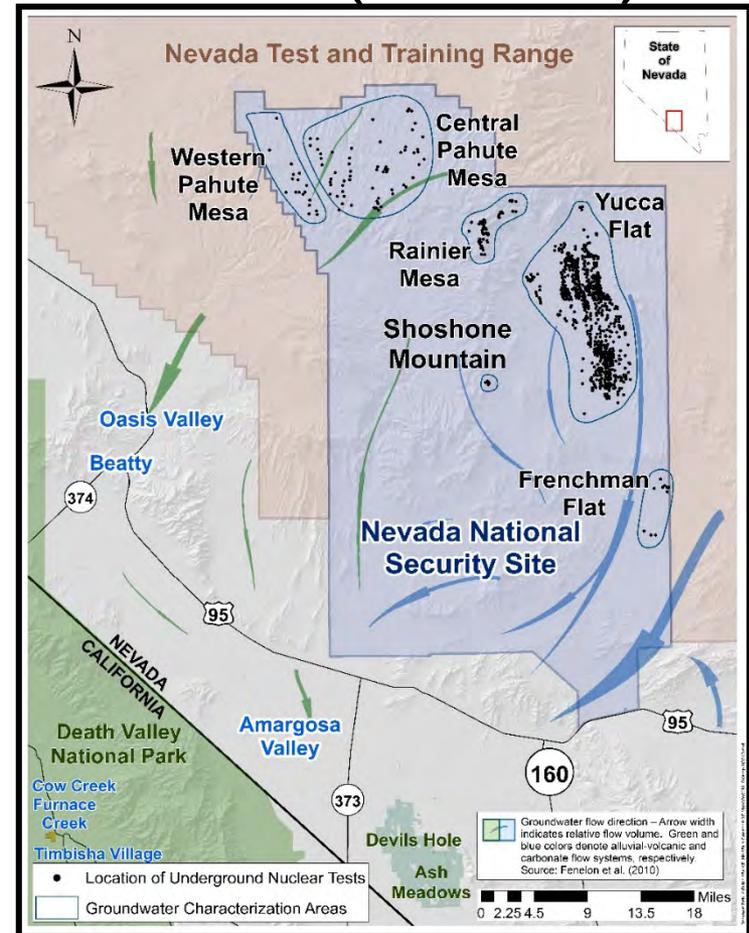
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

UGTA Corrective Action Units (CAUs)

- There are five CAUs that make up the UGTA activity on the Nevada National Security Site (NNSS):
 - Frenchman Flat (CAU 98) – **COMPLETE**
(in closure/long-term monitoring)
 - Yucca Flat/Climax Mine (CAU 97)
 - Rainier Mesa/Shoshone Mountain (CAU 99)
 - Central Pahute Mesa* (CAU 101)
 - Western Pahute Mesa* (CAU 102)



**Western and Central Pahute Mesa are managed as one entity*



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

UGTA FY 2019 Wrap Up

- Yucca Flat/Climax Mine (YF/CM)
 - Planned: Conduct final Internal Peer Reviews
 - Status: Completed in April 2019
 - Planned: Complete any needed flow and transport simulations
 - Status: Completed in February 2019
 - Planned: Complete Model Evaluation Report
 - Status: Approved by the State of Nevada Division of Environmental Protection (NDEP) in August 2019



Peer Review



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

UGTA FY 2019 Wrap Up

(continued)

- Rainier Mesa/Shoshone Mountain (RM/SM)
 - Planned: Document supplemental analysis based on the External Peer Review report
 - Status: Approved by NDEP in June 2019
 - Planned: Complete the Closure Report
 - Status: Submitted to NDEP in August 2019 for approval



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 4
2019-142-EMRP

UGTA FY 2019 Wrap Up

(continued)

- Pahute Mesa
 - Planned: Document considerations to a more pragmatic closure approach and present to NDEP
 - Status: Submitted to NDEP in June 2019; currently addressing NDEP comments
 - Planned: Select potential drilling locations
 - Status: Identified draft criteria to select drilling locations



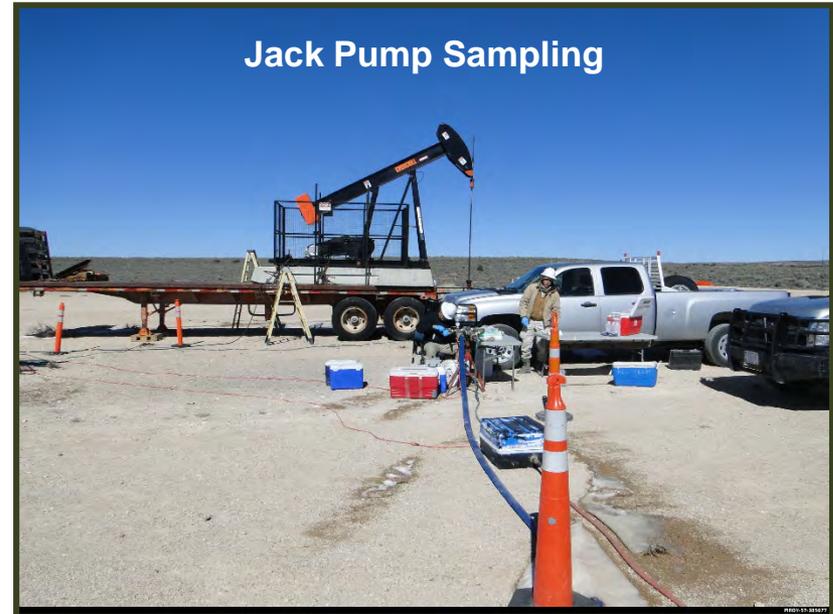
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

UGTA FY 2019 Additional Activities

- As of July 13, 2019, collected groundwater samples from 23 zones in 19 wells on the NNSS and Nevada Test and Training Range



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 6
2019-142-EMRP

UGTA FY 2019 Additional Activities (continued)

- Continued funding and support for Nye County Tritium Sampling and Monitoring Program (TSaMP) and internal peer review membership
 - No detectable tritium in TSaMP samples to date



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 7
2019-142-EMRP

FY 2019 NSSAB Work Plan Items

(continued)

Provide a recommendation on if the offsite groundwater communication plan is supported by the NSSAB and/or how it could be improved

Status

- NSSAB Recommendation – November 2018
- EM Nevada Program Response – December 2018



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

FY 2019 NSSAB Work Plan Items

- *Provide a recommendation on if the more pragmatic approach is supported and how it could be improved*

Status

- NSSAB Recommendation – April 2019
- EM Nevada Program Response – July 2019
- Continue to work with NDEP toward implementation of pragmatic approach



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 9
2019-142-EMRP

FY 2019 NSSAB Work Plan Items

(continued)

- *Provide a recommendation on prioritizing the factors used by the EM Nevada Program for proposed well locations in Pahute Mesa*

Status

- NSSAB Recommendation – July 2019
- EM Nevada Program Response – August 2019



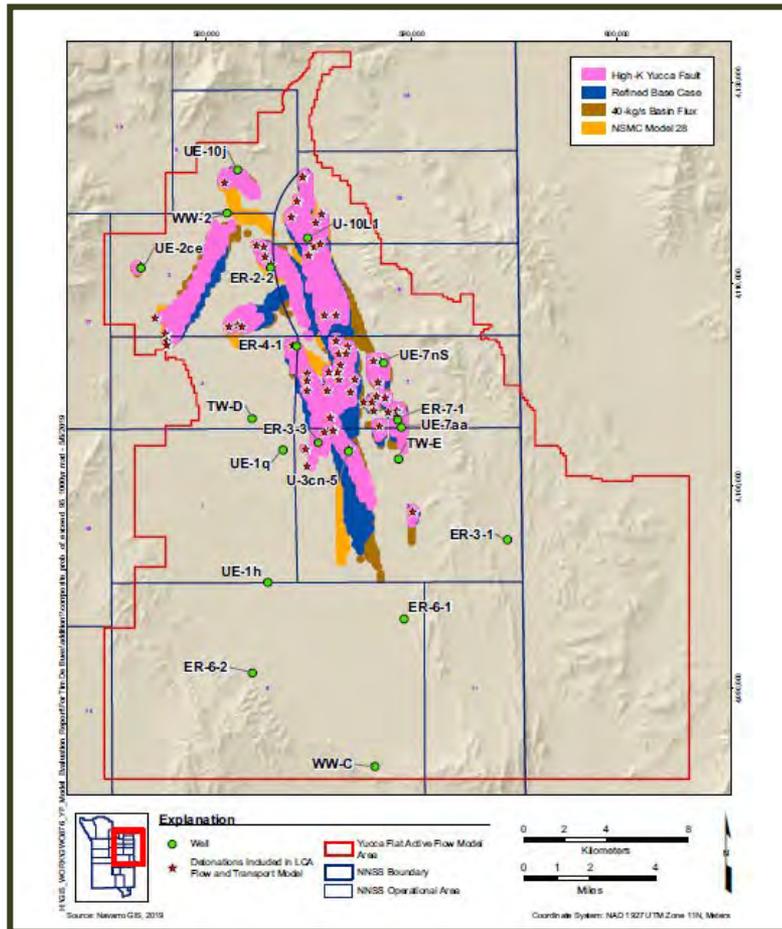
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 10
2019-142-EMRP

UGTA FY 2020 Planned Activities



- YF/CM – the model evaluation phase is complete and EM has received approval to enter the closure stage; FY 2020 activities will be:
 - Negotiate regulatory and use restriction boundaries
 - Submit Closure Report



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 11
2019-142-EMRP

UGTA FY 2020 Planned Activities

(continued)

- RM/SM – Draft Closure Report has been submitted for NDEP review; FY 2020 activities will be:
 - Complete final Closure Report
 - Implement closure monitoring requirements



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

UGTA FY 2020 Planned Activities

(continued)

- Pahute Mesa – Phase II data analysis and evaluation continues; FY 2020 activity will be:
 - Begin development of Phase II flow and transport models



Pahute Mesa: NSSAB Briefed During Tour



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 13
2019-142-EMRP

UGTA FY 2020 Planned Activities

(continued)



- Collect groundwater samples from nine (9) wells on the NNSS
- Conduct Groundwater Open House in Beatty, NV on Thursday, October 17, 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 14
2019-142-EMRP

Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2219 – 9/18/2019 – Page 15
2019-142-EMRP

Waste Management Fiscal Year (FY) 2019 Wrap Up and FY 2020 Planned Activities



Jhon Carilli

Low-Level Waste (LLW) Activity Lead
Environmental Management (EM) Nevada Program
September 18, 2019



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Waste Management FY 2019 Wrap Up

- Planned: Safely dispose ~ 1.4 million cubic feet (ft³) of forecasted waste at the Nevada National Security Site (NNSS)
 - Status: As of June 30, 2019, the NNSS safely disposed 756,900 ft³ of waste and the total volume revised projections are ~ 1.1 million ft³ of waste by the end of FY 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 2
2019-146-EMRP

Waste Management FY 2019 Wrap Up (continued)

- Planned: Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Status: Submitted in March 2019; no significant changes from past trends



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 3
2019-146-EMRP

Waste Management FY 2019 Wrap Up

(continued)

- Planned: Prepare for new cell construction on western section of Area 5 Radioactive Waste Management Complex (RWMC) at the NNSS

Area 5 RWMC
Flood Control
Berm Section



- Status: Flood control berm and channel construction on northern portion complete and continuing on the southern portion



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Waste Management

FY 2019 Wrap Up

(continued)



- Planned: Resume Area 3 Radioactive Waste Management Site (RWMS) operations to make use of existing capacity for Clean Slate III waste disposal
 - Status: Began waste disposal activities in October 2018 and completed in August 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 5
2019-146-EMRP

Waste Management FY 2019 Wrap Up (continued)

- Planned: Conduct Radioactive Waste Acceptance Program (RWAP) facility evaluations
 - Status: RWAP conducted 24 facility evaluations
 - State of Nevada Division of Environmental Protection (NDEP) participated in 19 of these facility evaluations



RWAP Facility Evaluation



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 6
2019-146-EMRP

Waste Management FY 2019 Wrap Up (continued)

- Planned: Review potential enhancements to waste verification strategy
 - Status: The EM Nevada Program is drafting a verification strategy report
- Planned: Complete Supplemental Environmental Project (SEP) tasks related to NDEP's Notice of Violation
 - Status: All physical work associated with the three (3) tasks included in the SEP will be completed by the end of FY 2019



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Waste Management FY 2019 Wrap Up (continued)

- Planned: Conduct visual and real-time radiography (RTR) verifications
 - Status: As of August 30, 2019, 100 RTR examinations (100 required by SEP) and 46 LLW visual verifications (40 required by SEP) have been performed



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 8
2019-146-EMRP

Waste Management FY 2019 Wrap Up (continued)



- Planned: Continue funding and support for the Emergency Preparedness Working Group (EPWG) grant
 - Status: Provided over \$14.8 million in funding to Clark, Elko, Esmeralda, Lincoln, Nye, and White Pine counties since FY 2000



EM Environmental Management

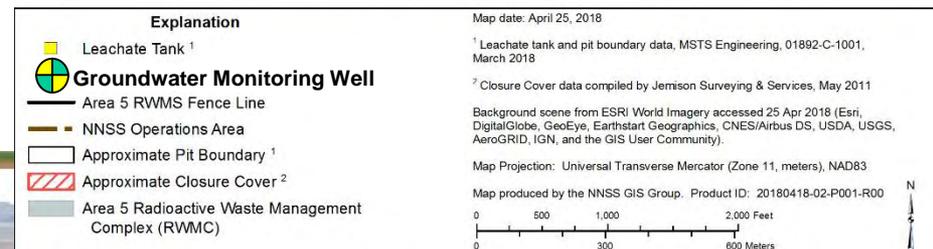
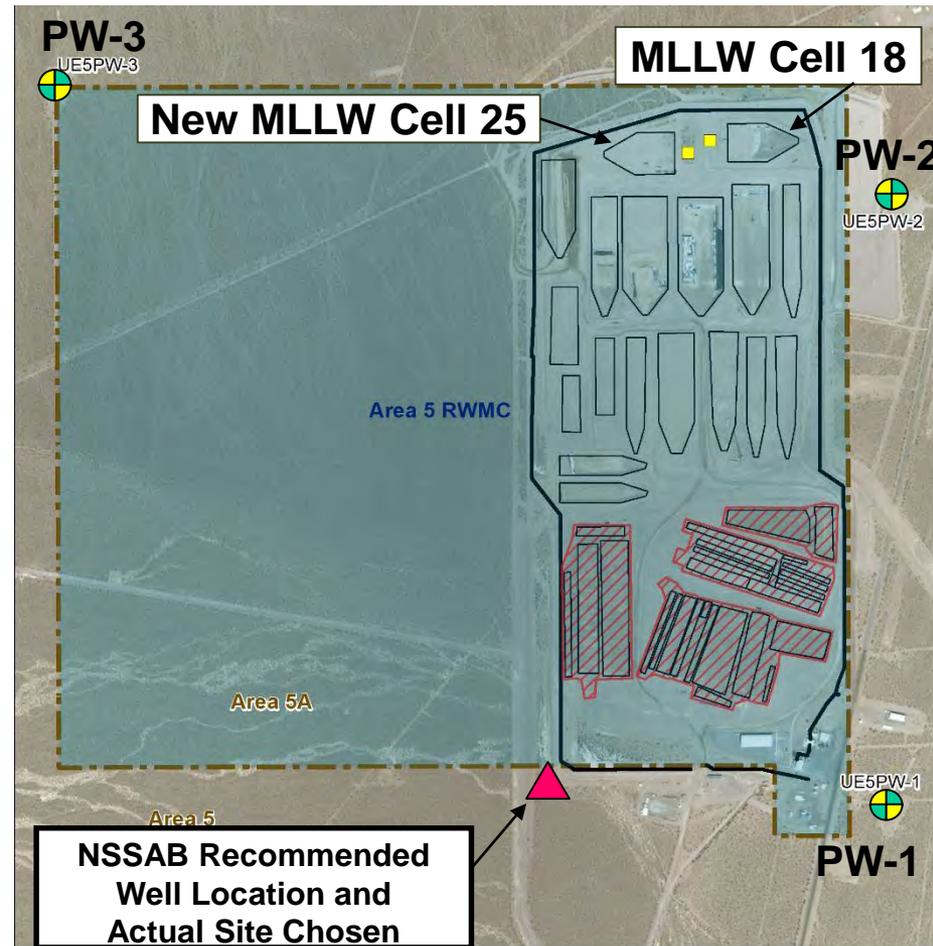
safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 9
2019-146-EMRP

Waste Management FY 19 Wrap Up Additional Activity

- Location of new monitoring well sited south of the Area 5 RWMC
 - NSSAB provided a recommendation in May 2018



FY 2019 NSSAB Work Plan Items

- *Provide a recommendation for how RWAP's visual verifications could be enhanced*

Status

- NSSAB members observed RWAP LLW Visual Verification of NNSS generator – July 2019
- NSSAB members observed RWAP LLW Visual Verification of Los Alamos generator – August 2019
- NSSAB discussion and recommendation planned for tonight



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 11
2019-146-EMRP

FY 2019 NSSAB Work Plan Items

(continued)

- *Provide a recommendation how the risk-informed audit determination selection could be improved*

Status

- NSSAB Recommendation – March 2019
- EM Nevada Program Response – June 2019
- Update: RWAP is updating risk-informed audit determination selection criteria using NSSAB's recommendation



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Waste Management FY 2020 Planned Activities

- Safely dispose up to 1.4 million ft³ of forecasted waste at the NNSS
- Submit annual Performance Assessment Summary Report to the LLW Federal Review Group



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 13
2019-146-EMRP

Waste Management

FY 2020 Planned Activities

(continued)



- Conduct RWAP facility evaluations
- Continue funding and support for the EPWG grant



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 14
2019-146-EMRP

Waste Management

FY 2020 Planned Activities

(continued)

- Complete flood control berm and channel on western section of Area 5 RWMC
- Complete design of new cell on western section of Area 5 RWMC and potentially begin construction



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 15
2019-146-EMRP

Waste Management

FY 2020 Planned Activities

(continued)

- Begin closure of mixed LLW (MLLW) Cell 18 with a closure cap and initial revegetation
- Complete construction of new monitoring well south of the Area 5 RWMC



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 16
2019-146-EMRP

Proposed FY 2020 NSSAB Work Plan Item



NSSAB Tour of RTR Machine

- Waste Verification Strategy



NSSAB Observation of Visual Verification Activities



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

ID 2220 – 9/18/2019 – Page 17
2019-146-EMRP

Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Environmental Management (EM) Work Plan Status Fiscal Year (FY) 2019 Wrap Up and FY 2020 Planned Activities



Bill Wilborn

Deputy Program Manager, Operations
Environmental Management (EM) Nevada Program
September 18, 2019



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

FY 2019 NSSAB Work Plan Items

Review FY 2021 baseline funding needs and provide a recommendation to the DOE prioritizing the work by activity

Status

- NSSAB Recommendation April 2019
- EM Nevada Program Response to NSSAB April 2019
- EM Nevada Program Presented Draft Budget Briefing to EM Headquarters June 2019
- Final Budget to Office of Management and Budget TBD~September 2019
- President's Budget to Congress TBD~February 2020

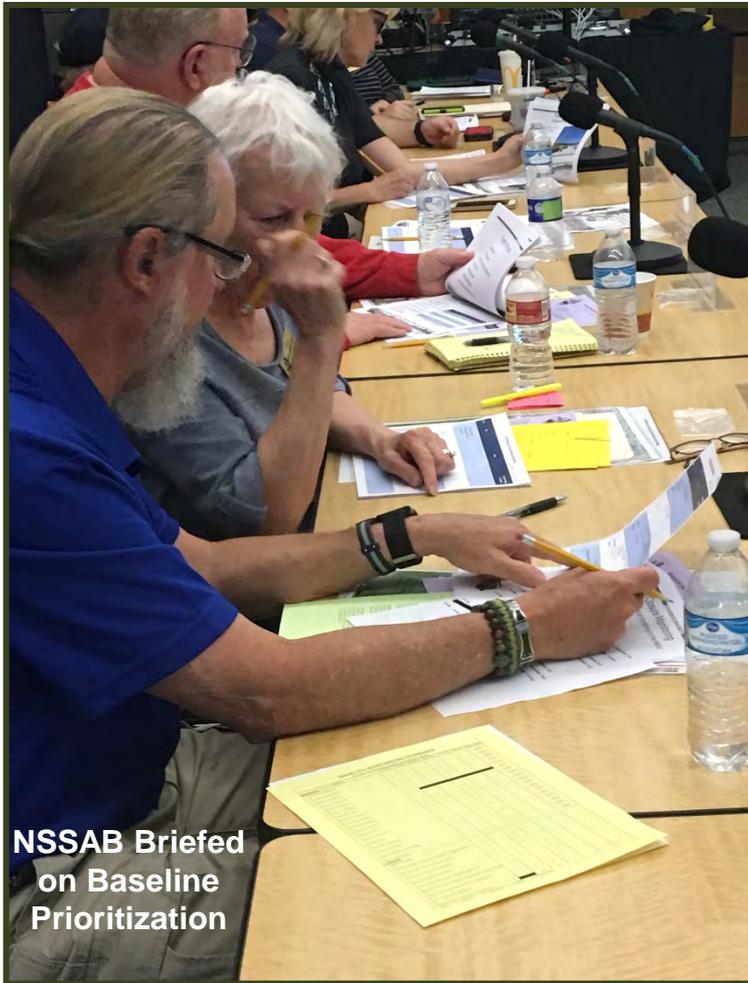


EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Proposed FY 2020 NSSAB Work Plan Items



NSSAB Briefed
on Baseline
Prioritization

- FY 2022 Baseline Prioritization
- NSSAB Long-Term Strategy



Questions?



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.nnss.gov

Nevada Site Specific Advisory Board (NSSAB)

PROPOSED FY 2020 Work Plan

Item 1	Work Plan Item:	<i>Waste Verification Strategy</i>
	Recommendation Deadline:	Sept 2020
	Description:	<p>Background: EM NV will identify existing and potential verification strategies regarding verification of waste sent to the Nevada National Security Site (NNSS) for disposal. This information will be used to determine if the existing verification strategy can be improved.</p> <p>NSSAB Scope: From a community perspective, the NSSAB will provide a recommendation on the potential verification strategies identified and/or how these strategies may be implemented.</p>

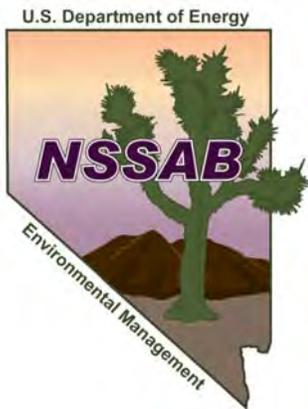
Item 2	Work Plan Item:	<i>FY 2022 Baseline Prioritization</i>
	Recommendation Deadline:	March 2020
	Description:	<p>Background: As part of the federal budget process, the EM NV Program must provide funding request information to HQ as it relates to planned FY 2022 activities. The request is based on planned baseline activities.</p> <p>NSSAB Scope: From a community perspective, the NSSAB will provide a recommendation ranking the baseline activities.</p>

Nevada Site Specific Advisory Board (NSSAB)

PROPOSED FY 2020 Work Plan

Item 3	Work Plan Item:	Test Cell C Path Forward
	Recommendation Deadline:	Nov 2019
	Description:	<p>Background: EM NV will provide a briefing to the NSSAB explaining historic activities that took place at Test Cell C, already completed remediation activities, and the anticipated path forward for the facility.</p> <p>NSSAB Scope: From a community perspective, the NSSAB will provide a recommendation on the Department's planned end state for Test Cell C or how the plan could be improved.</p>

Item 4	Work Plan Item:	<i>NSSAB Long-Term Strategy</i>
	Recommendation Deadline:	Sept 2020
	Description:	<p>Background: The EM NV mission is scheduled to end in 2030. As such, EM NV will have to determine how the NSSAB will transition into completion as well.</p> <p>NSSAB Scope: Provide a recommendation for how the NSSAB envisions its future role as the EM NV mission transitions to completion. This includes recommendations on the frequency of meetings, number of members, and overall community expectations.</p>



Nevada Site Specific Advisory Board

September 18, 2019

Members

Amina Anderson
Frank Bonesteel (Chair)
William DeWitt
Karen Eastman
Pennie Edmond
Charles Fullen
Richard Gardner
Anthony Graham
Tanya Henderson
Hepburn Klemm
Donald Neill
Steve Rosenbaum (Vice-Chair)
Janice Six
Richard Stephans
Richard Twiddy
Dina Williamson-Erdag
Connie Wissmiller

Liaisons

Clark County
Consolidated Group of Tribes
and Organizations
Esmeralda County Commission
Lincoln County Commission
Nye County Commission
Nye County Emergency
Management
Nye County Nuclear Waste
Repository Project Office
State of Nevada Division of
Environmental Protection
U.S. National Park Service
White Pine County Commission

Administration

Kelly Snyder, Deputy Designated
Federal Officer (DDFO)
*U.S. Department of Energy,
EM Nevada Program*
Barbara Ulmer, Administrator
*Navarro, Contractor for the U.S.
Department of Energy,
EM Nevada Program*

Ms. Kelly Snyder, DDFO
U.S. Department of Energy
Environmental Management (EM) Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Proposed Fiscal Year (FY) 2020 Nevada Site Specific Advisory
Board (NSSAB) Work Plan

Dear Ms. Snyder,

At our September 18, 2019, Full Board meeting, the NSSAB had the opportunity to review the list of activities the Department of Energy EM Nevada Program proposed the NSSAB incorporate into its FY 2020 work plan. In addition, the NSSAB also discussed potential tasks. After Full Board discussion, the NSSAB would like the EM Nevada Program's approval for the attached work plan.

We appreciate the opportunity to review and comment on EM activities at the Nevada National Security Site and look forward to a productive year.

Sincerely,

Frank Bonesteel, Chair

cc: David Borak, DOE/HQ (EM-4.32)
Michelle Hudson, DOE/HQ (EM-4.32)
Barbara Ulmer, Navarro
NSSAB Members and Liaisons
Robert Boehlecke, EM
Catherine Hampton, EM
Bill Wilborn, EM

FY 2020 NSSAB Calendar

October 2019

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Oct 3 - NSSAB NNS Tour

Oct 14 - Columbus Day

GOH - Beatty

EM SSAB Chairs - Idaho

December 2019

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Dec 25 - Christmas

February 2020

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Feb 17 - President's Day

April 2020

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

EM SSAB Chairs -NV

Spring Break Apr 6-13

June 2020

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

August 2020

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

EM SSAB-NM

November 2019

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Nov 11 - Veterans Day

Nov 13- NSSAB Mtg-LV

Nov 19-21 IG Mtg, Nashville

Nov 28 - Thanksgiving

January 2020

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Jan 1 - New Years Day

Jan 15 - NSSAB Mtg - Pahr

Jan 20 - MLK

March 2020

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Mar 8-12 WMS Phoenix

Mar 18 - NSSAB Mtg - LV

EM SSAB Chairs -NV

May 2020

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

May 20 - NSSAB Mtg - AV

May 25 - Memorial Day

July 2020

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

July 3 - Ind Day Observed

July 15 - NSSAB Mtg - LV

September 2020

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

EM SSAB-NM

Sep 8-10-RadWaste

Sep 7-Labor Day

9/16-18-EM Cleanup WS

Sept 23 - NSSAB Mtg - LV