

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO) RECORD OF TECHNICAL CHANGE (ROTC)

Corrective Action Unit (CAU) Number: 105

CAU Description: Area 2 Yucca Flat Atmospheric Test Sites

CAU Owner: Soils - Environmental Restoration (ER)

ROTC No. DOE/NV--1508-Rev. 1-ROTC 1 **Page** 1 **of** 37

Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

The following technical changes (including justification) are requested by:

Tiffany Gamero

Requestor Name

Long-Term Monitoring Activity Lead

Requestor Title

Description of Change:

1. This ROTC replaces the Use Restriction (UR) forms listed in the CAU 105 CADD/CR, Rev. 1 (DOE/NV--1508-Rev. 1).

These UR forms have been updated to list all UR requirements, including but not limited to: post-closure site controls, inspection and maintenance requirements, Geographic Information Systems (GIS) coordinate information. The UR Forms attached to this ROTC are the current UR requirements for each UR in this CAU and supersede any existing UR documentation.

2. The Administrative UR for Corrective Action Sites (CASs) 02-23-04, 02-23-08, and 02-23-09 was separated into Administrative URs for each CAS. The FFACO UR for Corrective Action Sites (CASs) 02-23-04, 02-23-08, and 02-23-09 was assigned only to CAS 02-23-04.

Justification:

1. Changes in UR requirements from those found in closure documents have been documented in letters, memos, and inspection reports. This has resulted in difficulty in determining current UR requirements. A review of the post-closure requirements for this CAU has been conducted to ensure that all UR requirements have been identified and documented on the new UR form. The new UR form was developed to be inclusive of all requirements for long-term monitoring and standardize information contained in the URs.
2. Current protocol is to have separate URs for each CAS. Corrective Action Sites (CASs) 02-23-04, 02-23-08, and 02-23-09 had a common FFACO UR for the previously unidentified waste trench located approximately 0.7 mi east of Site T-2. The contamination in this trench has not been associated with any of the three test releases located at Site T-2 (identified as the three CASs) but does require an FFACO UR. Therefore, the FFACO UR originally common to all three

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO) RECORD OF TECHNICAL CHANGE (ROTC)

Corrective Action Unit (CAU) Number: 105

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CAU Owner: Soils - Environmental Restoration (ER)

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Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

Description of Change:

3. For the CAS 02-23-05 FFACO UR, the depth of "6 in. bgs" was changed to 2 meters in the new UR form.

Justification:

CASs did not need to be assigned to each CAS. Instead, it was arbitrarily assigned to CAS 02-23-04. The Administrative UR common to CASs 02-23-04, 02-23-08, and 02-23-09 was created for each of CASs in the new UR forms.

3. This matches the "surface and subsurface" description in the original Summary Statement and better encompasses the lead-lined vaults described in the CADD/CR that are deeper than 6 inches below ground surface (bgs).

Schedule Impacts:

No impacts to schedule.

ROTC applies to the following document(s):

- U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2013. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1508. Las Vegas, NV.
- U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 1, DOE/NV--1508-Rev. 1. Las Vegas, NV.

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO)
RECORD OF TECHNICAL CHANGE (ROTC)

Corrective Action Unit (CAU) Number: 105

CAU Description: Area 2 Yucca Flat Atmospheric Test Sites

CAU Owner: Soils - Environmental Restoration (ER)

ROTC No. DOE/NV--1508-Rev. 1-ROTC 1 **Page** 3 **of** 37
Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

Approvals:

/s/ Kevin Cabble

Date 2/14/19

Kevin Cabble

Activity Lead

Environmental Management (EM) Nevada Program

/s/ Wilhelm R. Wilborn

Date 2/20/2019

Bill Wilborn

Deputy Program Manager, Operations

Environmental Management (EM) Nevada Program

/s/ Chris Andres

Date 2/25/19

Chris Andres

Chief, Bureau of Federal Facilities

Nevada Division of Environmental Protection (NDEP)

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

| | |
|--|--|
| Use Restriction (UR) Type(s): | Both FFACO and Administrative |
| Corrective Action Unit (CAU) Number & Description: | 105 - Area 2 Yucca Flat Atmospheric Test Sites |
| Corrective Action Site (CAS) Number & Description: | 02-23-04 - Atmospheric Test Site - Whitney |
| CAU/CAS Owner: | Soils - ER |
| Note: | CAS previously shared UR Form with CASs 02-23-08 and 02-23-09. |

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Radiological and Chemical contaminants that were released at this site. Radiological and Chemical contaminants are assumed to be present that exceed CAS 02-23-04 final action levels under the Occasional Use Area (80 hours per year) exposure scenario.

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| FFACO Boundary | 1 | 579,368 | 4,110,711 |
| | 2 | 579,313 | 4,110,754 |
| | 3 | 579,286 | 4,110,798 |
| | 4 | 579,360 | 4,110,835 |
| | 5 | 579,405 | 4,110,726 |
| | 6 | 579,368 | 4,110,711 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Subsurface

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Starting Depth: 0 _____ **Ending Depth:** 250 _____
Depth Unit: Centimeters
Survey Source: GPS

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

| Control | Criteria |
|---------|----------------------|
| Signage | Present and legible. |

Inspection Frequency: Annual

Additional Considerations:

| Consideration | Criteria |
|---------------|----------|
| None | None |

Requirements Comments: N/A

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 02-23-04 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| Admin Boundary | 1 | 578,317 | 4,110,204 |
| | 2 | 578,178 | 4,110,204 |
| | 3 | 577,957 | 4,110,360 |
| | 4 | 577,968 | 4,110,785 |
| | 5 | 578,157 | 4,110,941 |
| | 6 | 578,631 | 4,110,849 |
| | 7 | 578,700 | 4,110,398 |
| | 8 | 578,317 | 4,110,204 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GPS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 105 CADD/CR (DOE/NV--1508-Rev. 1), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 1, DOE/NV--1508-Rev. 1. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2013. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1508. Las Vegas, NV.

Attachments

- CAU 105, CAS 02-23-04 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-04 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-04 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero


Tiffany Gamero

Activity Lead

EM Nevada Program

Date:


2/14/2019



CAU 105, CAS 02-23-04
Atmospheric Test Site - Whitney
FFACO UR Boundary

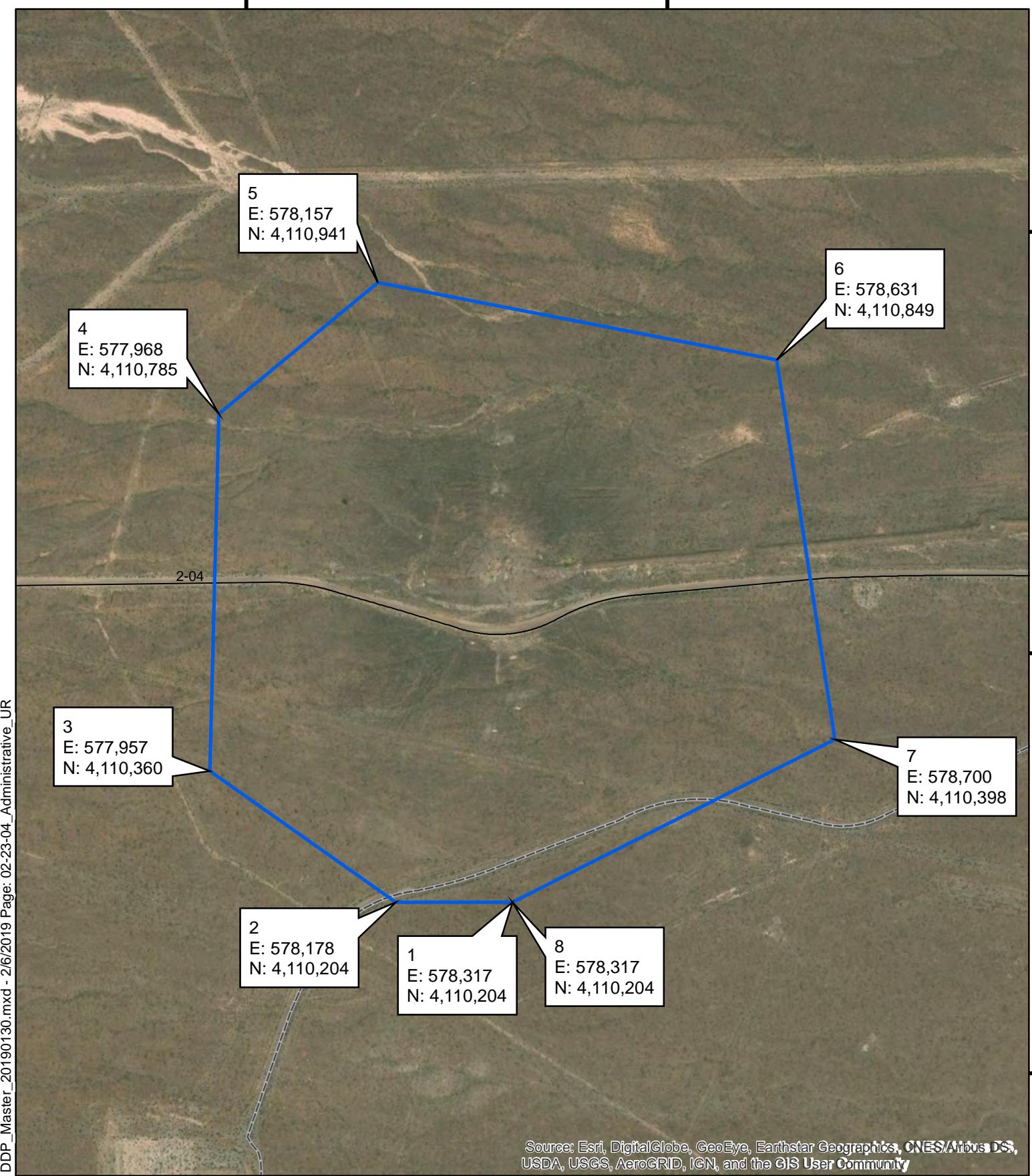
Explanation

FFACO UR

Vehicular Trail

0 10 20 40 Meters

0 35 70 140 Feet



CAU 105, CAS 02-23-04 Atmospheric Test Site - Whitney Administrative UR Boundary

NOTE: CAS 02-23-04, CAS 02-23-08, and CAS 02-23-09 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation

- █ Administrative UR
- Local Road
- Vehicular Trail



NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

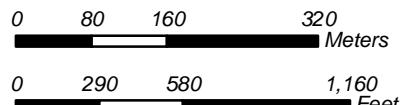
The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.



Source: Navarro GIS, 2019

CAU 105, CAS 02-23-04
Atmospheric Test Site -
Whitney
Supplemental Information
General Location of Site Features



NOTE: Size and location of features are approximated
 Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

| | |
|--|--|
| Use Restriction (UR) Type(s): | Both FFACO and Administrative |
| Corrective Action Unit (CAU) Number & Description: | 105 - Area 2 Yucca Flat Atmospheric Test Sites |
| Corrective Action Site (CAS) Number & Description: | 02-23-05 - Atmospheric Test Site T-2A |
| CAU/CAS Owner: | Soils - ER |
| Note: | N/A |

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Chemical contaminants that were released at this site. Chemical contaminants are present that exceed CAS 02-23-05 final action levels under the Occasional Use Area (80 hours per year) exposure scenario.

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| FFACO Boundary | 1 | 579,297 | 4,109,355 |
| | 2 | 579,237 | 4,109,377 |
| | 3 | 579,217 | 4,109,435 |
| | 4 | 579,238 | 4,109,490 |
| | 5 | 579,296 | 4,109,513 |
| | 6 | 579,352 | 4,109,491 |
| | 7 | 579,377 | 4,109,434 |
| | 8 | 579,354 | 4,109,376 |
| | 9 | 579,297 | 4,109,355 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Boundary Applies to: Both Surface and Subsurface

Starting Depth: 0 **Ending Depth:** 2

Depth Unit: Meters

Survey Source: GPS

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

| Control | Criteria |
|---------|----------------------|
| Signage | Present and legible. |

Inspection Frequency: Annual

Additional Considerations:

| Consideration | Criteria |
|---------------|----------|
| None | None |

Requirements Comments: N/A

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 02-23-05 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| Admin Boundary | 1 | 579,641 | 4,109,206 |
| | 2 | 579,157 | 4,109,261 |
| | 3 | 579,078 | 4,109,565 |
| | 4 | 579,459 | 4,109,595 |
| | 5 | 579,641 | 4,109,206 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GPS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 105 CADD/CR (DOE/NV--1508-Rev. 1), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 1, DOE/NV--1508-Rev. 1. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2013. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1508. Las Vegas, NV.

Attachments

- CAU 105, CAS 02-23-05 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-05 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-05 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

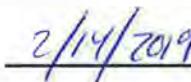
/s/ Tiffany Gamero


Tiffany Gamero

Activity Lead

EM Nevada Program

Date:

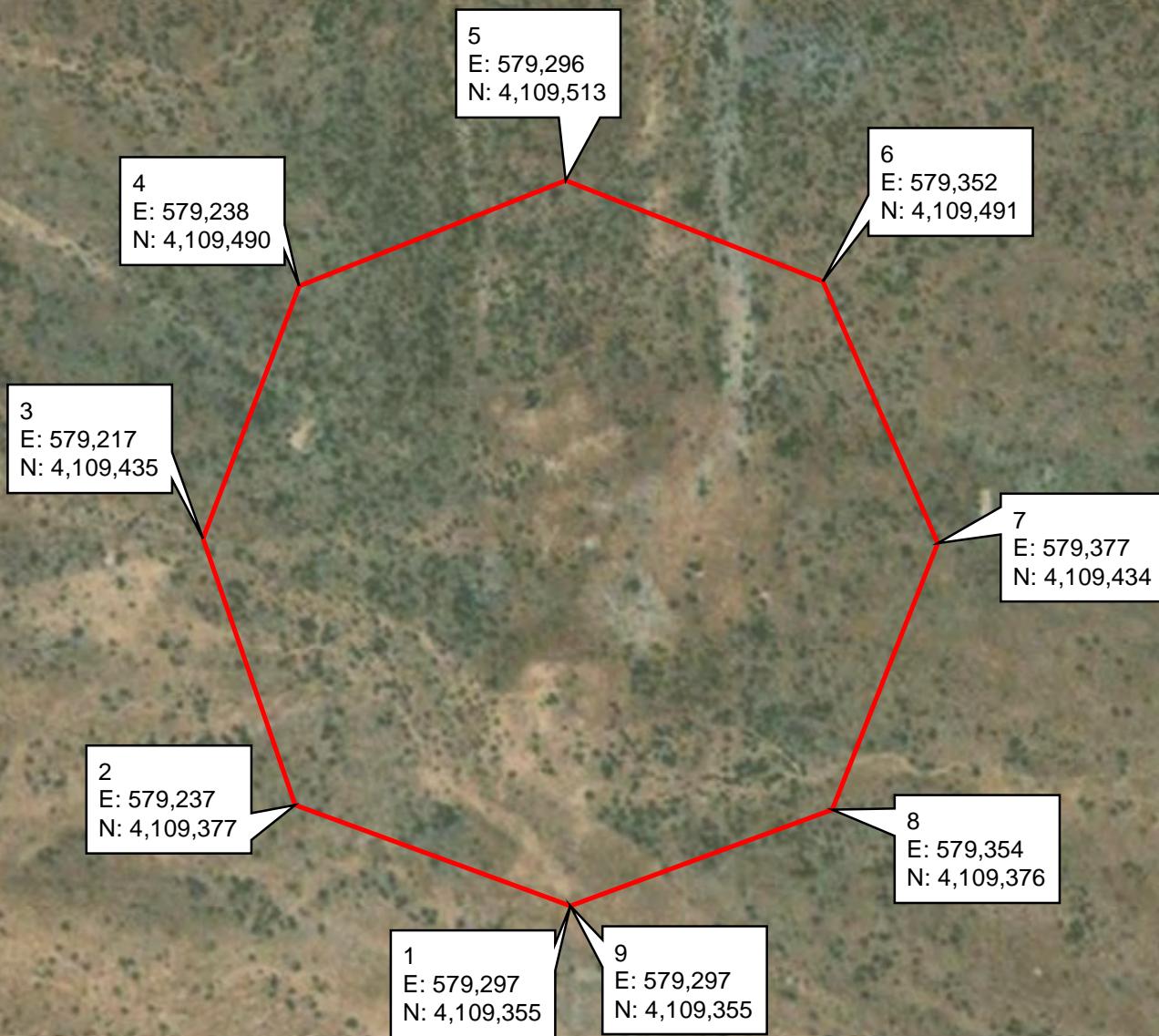

2/14/2019

579200

579300

579400

4109600



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**CAU 105, CAS 02-23-05
Atmospheric Test Site T-2A
FFACO UR Boundary**

Explanation

FFACO UR

0 15 30 60 Meters

0 50 100 200 Feet



Source: Navarro GIS, 2019

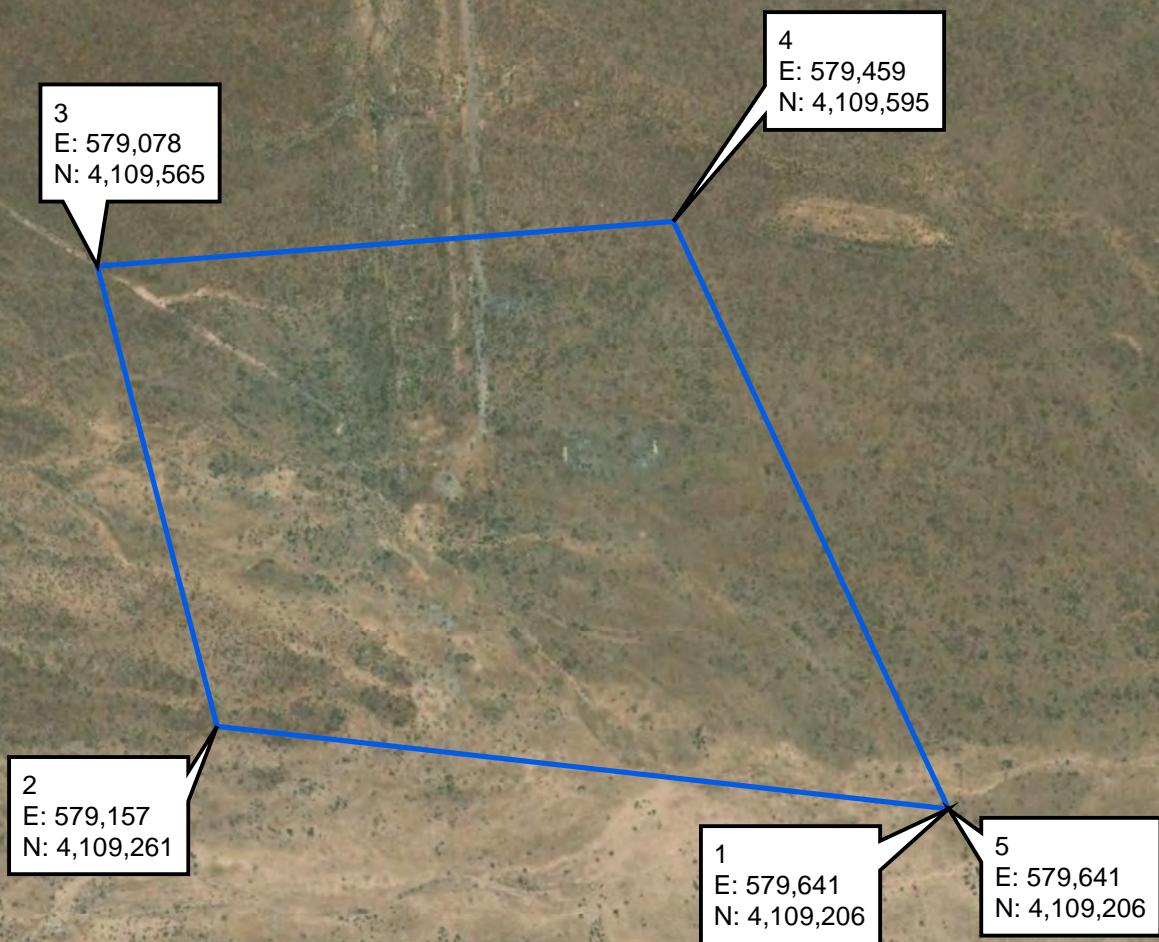
NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

579000

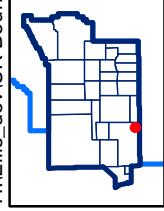
579500

4109500

4109000



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



CAU 105, CAS 02-23-05
Atmospheric Test Site T-2A
Administrative UR Boundary

Explanation

Administrative UR

0 50 100 200 Meters

0 180 360 720 Feet

Source: Navarro GIS, 2019

NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

578,500

579,000

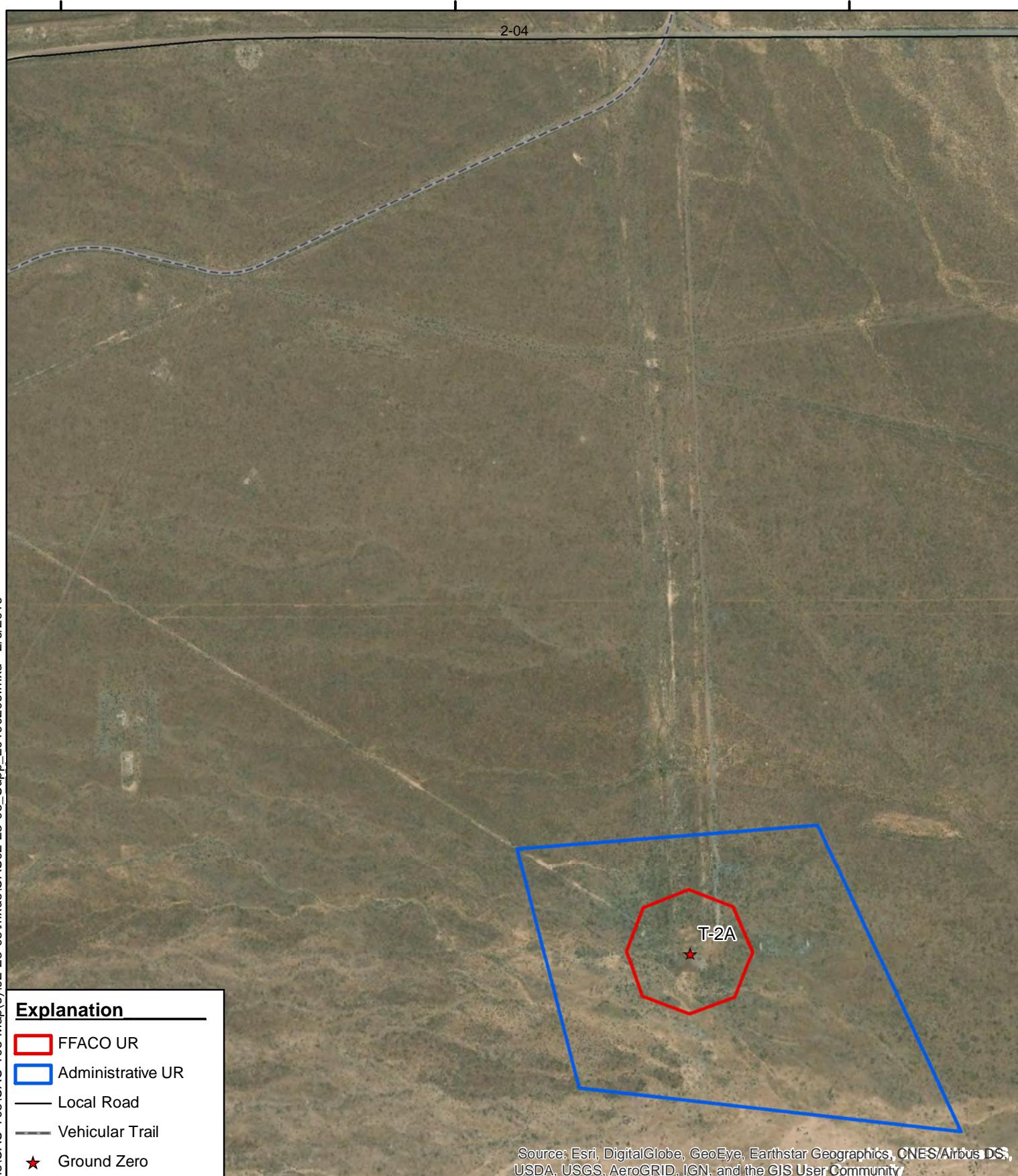
579,500

2-04

4,110,500

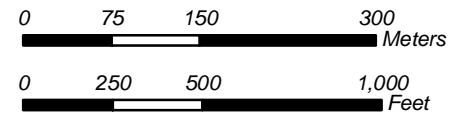
4,110,000

4,109,500



Source: Navarro GIS, 2019

CAU 105, CAS 02-23-05 Atmospheric Test Site T-2A Supplemental Information General Location of Site Features



NOTE: Size and location of features are approximated.

Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

| | |
|--|--|
| Use Restriction (UR) Type(s): | Administrative Only |
| Corrective Action Unit (CAU) Number & Description: | 105 - Area 2 Yucca Flat Atmospheric Test Sites |
| Corrective Action Site (CAS) Number & Description: | 02-23-06 - Atmospheric Test Site T-2B |
| CAU/CAS Owner: | Soils - ER |
| Note: | N/A |

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

An FFACO UR is not identified for this site.

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 02-23-06 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| Admin Boundary | 1 | 579,309 | 4,111,716 |
| | 2 | 578,836 | 4,111,738 |
| | 3 | 578,832 | 4,111,933 |
| | 4 | 579,261 | 4,111,968 |
| | 5 | 579,309 | 4,111,716 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Starting Depth: 0 _____ **Ending Depth:** 15 _____
Depth Unit: Centimeters
Survey Source: GPS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 105 CADD/CR (DOE/NV--1508-Rev. 1), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 1, DOE/NV--1508-Rev. 1. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2013. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1508. Las Vegas, NV.

Attachments

- CAU 105, CAS 02-23-06 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-06 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Section IV. Recordation Requirements

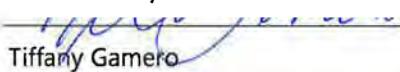
Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero



Tiffany Gamero

Date:

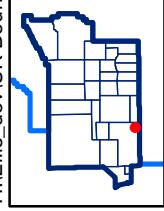
2/14/2014

Activity Lead

EM Nevada Program



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

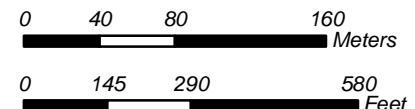


CAU 105, CAS 02-23-06 Atmospheric Test Site T-2B Administrative UR Boundary

Source: Navarro GIS, 2019

Explanation

- Administrative UR (blue square)
- Vehicular Trail (dashed line)

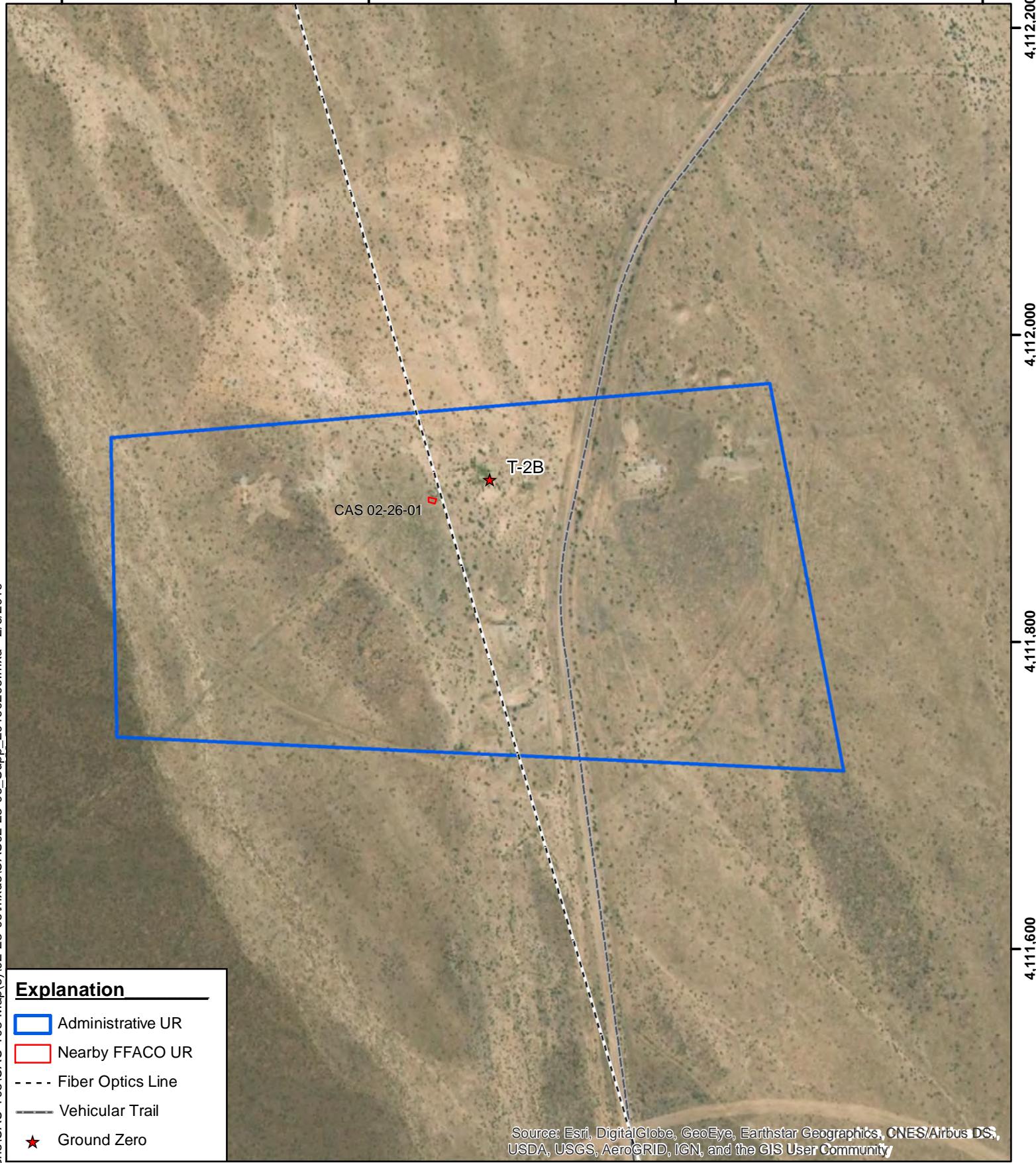


NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.



Source: Navarro GIS, 2019

CAU 105, CAS 02-23-06 Atmospheric Test Site T-2B Supplemental Information General Location of Site Features



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

General Information

| | |
|--|--|
| Use Restriction (UR) Type(s): | Administrative Only |
| Corrective Action Unit (CAU) Number & Description: | 105 - Area 2 Yucca Flat Atmospheric Test Sites |
| Corrective Action Site (CAS) Number & Description: | 02-23-08 - Atmospheric Test Site T-2 |
| CAU/CAS Owner: | Soils - ER |
| Note: | CAS previously shared UR Form with CASs 02-23-04 and 02-23-09. |

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

An FFACO UR is not identified for this site.

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 02-23-08 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| Admin Boundary | 1 | 578,317 | 4,110,204 |
| | 2 | 578,178 | 4,110,204 |
| | 3 | 577,957 | 4,110,360 |
| | 4 | 577,968 | 4,110,785 |
| | 5 | 578,157 | 4,110,941 |
| | 6 | 578,631 | 4,110,849 |
| | 7 | 578,700 | 4,110,398 |
| | 8 | 578,317 | 4,110,204 |

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GPS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 105 CADD/CR (DOE/NV--1508-Rev. 1), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 1, DOE/NV--1508-Rev. 1. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2013. Corrective Action Decision Document/Closure Report for Corrective Action Unit 105: Area 2 Yucca Flat Atmospheric Test Sites, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1508. Las Vegas, NV.

Attachments

- CAU 105, CAS 02-23-08 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-08 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

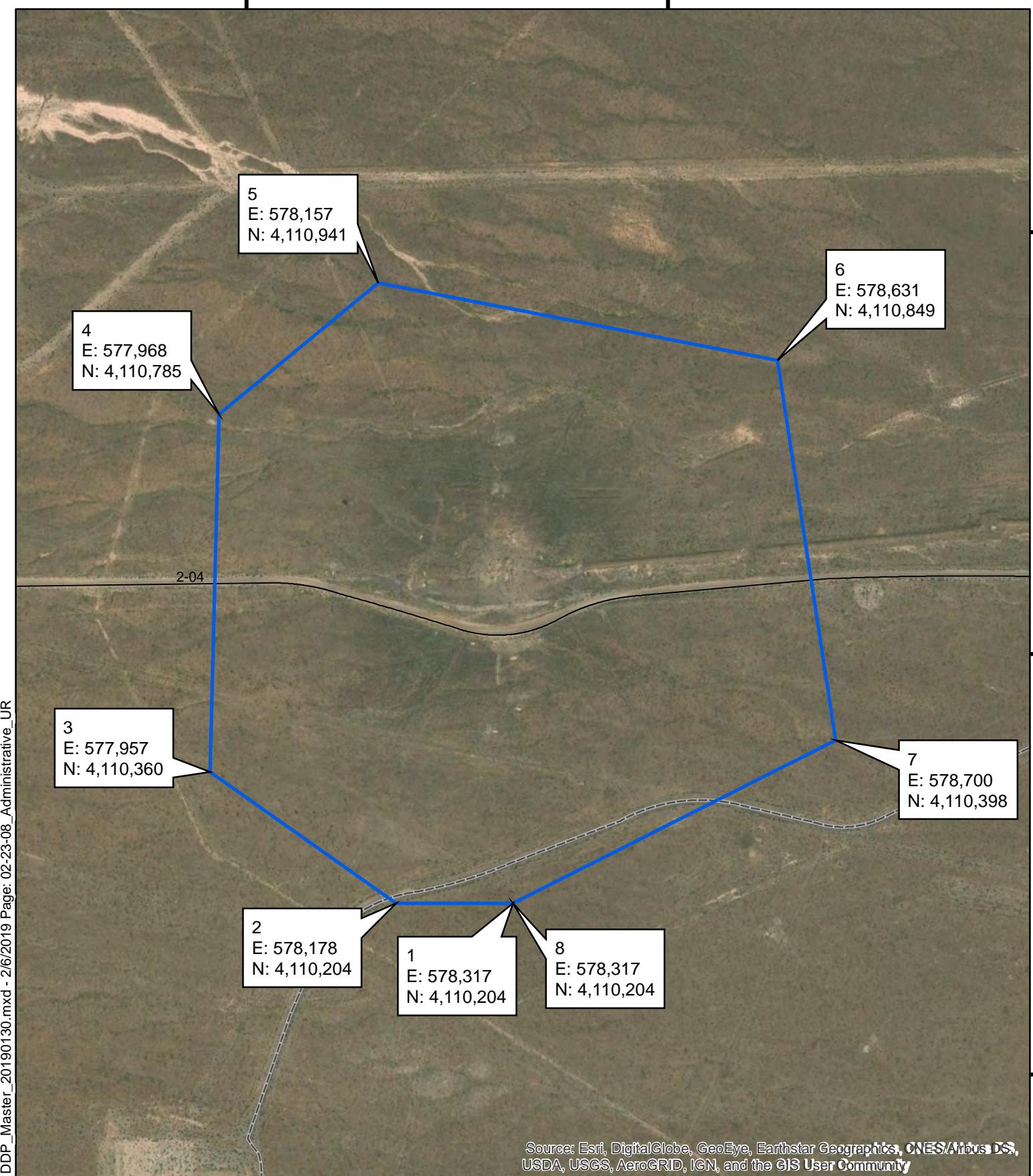

Tiffany Gamero

Activity Lead

EM Nevada Program

Date:


2/14/2019



CAU 105, CAS 02-23-08 Atmospheric Test Site T-2 Administrative UR Boundary

NOTE: CAS 02-23-04, CAS 02-23-08, and CAS 02-23-09 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation

- Administrative UR (blue square)
- Local Road (solid black line)
- Vehicular Trail (dashed black line)



NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

578,000

578,250

578,500

578,750

4,110,900

4,110,625

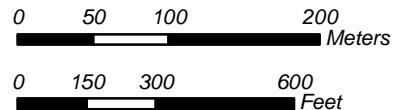
4,110,350

4,110,075



Source: Navarro GIS, 2019

CAU 105, CAS 02-23-08 Atmospheric Test Site T-2 Supplemental Information General Location of Site Features



NOTE: Size and location of features are approximated.

Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

General Information

| | |
|--|--|
| Use Restriction (UR) Type(s): | Administrative Only |
| Corrective Action Unit (CAU) Number & Description: | 105 - Area 2 Yucca Flat Atmospheric Test Sites |
| Corrective Action Site (CAS) Number & Description: | 02-23-09 - Atmospheric Test Site - Turk |
| CAU/CAS Owner: | Soils - ER |
| Note: | CAS previously shared UR Form with CASs 02-23-04 and 02-23-08. |

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

An FFACO UR is not identified for this site.

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 02-23-09 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

| UR Boundary | UR Point ¹ | Easting ² | Northing ² |
|----------------|-----------------------|----------------------|-----------------------|
| Admin Boundary | 1 | 578,317 | 4,110,204 |
| | 2 | 578,178 | 4,110,204 |
| | 3 | 577,957 | 4,110,360 |
| | 4 | 577,968 | 4,110,785 |
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¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GPS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

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U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

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Attachments

- CAU 105, CAS 02-23-09 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 105, CAS 02-23-09 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

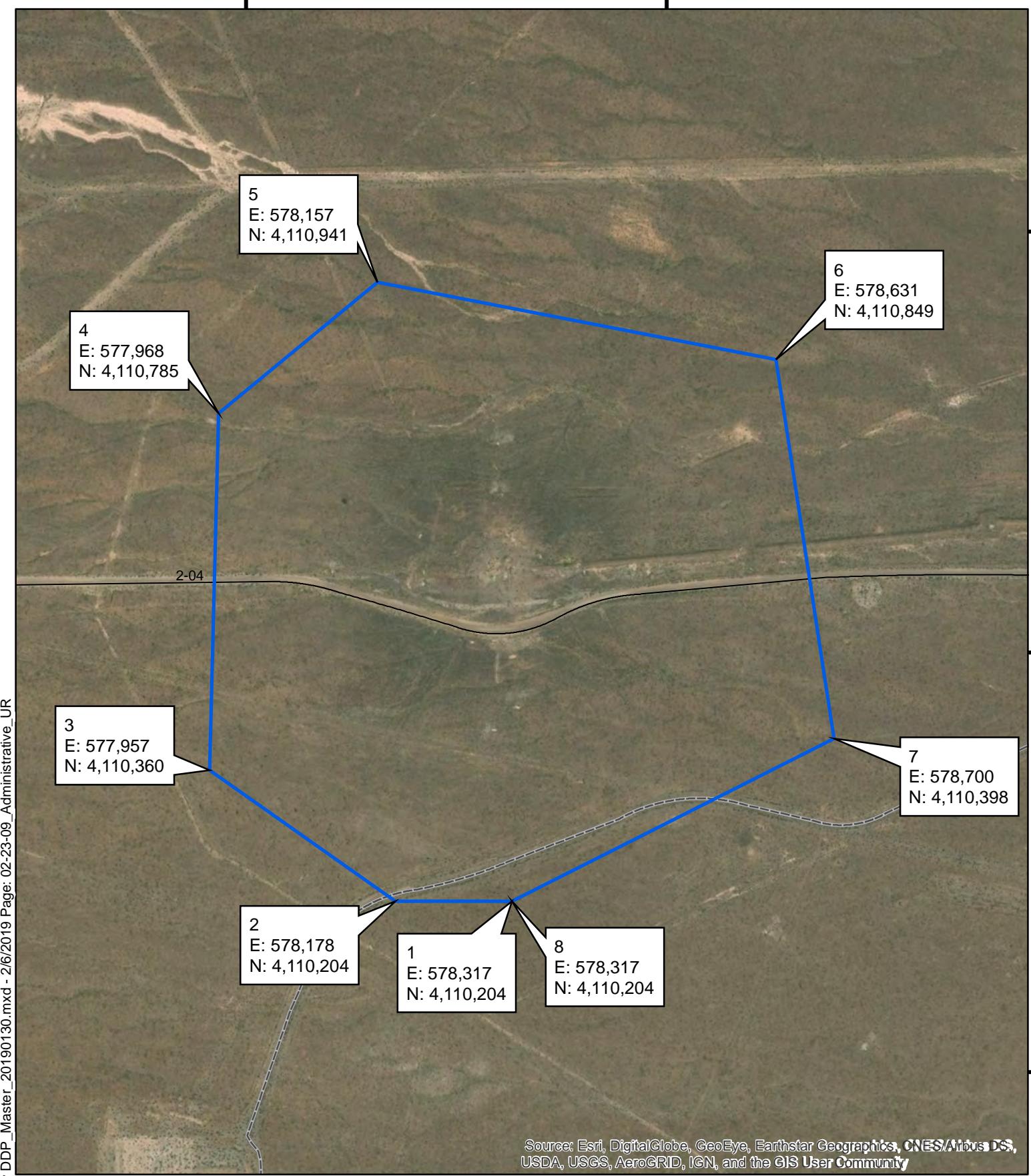

Tiffany Gamero

Activity Lead

EM Nevada Program

Date:


2/14/2019



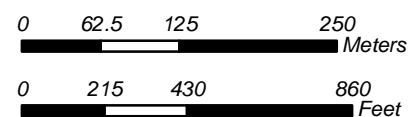
CAU 105, CAS 02-23-09 Atmospheric Test Site - Turk Administrative UR Boundary

NOTE: CAS 02-23-04, CAS 02-23-08, and CAS 02-23-09 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation

- Administrative UR
- Local Road
- Vehicular Trail



NOTE: Size and location of features are approximated
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

578,000

578,250

578,500

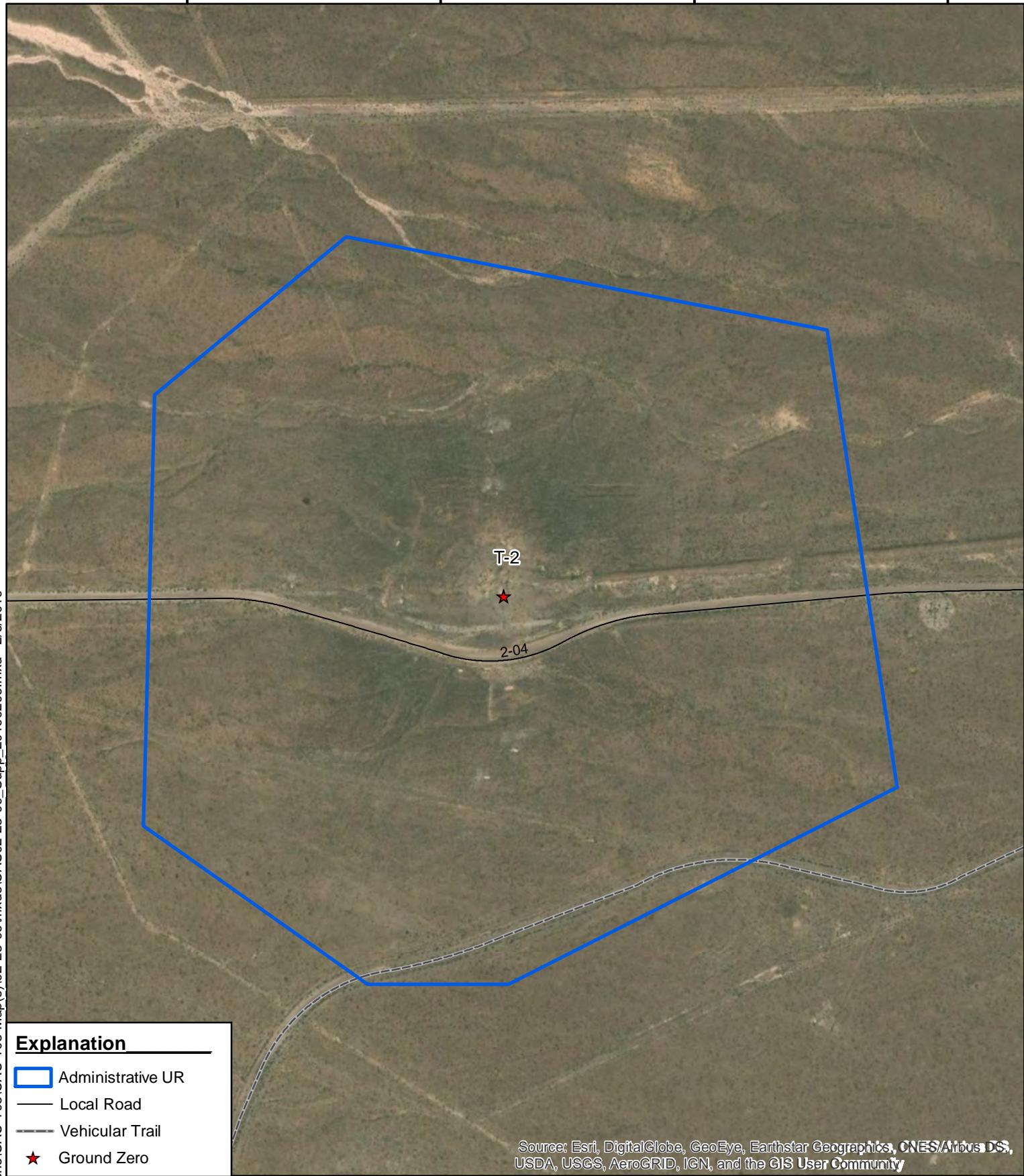
578,750

4,110,900

4,110,625

4,110,350

4,110,075



Source: Navarro GIS, 2019

**CAU 105, CAS 02-23-09
Atmospheric Test Site - Turk
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.

Coordinate System: NAD 1983 UTM Zone 11N, Meter