

Authorization ID: BAN700173  
Contact Name: DEPARTMENT OF ENERGY  
Expiration Date: 04/30/2028  
Use Code: 422

FS-2700-4 (VER. 03/17)  
OMB 0596-0082

**U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE**

**SPECIAL USE PERMIT**

**Authority: ORGANIC ADMINISTRATION ACT June 4, 1897**

DEPARTMENT OF ENERGY, ATTN: SUSAN BOURGART, REALTY SPECIALIST of 9800 S CASS AVE, BUILDING 201, LEMONT IL USA 60439 (hereinafter "the holder") is authorized to use or occupy National Forest System lands in the William B. Bankhead National Forest, subject to the terms and conditions of this special use permit (the permit).

This permit covers less than 5 acres in the Sec. 14, T. 8 S., R. 8 W., HUNTSVILLE MERIDIAN, Lawrence County, AL ("the permit area"), as shown on the map attached as Appendix A. This and any other appendices to this permit are hereby incorporated into this permit.

This permit issued for the purpose of:

Constructing and installing structures and instrumentation for atmospheric observations, in addition to maintenance and operation of the Department of Energy Atmospheric Radiation Measurement user facility by Argonne National Lab (ANL). Structures and instrumentation are detailed in plans provided by ANL, but include the following in this authorization:

- Main instrument field (300'x 300')
- 140 foot scaffold tower
- Gravel entrance road and concrete pad improvement
- Tractor shed
- Fenced entry

A phased deployment will include a central facility at the Black Warrior Work Center (BWWC) consisting of a main office site with a balloon launching pad, main instrument field, and a 140-foot scaffold tower. Phase two will include supplemental sites arranged around the BWWC.

**TERMS AND CONDITIONS**

**I. GENERAL TERMS**

**A. AUTHORITY.** This permit is issued pursuant to the Organic Administration Act of June 4, 1987 and 36 CFR Part 251, Subpart B, as amended, and is subject to their provisions.

**B. AUTHORIZED OFFICER.** The authorized officer is the Forest or Grassland Supervisor or a subordinate officer with delegated authority.

**C. TERM.** This permit shall expire at midnight on 04/30/2028, 5 years from the date of issuance.

**D. CONTINUATION OF USE AND OCCUPANCY.** This permit is not renewable. Prior to expiration of this permit, the holder may apply for a new permit for the use and occupancy authorized by this permit. Applications for a new permit must be submitted at least 6 months prior to expiration of this permit. Issuance of a new permit is at the sole discretion of the authorized officer. At a minimum, before issuing a new permit, the authorized officer shall ensure that (1) the use and occupancy to be authorized by the new permit is consistent with the standards and guidelines in the applicable land management plan; (2) the type of use and occupancy to be authorized by the new permit is the same as the type of use and occupancy authorized by this permit; and (3) the holder is in compliance with all the terms of this permit. The authorized officer may prescribe new terms and conditions when a new permit is issued.

**E. AMENDMENT.** This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law, regulation, directive, the applicable forest land and resource management plan, or projects and activities implementing a land management plan pursuant to 36 CFR Part 215.

**F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS.** In exercising the rights and privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations, and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulation, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other governmental entities.

**G. NON-EXCLUSIVE USE.** The use or occupancy authorized by this permit is not exclusive. The Forest Service reserves the right of access to the permit area, including a continuing right of physical entry to the permit area for inspection, monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation. The Forest Service reserves the right to allow others to use the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved. Except for any restrictions that the holder and the authorized officer agree are necessary to protect the installation and operation of authorized temporary improvements, the lands and waters covered by this permit shall remain open to the public for all lawful purposes.

**H. ASSIGNABILITY.** This permit is not assignable or transferable.

## **I. TRANSFER OF TITLE TO THE IMPROVEMENTS.**

1. **Notification of Transfer.** The holder shall notify the authorized officer when a transfer of title to all or part of the authorized improvements is planned.

2. **Transfer of Title.** Any transfer of title to the improvements covered by this permit shall result in termination of the permit. The party who acquires title to the improvements must submit an application for a permit. The Forest Service is not obligated to issue a new permit to the party who acquires title to the improvements. The authorized officer shall determine that the applicant meets requirements under applicable federal regulations.

## **II. IMPROVEMENTS**

**A. LIMITATIONS ON USE.** Nothing in this permit gives or implies permission to build or maintain any structure or facility or to conduct any activity, unless specifically authorized by this permit. Any use not specifically authorized by this permit must be proposed in accordance with 36 CFR 251.54. Approval of such a proposal through issuance of a new permit or permit amendment is at the sole discretion of the authorized officer.

**B. PLANS.** All plans for development, layout, construction, reconstruction, or alteration of improvements in the permit area, as well as revisions to those plans must be prepared by a professional engineer, architect, landscape architect, or other qualified professional based on federal employment standards acceptable to the authorized officer. These plans and plan revisions must have written approval from the authorized officer before they are implemented. The authorized officer may require the holder to furnish as-built plans, maps, or surveys upon completion of the work.

**C. CONSTRUCTION.** Any construction authorized by this permit shall commence by 1/1/2023 and shall be completed by 12/31/2023.

## **III. OPERATIONS.**

**A. PERIOD OF USE.** Use or occupancy of the permit area shall be exercised at least 365 days each year.

**B. CONDITION OF OPERATIONS.** The holder shall maintain the authorized improvements and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer when deemed necessary to meet statutory, regulatory, or policy requirements or to protect national forest resources. The holder shall comply with inspection requirements deemed appropriate by the authorized officer.

**C. OPERATING PLAN.** The holder shall prepare and annually revise by January 1 an operating plan. The operating plan shall be prepared in consultation with the authorized officer or the authorized officer's designated representative and shall cover all operations authorized by this permit. The operating plan shall outline steps the holder will take to protect public health and safety and the

environment and shall include sufficient detail and standards to enable the Forest Service to monitor the holder's operations for compliance with the terms and conditions of this permit. The operating plan shall be submitted by the holder and approved by the authorized officer or the authorized officer's designated representative prior to commencement of operations and shall be attached to this permit as an appendix. The authorized officer may require an annual meeting with the holder to discuss the terms and conditions of the permit or operating plan, annual use reports, or other concerns either party may have.

**D. MONITORING BY THE FOREST SERVICE.** The Forest Service shall monitor the holder's operations and reserves the right to inspect the permit area and transmission facilities at any time for compliance with the terms of this permit. The holder shall comply with inspection requirements deemed appropriate by the authorized officer. The holder's obligations under this permit are not contingent upon any duty of the Forest Service to inspect the permit area or transmission facilities. A failure by the Forest Service or other governmental officials to inspect is not a justification for noncompliance with any of the terms and conditions of this permit.

#### **IV. RIGHTS AND LIABILITIES**

**A. LEGAL EFFECT OF THE PERMIT.** This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the procedures set forth in 36 CFR 214 and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

**B. VALID EXISTING RIGHTS.** This permit is subject to all valid existing rights. Valid existing rights include those derived under mining and mineral leasing laws of the United States. The United States is not liable to the holder for the exercise of any such right.

**C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS.** The parties to this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

**D. SERVICES NOT PROVIDED.** This permit does not provide for the furnishing of road or trail maintenance, water, fire protection, search and rescue, or any other such service by a government agency, utility, association, or individual.

**E. LOSS OF AUTHORIZED IMPROVEMENTS.** If authorized temporary improvements in the permit area are destroyed or substantially damaged, the authorized officer shall conduct an analysis to determine whether the improvements can be safely occupied in the future and whether rebuilding should be allowed. If rebuilding is not allowed, the permit shall terminate.

**F. HEALTH AND SAFETY.** The holder shall take all measures necessary to protect the health and safety of all persons affected by the use and occupancy authorized by this permit. The holder shall promptly abate as completely as possible and in compliance with all applicable laws and regulations any physical or mechanical procedure, activity, event, or condition existing or occurring in connection with the authorized use and occupancy during the term of this permit that causes or

threatens to cause a hazard to the health or safety of the public or the holder's employees or agents. The holder shall as soon as practicable notify the authorized officer of all serious accidents that occur in connection with these procedures, activities, events, or conditions. The Forest Service has no duty under the terms of this permit to inspect the permit area or operations of the holder for hazardous conditions or compliance with health and safety standards.

## **G. ENVIRONMENTAL PROTECTION.**

1. For purposes of clause IV.G and section V, "hazardous material" shall mean (a) any hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws.

2. The holder shall avoid damaging or contaminating the environment, including but not limited to the soil, vegetation (such as trees, shrubs, and grass), surface water, and groundwater, during the holder's use and occupancy of the permit area. Environmental damage includes but is not limited to all costs and damages associated with or resulting from the release or threatened release of a hazardous material occurring during or as a result of activities of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees on, or related to, the lands, property, and other interests covered by this permit. If the environment or any government property covered by this permit becomes damaged in connection with the holder's use and occupancy, the holder shall as soon as practicable repair the damage or replace the damaged items to the satisfaction of the authorized officer and at no expense to the United States.

3. The holder shall as soon as practicable, as completely as possible, and in compliance with all applicable laws and regulations abate any physical or mechanical procedure, activity, event, or condition existing or occurring in connection with the authorized use and occupancy during or after the term of this permit that causes or threatens to cause harm to the environment, including but not limited to areas of vegetation or timber, fish or other wildlife populations, their habitats, or any other natural resources.

## **V. RESOURCE PROTECTION**

**A. COMPLIANCE WITH ENVIRONMENTAL LAWS.** The holder shall in connection with the use or occupancy authorized by this permit comply with all applicable federal, state, and local environmental laws and regulations, including but not limited to those established pursuant to the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., the Oil Pollution Act, as amended, 33 U.S.C. 2701 et seq., the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., CERCLA, as amended, 42 U.S.C. 9601 et seq., the Toxic Substances Control Act, as amended, 15 U.S.C. 2601 et seq., the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. 136 et seq., and the Safe Drinking Water Act, as amended, 42 U.S.C. 300f et seq.

**B. VANDALISM.** The holder shall take reasonable measures to prevent and discourage vandalism and disorderly conduct and when necessary shall contact the appropriate law enforcement officer.

**C. PESTICIDE USE.**

1. Authorized Officer Concurrence. Pesticides may not be used outside of buildings in the permit area to control pests, including undesirable woody and herbaceous vegetation (including aquatic plants), insects, birds, rodents, or fish without prior written concurrence of the authorized officer. Only those products registered or otherwise authorized by the U.S. Environmental Protection Agency and appropriate State authority for the specific purpose planned shall be authorized for use within areas on National Forest System lands.

2. Pesticide-Use Proposal. Requests for concurrence of any planned uses of pesticides shall be provided in advance using the Pesticide-Use Proposal (form FS-2100-2). Annually the holder shall, on the due date established by the authorized officer, submit requests for any new, or continued, pesticide usage. The Pesticide-Use Proposal shall cover a 12-month period of planned use. The Pesticide-Use Proposal shall be submitted at least 60 days in advance of pesticide application. Information essential for review shall be provided in the form specified. Exceptions to this schedule may be allowed, subject to emergency request and approval, only when unexpected outbreaks of pests require control measures which were not anticipated at the time a Pesticide-Use Proposal was submitted.

3. Labeling, Laws, and Regulations. Label instructions and all applicable laws and regulations shall be strictly followed in the application of pesticides and disposal of excess materials and containers. No pesticide waste, excess materials, or containers shall be disposed of in any area administered by the Forest Service.

**D. ARCHAEOLOGICAL-PALEONTOLOGICAL DISCOVERIES.** The holder shall immediately notify the authorized officer of all antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered in connection with the use and occupancy authorized by this permit. The holder shall follow the applicable inadvertent discovery protocols for the undertaking provided in an agreement executed pursuant to section 106 of the National Historic Preservation Act, 54 U.S.C. 306108; if there are no such agreed-upon protocols, the holder shall leave these discoveries intact and in place until consultation has occurred, as informed, if applicable, by any programmatic agreement with tribes. Protective and mitigation measures developed under this clause shall be the responsibility of the holder. However, the holder shall give the authorized officer written notice before implementing these measures and shall coordinate with the authorized officer for proximate and contextual discoveries extending beyond the permit area.

**E. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA).** In accordance with 25 U.S.C. 3002(d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a

reasonable effort to protect and secure the items. The holder shall follow the applicable NAGPRA protocols for the undertaking provided in the NAGPRA plan of action or the NAGPRA comprehensive agreement; if there are no such agreed-upon protocols, the holder shall as soon as practicable notify the authorized officer of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the forest archaeologist certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

**F. PROTECTION OF THREATENED AND ENDANGERED SPECIES, SENSITIVE SPECIES, AND SPECIES OF CONSERVATION CONCERN AND THEIR HABITAT.**

1. Threatened and Endangered Species and Their Habitat. The location of sites within the permit area needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 1531 et seq., as amended, or within designated critical habitat shall be shown on a map in an appendix to this permit and may be shown on the ground. The holder shall take any protective and mitigation measures specified by the authorized officer as necessary and appropriate to avoid or reduce effects on listed species or designated critical habitat affected by the authorized use and occupancy. Discovery by the holder or the Forest Service of other sites within the permit area containing threatened or endangered species or designated critical habitat not shown on the map in the appendix shall be promptly reported to the other party and shall be added to the map.

2. Sensitive Species and Species of Conservation Concern and Their Habitat. The location of sites within the permit area needing special measures for protection of plants or animals designated by the Regional Forester as sensitive species or as species of conservation concern pursuant to FSM 2670 shall be shown on a map in an appendix to this permit and may be shown on the ground. The holder shall take any protective and mitigation measures specified by the authorized officer as necessary and appropriate to avoid or reduce effects on sensitive species or species of conservation concern or their habitat affected by the authorized use and occupancy. Discovery by the holder or the Forest Service of other sites within the permit area containing sensitive species or species of conservation concern or their habitat not shown on the map in the appendix shall be promptly reported to the other party and shall be added to the map.

**G. CONSENT TO STORE HAZARDOUS MATERIALS.** The holder shall not store any hazardous materials at the site without prior written approval from the authorized officer. This approval shall not be unreasonably withheld. If the authorized officer provides approval, this permit shall include, or in the case of approval provided after this permit is issued, shall be amended to include specific terms addressing the storage of hazardous materials, including the specific type of materials to be stored, the volume, the type of storage, and a spill plan. Such terms shall be proposed by the holder and are subject to approval by the authorized officer.

1. If the holder receives consent to store hazardous material, the holder shall identify to the Forest Service any hazardous material to be stored at the site. This identifying information shall be consistent with column (1) of the table of hazardous materials and special provisions enumerated at

49 CFR 172.101 whenever the hazardous material appears in that table. For hazard communication purposes, the holder shall maintain Material Safety Data Sheets for any stored hazardous chemicals, consistent with 29 CFR 1910.1200(c) and (g). In addition, all hazardous materials stored by the holder shall be used, labeled, stored, transported, and disposed of in accordance with all applicable federal, state, and local laws and regulations.

2. The holder shall not release any hazardous material as defined in clause IV.G. onto land or into rivers, streams, impoundments, or natural or man-made channels leading to them. All prudent and safe attempts must be made to contain any release of these materials. The authorized officer in charge may specify specific conditions that must be met, including conditions more stringent than federal, state, and local regulations, to prevent releases and protect natural resources.

3. If the holder uses or stores hazardous materials at the site, upon revocation or termination of this permit the holder shall provide the Forest Service with a report certified by a professional or professionals acceptable to the Forest Service that the permit area is uncontaminated by the presence of hazardous materials and that there has not been a release or discharge of hazardous materials upon the permit area, into surface water at or near the permit area, or into groundwater below the permit area during the term of the permit. If a release or discharge has occurred, the professional or professionals shall document and certify that the release or discharge has been fully remediated and that the permit area is in compliance with all applicable federal, state, and local laws and regulations.

#### **H. CLEANUP AND REMEDIATION.**

1. The holder shall immediately notify all appropriate response authorities, including the National Response Center and the authorized officer or the authorized officer's designated representative, of any oil discharge or of the release of a hazardous material in the permit area in an amount greater than or equal to its reportable quantity, in accordance with 33 CFR Part 153, Subpart B, and 40 CFR Part 302. For the purposes of this requirement, "oil" is as defined by section 311(a)(1) of the Clean Water Act, 33 U.S.C. 1321(a)(1). The holder shall immediately notify the authorized officer or the authorized officer's designated representative of any release or threatened release of any hazardous material in or near the permit area which may be harmful to public health or welfare or which may adversely affect natural resources on federal lands.

2. Except with respect to any federally permitted release as that term is defined under Section 101(10) of CERCLA, 42 U.S.C. 9601(10), the holder shall clean up or otherwise remediate any release, threat of release, or discharge of hazardous materials that occurs either in the permit area or in connection with the holder's activities in the permit area, regardless of whether those activities are authorized under this permit. The holder shall perform cleanup or remediation immediately upon discovery of the release, threat of release, or discharge of hazardous materials. The holder shall perform the cleanup or remediation to the satisfaction of the authorized officer and at no expense to the United States. Upon revocation or termination of this permit, the holder shall deliver the site to the Forest Service free and clear of contamination.

#### **VI. LAND USE FEE AND DEBT COLLECTION**

**A. LAND USE FEES.** The use or occupancy authorized by this permit is exempt from a land use fee or the land use fee has been waived in full pursuant to 36 CFR 251.57 and Forest Service Handbook 2709.11, Chapter 30.

## **VII. REVOCATION, SUSPENSION, AND TERMINATION**

**A. REVOCATION AND SUSPENSION.** The authorized officer may revoke or suspend this permit in whole or in part:

1. For noncompliance with federal, state, or local law.
2. For noncompliance with the terms of this permit.
3. For abandonment or other failure of the holder to exercise the privileges granted.
4. With the consent of the holder.
5. For specific and compelling reasons in the public interest.

Prior to revocation or suspension, other than immediate suspension under clause VII.B, the authorized officer shall give the holder written notice of the grounds for revocation or suspension and a reasonable period, typically not to exceed 90 days, to cure any noncompliance.

**B. IMMEDIATE SUSPENSION.** The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an on-site review with the authorized officer's supervisor of the adverse conditions prompting the suspension. The authorized officer's supervisor shall grant this request within 48 hours. Following the on-site review, the authorized officer's supervisor shall promptly affirm, modify, or cancel the suspension.

**C. APPEALS AND REMEDIES.** Written decisions by the authorized officer relating to administration of this permit are subject to administrative appeal pursuant to 36 CFR Part 214, as amended. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

**D. TERMINATION.** This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. Examples include but are not limited to expiration of the permit by its terms on a specified date and termination upon change of control of the business entity. Termination of this permit shall not require notice, a decision document, or any environmental analysis or other documentation. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service.

## **E. RIGHTS AND RESPONSIBILITIES UPON REVOCATION OR TERMINATION WITHOUT ISSUANCE OF A NEW PERMIT.**

Upon revocation or termination of this permit without issuance of a new permit, the holder shall remove within a reasonable period prescribed by



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According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average one hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

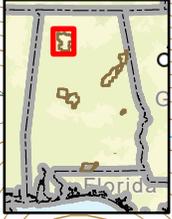
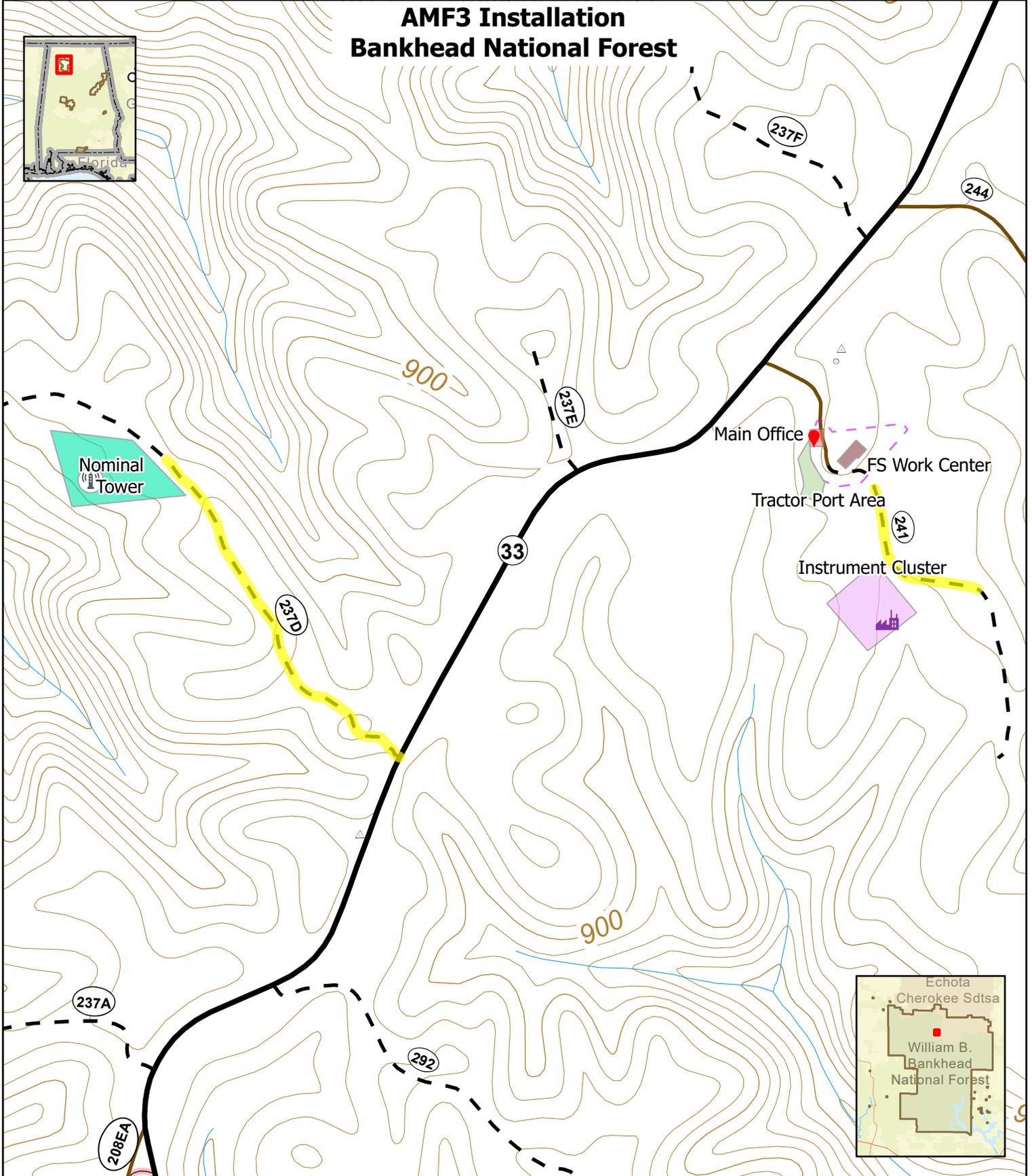
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

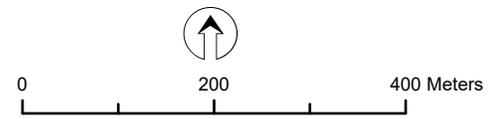
The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.



## AMF3 Installation Bankhead National Forest



- |                        |                                   |                             |                   |
|------------------------|-----------------------------------|-----------------------------|-------------------|
| Balloon Launch Station | 1 - BASIC CUSTODIAL CARE (CLOSED) | FS Work Center              | Tower Boundary    |
| Instrument Cluster     | 3 - SUITABLE FOR PASSENGER CARS   | Existing Fence              | Tractor Port Area |
| Tower                  | 5 - HIGH DEGREE OF USER COMFORT   | Instrument Cluster Boundary | Main Office Area  |
|                        | Road Clearance                    |                             |                   |



# Appendix B

## Operation and Maintenance Plan

For

### **Special Use Permit BAN700173**

Atmospheric Radiation Measurement User Facility

on the

**National Forests in Alabama**

Bankhead Ranger District

**Forest Supervisor:** Cherie Hamilton

**District Ranger:** Andy Scott

**Holder:** Department of Energy

**Operations Management:** Argonne (ANL) National Laboratory (Department of Energy is the owner of the Argonne National Laboratory and contracts with UChicago Argonne, LLC for the management and operation of the laboratory)

# 1 INTRODUCTION

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This operation and maintenance (O&M) plan is attached to and expressly made a part of the Special-Use Permit (SUP) issued by the U.S. Department of Agriculture Forest Service (FS) to (Holder) for a right-of-way (ROW) for the operation and maintenance of permitted areas on National Forest System lands (NFS lands) in the State of Alabama (see map in Appendix A of the Permit). The authorized ROW locations, ROW lengths and widths, and associated facilities are described in the Permit.

This plan does not supersede or nullify any clauses of the Permit, but instead helps define and clarify additional required actions by the Holder and emphasizes the high degree of coordination and cooperation necessary to satisfactorily fulfill these responsibilities. The provisions of this O&M plan are considered binding terms and conditions of the Permit and may be amended as appropriate or upon changed conditions. However, the FS and Department of Energy (DOE) authorized officer must approve in advance and in writing any such changes or amendments to this O&M plan. For purpose of the Permit and the O&M plan, the term “Holder” includes ANL (DOE is the owner of the ANL and contracts with UChicago Argonne, LLC for the management and operation of the laboratory), authorized agents, contractors, and lessees of the Holder.

## 2 OPERATIONS (FS)

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### A. INSTALLATION (FS)

1. Clearing, widening, and tree cutting shall be authorized for NFS lands defined in this permit.

### B. ROUTINE MAINTENANCE ACTIVITIES (FS)

Best Management Practices shall be followed during the performance of all activities to ensure the protection of streams, wetlands, soils, and vegetation and prevent the spread of non-native, invasive species.

Routine maintenance is considered to include the following activities:

1. Holder shall maintain ground-based cutting or mowing of vegetation that is less than or equal to 5 inches at diameter breast height within the authorized width of the ROW defined in this permit. No permitted National Forest System lands are located within a floodplain, flood prone area, riparian area, wetland, or area of visual concern.
2. Holder shall hand trim at ground-base to remove overhanging limbs from the ROW and brush under the canopy.
3. Holder shall repair lines or other authorized structures when such repairs would not result in any earth disturbing activities (such as digging, excavation, etc.). All digging requirements shall require US FS authorization.
4. Holder shall maintain Alabama Department of Environmental Management (ADEM) requirements throughout the use of this permit including remediation requirements.
5. Holder shall use motorized vehicles (passenger vehicles, and utility trucks, but not all terrain vehicles) on roads open to public motorized vehicle use or on roads specifically listed and authorized in writing

by the FS. See attached permits. Holder shall not use all-terrain vehicles on NFS lands within or outside the authorized ROW.

### C. **ACTIVITIES OTHER THAN ROUTINE MAINTENANCE (FS)**

The following activities are **NOT** defined as routine maintenance:

1. Ground-based cutting or mowing of vegetation greater than 5 inches at diameter breast height within the authorized width of the ROW when such use is not already authorized in the Holder's Permit.
2. Ground-based cutting or mowing of vegetation greater than 5 inches at diameter breast height within the authorized width of the ROW when such use is not already authorized in the Holder's Permit.
3. Any ground-based cutting or mowing of vegetation outside the authorized width of the ROW.
4. Performing activities that require earth disturbance such as digging, excavating, etc.
5. Any aerial or ground-based cutting or mowing within floodplains, flood prone areas, riparian areas, wetland, and areas of visual concern (such as along a road open to public motorized vehicle use or adjacent to or near a Forest System trail).
6. Use of motorized vehicles and equipment on the authorized ROW, cross country, or on roads not open to public motorized travel (gated roads, old woods roads, etc.) when such use is not already authorized specifically by the Holder's Permit.
7. Use of all-terrain vehicles on NFS lands.
8. Burning.

If any of the above activities need to be performed, the Holder shall notify the FS well in advance (preferably at least six months in advance) of the desired project initiation date. The FS shall complete any necessary environmental analysis; identify any special design measures or conditions that may need to be followed to protect natural resources and/or the public; and, if needed, modify the Holder's Permit.

### D. **VEGETATION MANAGEMENT (FS)**

1. Mowing – Mowing on the NFS lands is restricted to permitted areas only.
2. Slash Disposal - The Holder shall be responsible for disposing of slash (branches, boles) and other debris created because of vegetation clearing, logging, or other activities. Slash shall be treated to meet applicable FS and State standards for hazard reduction. Unless otherwise agreed in writing by the FS, the following standards shall apply:
  - a. Slash shall be lopped and scattered to lie within three feet of the ground, in lengths not to exceed eight feet when individual pieces exceed four inches in diameter at any point.
  - b. Trails, roads, road shoulders, road prisms, culverts, ditches, and other drainage structures shall be cleared of all slash and debris resulting from the Holder's or their contractor's activities.
  - c. No vegetation shall be cut within 25 feet of FS trails or FS roads that are open to public motorized vehicle use.

### E. **REMOVAL OF BIRD NESTS (FS)**

If an eagle or osprey nest is observed and needs to be removed the Holder shall obtain any necessary permits prior to moving any osprey or eagle nests from their facilities. In concert with obtaining the permit(s), the Holder shall notify and coordinate with the FS and their designated Wildlife Biologist.

After hours, on weekends, holidays, or in emergencies, where a threat of damage or harm to life or property exists, the FS shall be notified on the next normal workday.

#### **F. EROSION CONTROL (FS)**

1. The Holder shall be responsible for the prevention and control of soil erosion and gulying in the construction area and adjacent areas as specified by the ADEM permit and shall take preventative measures as are necessary to repair and revegetate damaged areas and to prevent future damages.
2. Disturbed soils shall be rehabilitated by fertilizing, liming, seeding, mulching, and/or constructing structural measures as soon as possible, but generally within two weeks after project completion or prior to periods of inactivity.
3. Holder shall seed all exposed areas of bare soil following any ground disturbing activities or mulch with wood chips derived from vegetation removed during clearing or mulch with oat or wheat straw at approximately 1-2 tons per acre (1-2 square bales per 1000 square feet) unless otherwise agreed to in writing by the FS. The Holder shall seed all exposed areas of bare soil following any ground disturbing activities. Disturbed soils shall not remain bare more than 14 days. The Holder shall monitor seeded or mulched areas to ensure ground cover is successfully established.
4. Revegetation should occur every spring or fall planting season or within 6 months following ground disturbing activity.

#### **G. SEEDING (FS)**

1. The holder shall seed and mulch all disturbed areas and use and maintain silt fencing to control erosion and sedimentation. Only approved seed mixes may be used (Bankhead Ranger District Seed Mix attached).
2. Native plants and low growing shrubs beneficial to wildlife species shall be planted and maintained within ROWs. It is recommended that native plants indigenous to the area be used to reseed disturbed areas.
3. Only certified, weed free seed mixes approved by the FS shall be used.
4. No application work shall be done during extremely windy or rainy weather.
5. No seed shall be applied to frozen ground.
6. Seeding shall occur within two weeks of final disturbance, unless otherwise agreed to in writing by the FS.
7. The appropriate periods for native general seed application are April 1 to June 15<sup>th</sup> and August 15<sup>th</sup> to October 15<sup>th</sup>. Depending on current weather and climate variations, these periods may be adjusted with written approval from the FS.
8. Fertilizer (10-20-20) shall be applied at a rate of 150 lbs/ton or as determined by the FS.
9. Straw mulch shall be applied at a rate of two tons/acre or as determined by the FS.
10. Lime shall be applied at a rate of two tons/acre or as determined by the FS.
11. If revegetation cannot be accomplished before October 15<sup>th</sup>, interim reclamation (seeding and mulching) is required. One to two suitable grass species (15 lbs/acre of annual ryegrass and 2 lbs/acre of partridge pea) shall be used or as determined by the FS. Fertilizer (10-20-20) shall be applied at 150 lbs/acre. Approximately 150 lbs of weed free straw mulch and two tons of lime per acre shall be applied. These rates may be modified with soil analysis and consulting with the FS.
12. Areas that do not achieve adequate cover may require additional scarification, reseeding, and fertilizing. This shall remain the responsibility of the Holder, until approved by the FS.

13. If native warm season grass is used, fertilizer is not recommended

## H. **REMEDIATION (RESTORATION) (FS)**

### 1. Removal of Equipment

- a. Holder shall remove at their own cost all instrument, cables, hardware, materials, equipment, tools, etc. from NFS lands once no longer needed. Also, all poles and cross-members shall be removed unless approved in writing by the FS.
2. Power and Fiber lines at the Main Site shall remain to be abandoned to the FS at no additional cost to Holder.
3. Power and fiber to the 140' tower shall be removed to the transformer (or beginning of installation). The FS holds the right to ask for it to be abandoned at no additional cost to Holder. Holder will not be liable after abandonment.
4. Holder shall not be responsible for repairs to power and fiber lines as a condition of abandonment.
5. Cement pads may be removed or retained depending on FS direction at the end of the permit. Removal of cement pads shall include all sand and gravel applied during installation.
6. If removed, all holes created by cement pads and piers shall be back filled and replanted with non-invasive plants approved by the FS
7. Gravel driveways shall remain intact
8. At a minimum all disturbed areas shall be replanted with non-invasive plants approved by the FS
9. Seasonality shall be considered
10. The final disposition of the office building and guest instrument facility will be finalized within one year of the end of this permit. The Holder should plan to remove both buildings, but if agreeable at that time in writing by the FS abandon both at no additional costs to Holder. Holder will remove all personal property located in the office building and the guest instrument prior to any abandonment. Holder will not be liable once the FS maintains the office building and the guest instrument.
11. The new tractor port area and fence will remain as installed. FS will maintain after abandonment. Holder will not be liable once the FS maintains the tractor port and fence.
12. Fencing around the main instrument site will be removed by Holder
13. Tornado shelters shall be removed by Holder
14. The expanded septic system shall remain as installed at no additional costs to Holder

## I. **NOXIOUS WEED CONTROL**

The Holder shall be responsible for preventing and controlling noxious weeds and/or exotic plants of concern on the area authorized by the Permit. The Holder shall adhere to all prevention and control measures prescribed by the FS:

1. All equipment (mechanized and non-mechanized equipment) and materials shall be free from soil, seeds, plant parts, or other material that could contain or hold seeds when such equipment arrives onto NFS lands. Equipment and materials shall not be cleaned on NFS lands. Once on site, equipment may be washed as needed.
2. When leaving one area of NFS lands, all equipment (mechanized and non-mechanized equipment) must be cleaned to the above standard prior to entering another area of NFS land.
3. If any seeding is necessary, the seed mix shall not contain any invasive plants. Seeding proposals shall identify the scientific names of all species to be planted and shall be submitted to the FS for

review and approval prior to implementation. Seed shall be accompanied by the vendor's test results, which must demonstrate that the seed is substantially free of noxious weeds.

4. Hay shall not be used on NFS lands. Instead, use clean straw, wood or paper fiber, coconut fiber, synthetic mulch, or other FS-approved material that is not likely to contain seeds or viable parts of invasive plants.

#### J. **HERBICIDE AND PESTICIDE USE**

Use of herbicides and pesticides is specifically prohibited unless otherwise approved in writing by the FS Authorized Officer. If the use of either is desired, the Holder shall submit an SF-299 Application form that clearly describes the reason such use is needed, the area to be affected, the type and strength of the herbicide or pesticide proposed for use, and any other information needed for the FS to assess the environmental consequences and make an informed decision.

#### K. **RELOCATION OF EXISTING FACILITIES**

If the relocation of an existing facility becomes necessary, the Holder shall submit a relocation plan with alternative sites for evaluation. The FS shall approve of a new location adhering to forest resource management plans and in conformance with the National Environmental Planning Act process.

#### L. **FACILITY AND SIGN MAINTENANCE AND REPLACEMENT**

The Holder shall follow Federal, State, and local laws and regulations when maintaining and replacing facilities and signs.

Identification markers shall be installed along all buried lines. These markers shall be installed at intervals adequate to inform the public of their location.

#### M. **SEPTIC**

Holder shall be responsible for expanding the existing septic system to accommodate Holder's personnel and visitors. During large events or an increase of visitors to the site, Holder shall provide port-a-potties.

### **3 OPERATIONS (HOLDER)**

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#### A. **ROUTINE BUSINESS OPERATIONS**

##### 1. Main Office

Holder personnel shall work, hold meetings, and perform other work-related activities while on site. Use of any FS building space is not expected. Holder shall provide a building structure that shall provide meeting rooms, a breakroom, offices, restrooms, and a reception area to conduct AMF3 business. A designated parking area shall also be designated to AMF3 business.

##### 2. Main Instrument site

ARM maintains all instrumentation and shelters and they shall not be operated by FS personnel.

- a. Grass Mowing shall be done as needed with a lawn mower and/or weed trimmer within the authorized boundaries of the SUP.
3. Transportation
    - a. Holder may maintain Government Fleet or leased vehicles on site for personnel to travel to all sites in and around the BNF.
    - b. Remain on public and approved roads
  4. Visitors
    - a. All visitors to the AMF3 BNF site are required to register for an ARM account and obtain ARM site access approval before visiting the site. <https://www.arm.gov/working-with-arm/use-arm-facilities>
    - b. A list of regular visitors will be provided to and by the FS and Holder. Expected visitors to the AMF3 BNF site could include, but not limited to:
      - FS personnel and partners
      - Holder personnel
      - Campaign PI's
      - Graduate students
      - Instrument Mentors
    - c. Visitors will adhere to ARM site visitor guidelines as presented upon checking in at the site including, but not limited to:
      - Sign in/out of the visitor log
      - Must read, and sign agreement to ARM Code of Conduct
      - Review, sign, and participate in any discussions about site safety and orientation as dictated by the work to be done by, or in the vicinity of, the visitor
      - Adhere to all site requirements regarding PPE and safe work operations
      - Maintain communication with AMF3 site technicians regarding work status and site safety (i.e., changing environmental or physical hazards associated with the work being done or as a result of local conditions)

## B. CAMPAIGNS

All ARM campaigns shall go through an approval process in the ARM infrastructure and be presented to the FS for their approval under the Holder SUP. All proposals require the following information:

- Science goals
- Instrument support request
  - List of chemicals
  - Space requirements
  - Hazards
  - Safety plans

All proposals approved by Holder shall be presented to the USFS for further review. Proposals that do not propose any work outside of the approved ARM facilities will generally be approved by email. Proposals for work outside of existing ARM facilities will need to be submitted as a Research Permit Request to the USFS, who usually will be able to respond in less than 60 days with either an approval (Nominal Effects letter) or the reasons why the proposal may need to go through the Special Uses Permitting process. This process may take anywhere from six months to two years depending on USFS capacity, proposal complexity, and other factors.

### **C. SAFETY AND SECURITY**

1. Holder personnel is expected to be on site at all times (24/7/365). This includes holidays and weekends, so access to the site shall remain available.
2. Although snow and ice conditions may be rare in Alabama the possibility is there. If AL 33 is closed due to weather, Holder personnel already on site shall remain on site until roads are safe for travel and likewise no Holder personnel shall drive to the site.
3. Holder shall have an inclement weather plan that shall include the use of a storm shelter at the instrument field.
4. All Holder personnel shall follow OSHA and any applicable safety and health standards
5. Subcontractors shall maintain a laboratory approved corporate safety plan.

### **D. CHEMICAL USE AND STORAGE**

All storage and use of chemical plans will be provided to and approved by the FS and made available for operations.

1. All chemicals shall be stored in their original containers
2. All flammables shall be stored in a flammable cabinet
3. All liquid chemicals shall be stored in secondary containment
4. Oxidizers shall be stored away from flammables
5. Acids and bases shall be stored separately in secondary containment
6. Compressed gasses shall be securely strapped
7. Sealed sources shall be stored in original containment until ready for use ANL RPP
8. A spill plan will be created based on ADEM regulations

### **E. TIMELINE**

- Trees cleared no later than February 28, 2023
- Land prep to begin March 1, 2023
- Operations by July 15, 2023
- Remediation beginning July 15, 2028

### **F. DAMAGE TO PROPERTY**

Holder is responsible for all damages to NFS lands that occur on lands defined in the SUP as a result of the Holders fault or negligence or that of its employees, agents, or representatives in connection with the performance of work. Holder shall report any damage to NFS lands to the US FS District Manager and the DOE immediately. Any damages to ARM equipment due to natural causes is not the responsibility of the FS.

Vegetation around the tower anchors and guy wires shall be maintained and cut at all times so that the guy wires can be seen.

No large trucks shall travel on the access road (FSR 237D). During installation, large trucks shall utilize the BWWC to transfer any large equipment to the tower site to a smaller vehicle. Holder shall be responsible for any damage caused by the truck or heavy equipment.

### **G. PARKING**

A designated parking space for AMF3 business shall be provided near the office structure.

### **H. SHIPPING AND RECEIVING**

- Holder shall have personnel on site at all times and shall accept shipments following ARM receiving process.
- Shipments shall be received at the Holders Main Office
- All shipments shall be checked to ensure accuracy

### **I. SITE ENTRANCE**

As part of the SUP, Holder shall update gate entrance to provide an electronic keypad and a manual option (for at least one of the two front gates) for entry. A list of people to have the access code shall be provided and agreed by both Holder and the FS.

The tower access road shall be secured with a padlock to avoid unauthorized vehicles from accessing the tower. At the base of the tower shall be a gated entrance to also avoid unauthorized access.

### **J. WASTE MANAGEMENT**

All waste plans will follow ADEM requirements and be provided and approved by the FS.

- Holder generates minor amounts of hazardous waste (HW) and qualifies as a Very Small Quantity Generator (VSQG) as defined by ADEM. Holder expects  $\leq 1$ kg per month of butanol/water mixed waste. Holder shall comply with ADEM regulations for storage and disposal of all HW. Including, but not limited to:
  - Monthly log sheets
- Holder falls under ANL RPP for use of sealed radiation sources and Class 1 RGD's
  - No hazardous radioactive waste will be generated
  - All sealed sources will be returned to the manufacturer in ANL approved packaging following ANL RPP and MC&A requirements
- Holder shall follow ADEM Admin. Code 335-14-11 for Universal waste
- Holder shall contract municipal waste pick up and maintain a dumpster as needed
- Recycling shall be used where possible

### **K. QUARTERLY MEETINGS**

Meetings shall be scheduled once every quarter between Holder and the FS to discuss any updates to this O&M document. Any disagreements on operations or management that arise that should be addressed prior to quarterly meetings, a special session may be scheduled to mediate said issue. Meetings shall be

in person or virtual. The FS and DOE authorized officer must approve in advance and in writing any such changes or amendments to this O&M plan.