



DRAFT ENVIRONMENTAL ASSESSMENT

Project Eagle Magnet Manufacturing Plant e-VAC Magnetics, LLC (Sumter, South Carolina)

Department of Energy, Loan Programs Office – Advanced Technology Vehicles Manufacturing

DOE/EA-2255 May 2024

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Acronyms and Abbreviations

AADT	annual average daily traffic
Act	Energy Independence and Security Act of 2007
APE	Area of Potential Effect
ATVM	Advanced Technology Vehicle Manufacturing
BMP	best management practice
CCTC	Central Carolina Technical College
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
DoD	Department of Defense
DOE	Department of Energy
e-VAC	e-VAC Magnetics, LLC
EA	Environmental Assessment
EJ	environmental justice
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FPPA	Farmland Protection Policy Act
GHG	greenhouse gas
HAZMAT	hazardous materials
ICE	Internal-combustion engine
IPaC	Information for Planning and Consultation
LPO	Loan Programs Office
LQG	large-quantity generator
MEP	mechanical, electrical, and plumbing
MT	metric tonne
NAAQS	National Ambient Air Quality Standards
NATA	National-Scale Air Toxics Assessment
NdFeB	neodymium-iron-boron
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OSHA	Occupation Safety and Health Administration
PIPP	Pollution Incident Prevention Plan
PM	permanent magnet
PM ₁₀	particulate matter with an aerodynamic diameter of 10 micrometers or less
PM _{2.5}	particulate matter with an aerodynamic diameter of 2.5 micrometers or less
	. ,

POTW	publicly owned treatment works
PSD	Prevention of Significant Determination
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
SC	South Carolina
SCDHEC	South Carolina Department of Health and Environmental Control
SDS	Safety Data Sheet
SESC	Soil Erosion and Sediment Control
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure
State	State of South Carolina
SWPPP	Stormwater Pollution Prevention Plan
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound

1. PURPOSE AND NEED

1.1 Purpose and Need for Agency Action

The purpose and need for agency action is to comply with the U.S. Department of Energy (DOE) mandate under Section 136 of the Energy Independence and Security Act of 2007 to select projects for financial assistance that are consistent with the goals of the act. DOE is using the National Environmental Policy Act (NEPA) process to assist in determining whether to issue a loan to the e-VAC Magnetics, LLC (e-VAC), to support the Project.

e-VAC is constructing Project Eagle (also known as Black Nickel), a fully integrated neodymium-ironboron (NdFeB) rare-earth permanent magnet production plant at the Pocotaligo Industrial Park in Sumter, South Carolina (SC). Project Eagle would increase domestic production of permanent magnets (PMs) for automotive applications like electric vehicles (EVs), which help to reduce air emissions that contribute to global warming.

e-VAC has applied for a loan pursuant to the DOE's Advanced Technology Vehicle Manufacturing Loan Program (ATVM Program), which was created by the Energy Independence and Security Act of 2007 to provide loans to automobile and automobile parts manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States that produce advanced-technology vehicles or qualified components. The primary goal of the ATVM Program is to improve fuel economy for light-duty vehicles and thereby reduce ozone precursors, greenhouse gas (GHG) emissions, and particulate matter emissions associated with vehicle emissions. The ATVM Program is designed to stimulate the technology required to meet program objectives.

DOE's financial support of e-VAC's Project Eagle would help bring domestically manufactured PMs to market, which, in turn, would help bring EVs to market and into greater use, thereby reducing overall national emissions of air pollutants and human-caused GHGs.

1.2 Background

The ATVM Program is administered by DOE's Loan Programs Office (LPO), which originates, underwrites, and services loans to eligible automotive manufacturers and component manufacturers. The loans are used to finance the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States that produce advanced-technology vehicles and qualifying components. The loans also finance the cost of associated engineering integration performed in the United States.

To fund Project Eagle, e-VAC applied to the DOE ATVM Program for financial assistance. LPO has reviewed the application and determined that it is consistent with the goals of the Act and substantially complete, per the rules governing the ATVM Program in 10 Code of Federal Regulations (CFR) Part 611. e-VAC was subsequently invited to enter into LPO's due diligence process.

1.3 Scope of Environmental Assessment

In accordance with the NEPA, LPO is preparing this Environmental Assessment (EA) to address construction and operation of Project Eagle, including the procurement and installation of NdFeB PM production equipment. DOE is preparing this EA to comply with NEPA, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Parts 1500–1508), and DOE NEPA Implementing Procedures (10 CFR Part 1021). If no significant impacts are identified during preparation of this EA, DOE will issue a Finding of No Significant Impact. If potentially significant impacts are identified, DOE will prepare an environmental impact statement.

Section 1.3.1 provides an overview of Project Eagle, including existing site conditions, and describes the site development and construction activities that have been completed — activities that were not subject to federal financial support.

Section 1.3.2 provides an overview of the current permit status as well as the natural, physical, and socioeconomic resources that may be subject to potentially significant environmental issues; resources that would not be subject to potentially significant environmental issues are also discussed. This process establishes the scope for the environmental review, given LPO's Proposed Action (i.e., a federal loan for post-sitework construction activities and procurement and installation of equipment).

1.3.1 Baseline Conditions at Project Site

The 320-acre Pocotaligo Industrial Park is owned by the City of Sumter and managed by the Sumter Economic Development Board. However, on December 12, 2023, e-VAC acquired a 85.6-acre site (Project site) through a land purchase; 76 acres within the site would be permanently affected (**Figure 1**, **Figure 2** and **Figure 3**). The land was zoned for heavy industry but undeveloped; however, the majority of the Project site had been disturbed as a result of an informal arrangement between the City of Sumter and a farmer for agricultural use. The final harvest concluded prior to the land purchase and the commencement of sitework construction activities.

Since acquisition in December 2023, e-VAC has commenced several construction activities at the Project site using State of South Carolina (State) and private funds. These activities, which are not subject to LPO's Proposed Action (i.e., not included within the scope of LPO's proposed financial support to e-VAC), included sitework on the entire Project site, including clearing, earthwork, stormwater management, erosion control, and the installation of various utility lines (e.g., water, sanitary sewer, storm drain, electrical). e-VAC secured all necessary State, county, and city permits for sitework construction prior to LPO involvement (see Appendix B, Permits and Approvals), including permits for land disturbance as well as the construction of sediment and stormwater control infrastructure, access roads, and building foundations. Sitework construction began in January 2024 and is generally expected to be complete in April 2024.

The City of Sumter has invested more than \$20 million over the past 15 years to ensure the Pocotaligo Industrial Park will be ready for industrial development, including ingress and egress improvements at the main entrance, U.S. 521 widening, and water and wastewater facilities upgrades. e-VAC engaged early on with local officials and community leaders, resulting in a commitment from the State that was publicly announced on December 13, 2023 (South Carolina Department of Commerce 2023). In addition, the SC Coordinating Council for Economic Development awarded a \$13 million grant as part of the Rural Infrastructure Fund to assist with certain costs associated with the facility, including land acquisition, site preparation, road improvements, water and wastewater improvements, and building construction. Sumter County was awarded a \$2 million LocateSC grant to offset costs associated with needed infrastructure improvements for the Pocotaligo Industrial Park, which will benefit e-VAC. Necessary infrastructure (e.g., water, sewer, power connections) already exist at the Pocotaligo Industrial Park; however, connections to the Project site and a new utilities corridor will be part of LPO financing, as described in more detail in **Section 2**. (All utility connections from the meter or other disconnect point to the building will also be subject to LPO financing.)

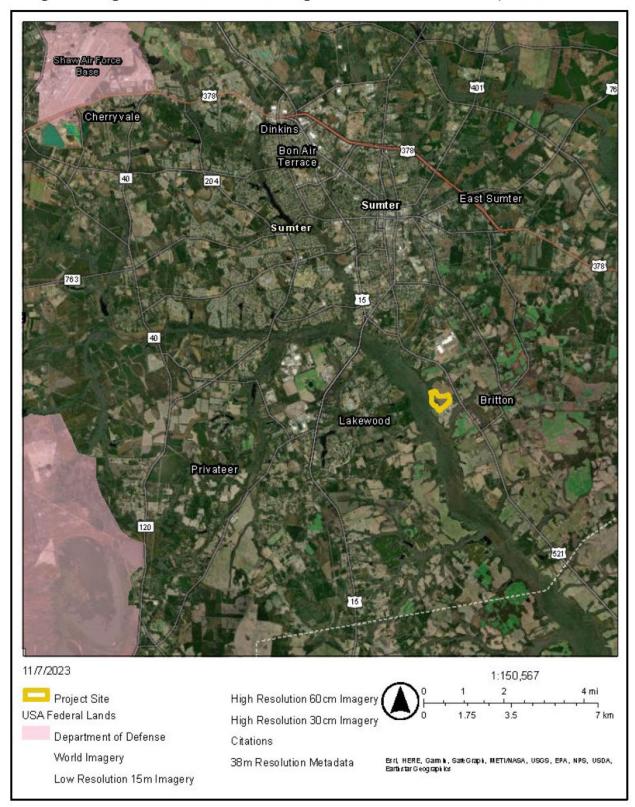


Figure 1. Regional Overview of Pocotaligo Industrial Park in Sumter, South Carolina

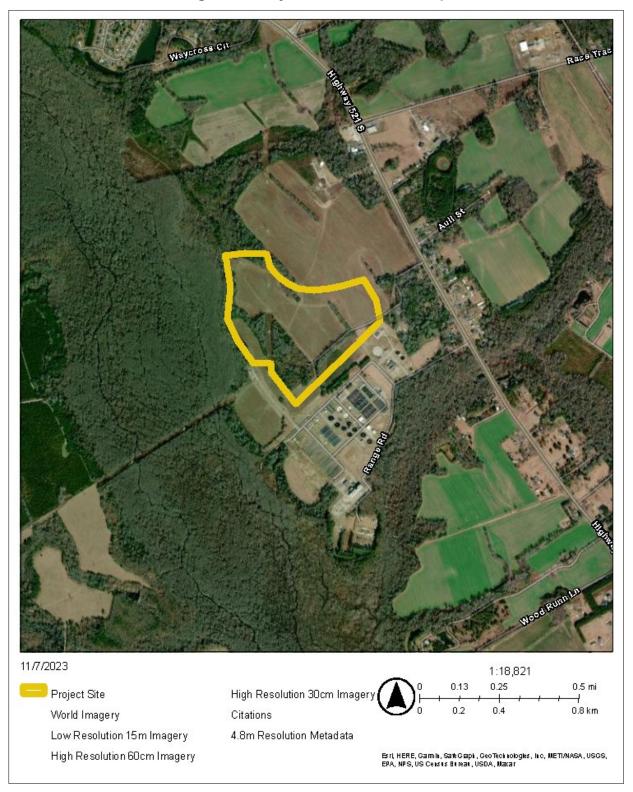
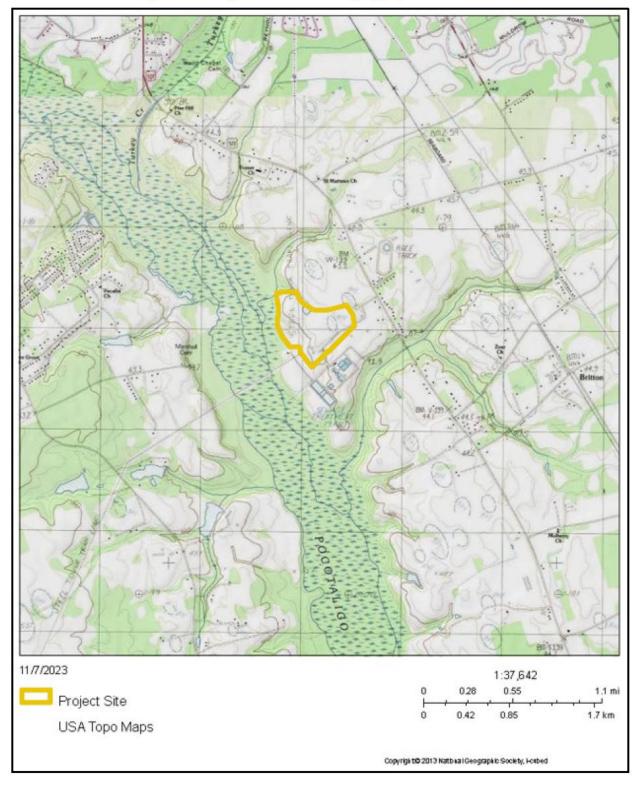
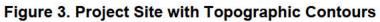


Figure 2. Project Site Location Map





1.3.2 Review of Natural, Physical, and Socioeconomic Resources

The scope of the Proposed Action to be analyzed in this EA is limited to those project activities subject to LPO financial assistance. Activities subject to LPO financing include post-sitework construction activities, starting with building foundations and slabs for the following Project Eagle components: a manufacturing facility (i.e., infrastructure area, mechanical processing, powder processing, support offices and labs) and several attendant structures and facilities (i.e., a parking lot, on-site facility roads, a stormwater detention pond, hazardous materials (HAZMAT) management facilities, waste management canopy, wastewater treatment facility, and guardhouse/pumphouse) for various support functions. Construction of a new entrance road from U.S. 521 South to the property line at the Project site, a utilities corridor to the Project site, and an upgrade for an internal industrial park road will also occur with LPO financing. These Project Eagle components are described in more detail in **Section 2**.

To identify potentially significant issues that warrant detailed review in this EA, LPO considered:

- The scope of the Proposed Action
- The location of the new facility, which is within the Pocotaligo Industrial Park, an area designated as a heavy industrial zone by the City of Sumter
- The site conditions at the onset of the federal action
- The proposed workforce once the facility is fully operational
- The permits that have been issued by regulatory authorities, including:
 - Land purchase agreement (land transfer complete)
 - SC Department of Health and Environmental Control (SCDHEC) concurrence letter for National Pollutant Discharge Elimination System (NPDES) (Complete)
 - SC Department of Transportation Temporary Construction Site Access Driveway Permit (Complete)
 - Sumter City-County Planning Department Commercial Land Disturbance Permit (Complete)
 - Sumter City-County Planning Department Encroachment Permit (Complete)
 - City of Sumter Building Department Foundations and Underground Mechanical, Electrical, and Plumbing (MEP) Permit (Intermediate – Complete)
 - City of Sumter Building Department Building Permits (Complete)
 - SCDHEC State Construction Permit Air Permit, Minor (Complete)
 - Sewer Line Construction Permit (Complete)
 - Water Line Construction Permit (Complete)

Any necessary permits that are not currently held by e-VAC will be obtained from the appropriate federal, State, or local regulating authority prior to facility operations (**Appendix B, Permits and Approvals**). These permits were at various stages of development, submission, or review at the time of writing:

- City of Sumter Water Department Industrial Wastewater Discharge permit (pending, mid-summer 2024)
- SCDHEC Wastewater Operators permit (anticipated Q3 2024)
- SCDHEC Operating Air Permit, Title V Major Source (to be completed)

Based on review of the scope of Project Eagle, existing site conditions, and permit status, the resource areas assessed in this EA include:

- Cultural resources and Native American interests
- Water resources
- Air quality
- Transportation
- Visual resources
- Special-status species
- Socioeconomics and environmental justice (EJ)
- Health and safety
- Waste management
- Soils and prime farmlands
- Climate change GHG emissions

These resource areas were identified as potentially being affected by Project Eagle; therefore, each was assessed to determine the nature, extent, and potential significance of those impacts (see **Section 3**).

This EA examines the direct, indirect, and cumulative effects of Project Eagle. The assessment combined desktop research, as well as analysis of existing available information, with select field studies, including archaeological and architectural surveys, threatened and endangered species initial screening surveys, a wetland survey and U.S. Army Corps of Engineers jurisdictional determination, floodplain assessment, and socioeconomic and EJ assessment.

Resource areas not included in the scope of issues analyzed in detail in this EA include terrestrial vegetation, terrestrial wildlife, wetlands, floodplains, land use, noise, and recreation. The Project site is within the Pocotaligo Industrial Park, which has been zoned for "heavy industry" by the City of Sumter. The site is also adjacent to existing industrial facilities within previously disturbed property.

The Project site is in an existing industrial area where the main sources of noise are associated with industrial operations and road traffic. The site is surrounded by areas that have been zoned for general commercial, agricultural conservation, and heavy industrial uses. Any noise produced by Project Eagle would be in compliance with the City of Sumter's permissible sound levels for a manufacturing or processing plant. Moreover, existing forested land between the Project site and nearby residences or sensitive receptors would further abate any noise associated with Project Eagle. The Project site is not located in a flood zone or floodplain, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Number 45085C0477E. There are no jurisdictional wetlands on the Project site, and none would be affected by Project Eagle. As a result, impacts related to terrestrial vegetation, wetlands, floodplains, land use, noise, and recreation are not anticipated to be significant; therefore, these resource areas are not included in the scope of issues analyzed in detail in this EA.

2. DESCRIPTION OF THE PROPOSED ACTION

Under the Proposed Action, the DOE LPO will issue an ATVM Program loan to e-VAC for Project Eagle. The loan will be used to purchase equipment and conduct limited construction activities associated with a rare-earth PM manufacturing plant within the Pocotaligo Industrial Park in Sumter, SC (**Figure 4**).

The Proposed Action will include construction and operation of Project Eagle, including the procurement and installation of NdFeB PM production equipment. Activities subject to LPO financing include postsitework construction activities, starting with building foundations and slabs for a manufacturing facility (i.e., infrastructure area, mechanical processing, powder processing, support offices and labs) and several attendant structures and facilities (i.e., a parking lot, on-site facility roads, a stormwater detention pond, HAZMAT management facilities, waste management canopy, wastewater treatment facility, guardhouse/pumphouse) for various support functions. Construction of a new entrance road from U.S. 521 South to the property line at the Project site, a utilities corridor to the Project site, and an upgrade for an internal industrial park road will also occur with LPO financing. Access roads and overhead power line connections to a new substation are included in the Proposed Action. However, the substation will be constructed independent of the Proposed Action; therefore, it is discussed in **Section 3.12**, Cumulative Effects. No additional acreage is anticipated for stockpiling, laydown operations, or long-term storage.

The following subsections describe Project Eagle as considered within the scope of LPO's proposed financial support to e-VAC.

2.1 Other Federal Actions

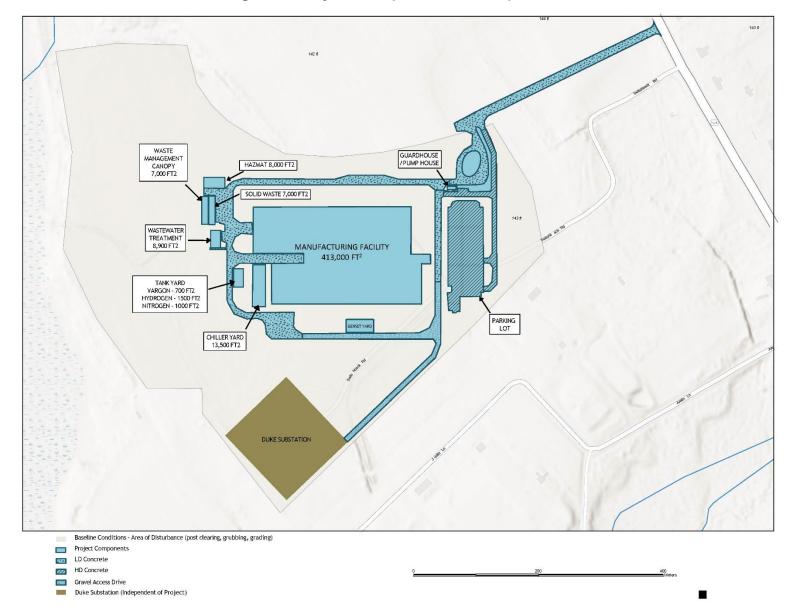
DOE LPO reviewed other actions associated with the Proposed Action to determine if any will be subject to federal control and responsibility (e.g., the subject of federal financial assistance under review by LPO). In its review, DOE considers "connected actions" to be limited to federal actions (i.e., subject to federal control and responsibility) that are currently proposed; therefore, if other actions are found to be "connected actions," the actions will be assessed as part of the Proposed Action.

In addition to the Proposed Action (i.e., an ATVM Program loan to e-VAC for Project Eagle to purchase equipment and conduct limited construction activities associated with a rare-earth PM manufacturing plant), the Department of Defense (DoD) will be involved by providing federal assistance for the equipment that will allow e-VAC to press blocks for the military. The equipment will be housed in the facilities financed by LPO. Therefore, the DoD action (i.e., additional equipment and its operation) is assessed as part of the Proposed Action.

2.2 Construction

The construction and installation of structures and equipment will occur within the Project site, as identified in **Figure 4** and **Figure 5**. The site covers 85.6 acres, which includes 75.96 developable acres for the following Project components that will be subject to LPO financing (**Figure 4**):

- A new 413,000-square-foot manufacturing facility that includes an infrastructure area, mechanical processing, powder processing, support offices, labs, and the following support infrastructure:
 - Associated structures and facilities (parking lot, on-site roads, lighting, landscaping); road sizes, widths, and surface types are shown in **Table 1**
 - Utilities corridor (sewer, water, electrical); dimensions and types are shown in Table 2





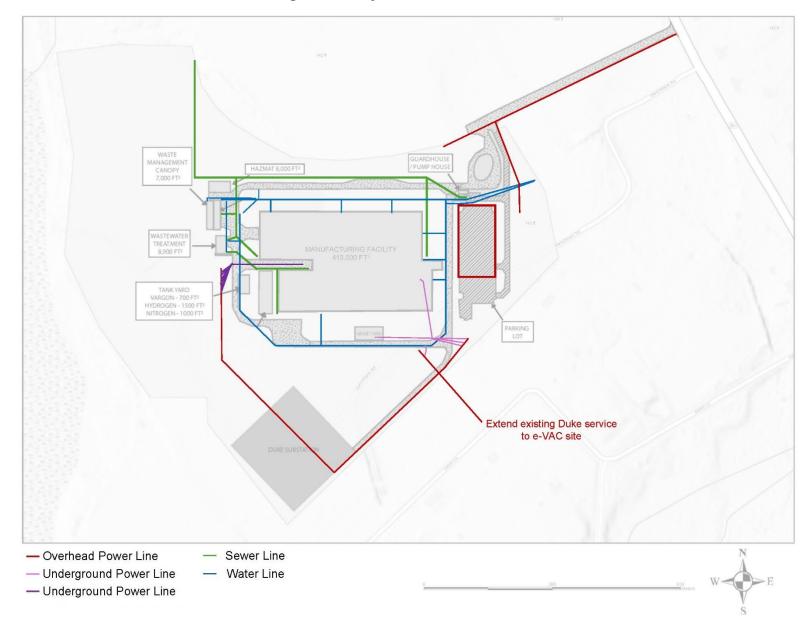


Figure 5. Project Utilities Site Plan

Road Type	Length	Width	Depth
Entrance	32'	200'	9"
Light duty to passenger parking	890'	24'	9"
Light duty passenger parking lot	890'	490'	9"
Light duty near guardhouse	266'	24'	9"
Heavy duty around main plant	2,420'	30'	11.5"
Heavy duty around HAZMAT and waste treatment areas	186'	125'	11.5"
Heavy duty to west side of infrastructure	387'	52'	11.5"
Heavy duty turnaround southwest of main plant	152'	142'	11.5"
Gravel road around main plant	1,000'	30'	10"
Gravel road to substation	910'	24'	10"
Gravel road around substation	958'	20'	10"
Gravel patch in front of substation	450'	120'	10"

Table 1. Road Size, Widths, and Surface Types on Project Site

Table 2. Utility Types and Sizes on Project Site

Jtility Type	Length	Width	Depth
Electrical – Overhead			
Entrance – access road – parking lot	1,808'	12"–24"	16'
Parking lot perimeter	1,145'	12"–24"	16'
South of main plant and extension of existing electrical service	2,750'	12"–24"	16'
Electrical – Underground			
Substation service to gravel road south of main plant	56'	24"–26"	24"-60"
Substation service to gravel road corner south of main plant	510'	24"–26"	24"–60"
Gravel road corner south of main plant to genset yard and powder building	621'	24"–26"	24"-60"
East gravel road to infra building	370'	24"–26"	24"-60"
Substation connection to east gravel road	628'	24"–26"	24"–60"
Sewer			
Northern off-site connection to facility north – north gravel road – guardhouse/pumphouse	2,031'	24"	48"–60"
North gravel road to east of plant buildings	405'	24"	48"–60"
Wastewater treatment – waste management canopy – plant buildings	1,256'	24"	48"-60"
Water			
Main plant perimeter to east of entrance circle	949'	18"	30"–48"
Main plant perimeter and building connections	4,754'	18"	30"–48"

- The following external structures:
 - 8,000-square-foot HAZMAT management facility
 - 14,000-square-foot waste management canopy, with additional truck canopy
 - 8,900-square-foot wastewater treatment facility
 - Guardhouse/pumphouse
- The following concrete pads (without structures):
 - 3,200-square-foot tank vard
 - 13,500-square-foot chiller yard
 - Genset yard
- Construction of a new entrance road from U.S. 521 South to the property line at the Project site, a utilities corridor to the Project site, and an upgrade for an internal industrial park road.
- Project Eagle will also include the purchase and installation of the equipment identified in **Table 3**, below.

Construction activities associated with Project Eagle will be completed in accordance with the Stormwater Pollution Prevention Plan (SWPPP), Soil Erosion and Sediment Control (SESC) Plan, Spill Prevention Control and Countermeasure (SPCC) Plan, and Pollution Incident Prevention Plan (PIPP), along with best management practices (BMPs) (see Appendix B). In addition, e-VAC will develop an emergency action plan, detailing the hazards on-site, potential emergency scenarios, and associated emergency response plans. Emergency scenarios may include fires, floods, chemical releases, or security breaches. The emergency action plan will identify the emergency coordinators who will take charge and lead the response in an emergency. The emergency coordinators will also be responsible for escalating to outside authorities, as required by the plan. The emergency action plan will be reviewed and updated as the facility changes, if the plan fails in an emergency, or as emergency coordinators change. During construction, the Sumter Fire Department will be provided with a copy of emergency plans and engaged to familiarize the department with the facility and provide feedback on the emergency response plan (see **Section 3.9** for more detail).

2.2.1 Construction Schedule

Construction activities following sitework for Project Eagle will be subject to LPO financing and include the timeframes for the major project components as shown in **Table 4**. Equipment installation is planned to begin in December 2024; equipment startup and commissioning is planned for January 2025.

Following installation of the manufacturing equipment and final inspections, trials and debugging will be scheduled for the third quarter of 2025, with full production planned for the third or fourth quarter of 2025.

2.2.2 Construction Staffing

Construction of the e-VAC Sumter facility will create 350 temporary construction jobs, which will be in compliance with prevailing wage and apprenticeship requirements. The 350 construction workers will work one shift 5 days a week at peak construction.

2.3 Operation

Operation of the rare-earth PM manufacturing facility will include raw material receiving, magnet-making processes, a final product storage and shipping area, and ancillary equipment and processes (e.g., heaters, generators, waste recovery systems). Also included during operation is the processing of an alloy material into sintered NdFeB PM through the various processes described in more detail below (**Section 2.3.2**). Further coating and high-temperature treatments, followed by various grinding, cleaning, gluing, cutting, inspection, and packaging processes, will be performed to produce the NdFeB PMs needed for e-VAC's off-take agreements.

Installation Energy/Process Water/Gas	TSAVO (incl. handling unit and lift unit)
Barrel opening station	Sintering furnace
HD oven	Intermediate inspection
Automation HD furnace	Press for light/heavy magnet system
Container mic/powder transfer station	Sintering furnace
Transport HD to jet mill	Tb diffusion (incl. robot)
Fine powder mill	Transport/handling sputtered part
Automated powder treatment station	Diffusion furnace
Leak test station cans	Grinding
Can mix	Transport
Cans	Cleaning
Container	Cutting, incl. transport to grinding
Can store	Optical inspection and marking
Transport powder => pressing*	Final magnetic inspection
Plates refurbishment	Chemical analysis, metallographie, powder analysis
Sets of presses	Final magnetic inspection

Table 3. Equipment Proposed for Purchase with LPO ATVM Funds

*"=>" indicates conveyance lines for transport between process areas.

HD = hydrogen decrepitation; TSAVO = German abbreviation for the oxygen free handling system between press and sintering furnace (Transportieren SAmmeln Verpacken Organisieren); Tb = terbium

Table 4. Timeframes for Major Project Component Construction

Timeframe	Major Project Component Construction
Q2 2024	Foundations and slabs for all Project Eagle components to begin Q2 2024
Q2 2024–Q1 2025	Mechanical processing building
Q2 2024–Q1 2025	Powder processing building
Q2 2024–Q1 2025	Infrastructure building
Q3 2024–Q4 2025	Wastewater treatment plant
Q4 2024–Q1 2025	Equipment installation, startup, and commissioning

Operation of the facility will follow all federal, State, and local requirements as well as industry BMPs to address the potential risks (see Appendix B). In addition, plans and procedures will be developed in accordance with federal Occupation Safety and Health Administration (OSHA) regulations as well as State rules under SC OSHA oversight to ensure employee and public health and safety. e-VAC will implement a program to evaluate new chemicals, assess regulatory requirements, and determine if their presence on-site will exceed reporting or regulatory thresholds. A Safety Data Sheet (SDS) will be kept on-site for each chemical, in accordance with OSHA requirements.

During operations, all hazardous liquids will be contained inside the facility, either in tanks or in closed containers that will be stored within secondary containment structures (see Section 3.9). Potential spills or releases of liquids during delivery will be minimized using the controls described in the SPCC Plan and PIPP, which are in place for the existing facility (see Section 3.9 and Appendix B). These plans will allow the facility to identify, monitor, and address any hazards associated with chemical storage on-site, thereby ensuring that bulk chemicals will be stored in compatible tanks or containers with secondary containment to protect employees, the public, and the environment in the event of a chemical release. In addition, e-VAC will develop an emergency action plan, detailing the hazards on-site, potential emergency scenarios, and associated emergency response plans. Emergency scenarios may include fires, floods, chemical releases, or security breaches. The emergency action plan will identify the emergency coordinators who will take charge and lead the response in an emergency. The emergency coordinators will also be responsible for escalating to outside authorities, as required by the plan. The emergency action plan will be reviewed and updated as the facility changes, if the plan fails in an emergency, or as emergency coordinators change. During the operational phases of Project Eagle, the Sumter Fire Department will be provided with a copy of emergency plans and engaged to familiarize the department with the facility and provide feedback on the emergency response plan.

Prior to operations, e-VAC will determine the applicable hazardous waste generator category, per the Resource Conservation and Recovery Act (RCRA), and submit the appropriate registration to obtain a U.S. Environmental Protection Agency (EPA) identification number. e-VAC anticipates that the facility will be a large-quantity generator (LQG) of hazardous waste during operations. As such, e-VAC will develop an Integrated Contingency Plan that will cover the hazardous waste streams on-site, their hazards, and the associated medical response if personnel are exposed (see **Section 3.9** for more detail).

2.3.1 Manufacturing Process Summary

The manufacturing process at Sumter begins with raw material input in the form of alloy flakes. Advanced equipment then processes the alloy, including some custom equipment that was designed especially for the facility (**Figure 6**). Fine alloy powders are pressed during an automated process, then processed through a set of sintering chambers, which, in combination with cooling chambers, allow for the production of sintered NdFeB PM. To supply the NdFeB PMs needed for e-VAC's off-take agreements, additional treatment is required. Following that step, the PMs undergo a series of grinding and cleaning treatments prior to several of the magnetic plates being assembled through gluing, grinding, and cutting processes. The magnet stacks then undergo fine grinding, as well as cleaning, inspection, and packaging processes, to ensure that the required surface quality has been obtained (**Figure 6**). The equipment requires specific gases for chemical processing. The building's mechanical, electrical, and plumbing systems have been designed for this processing.

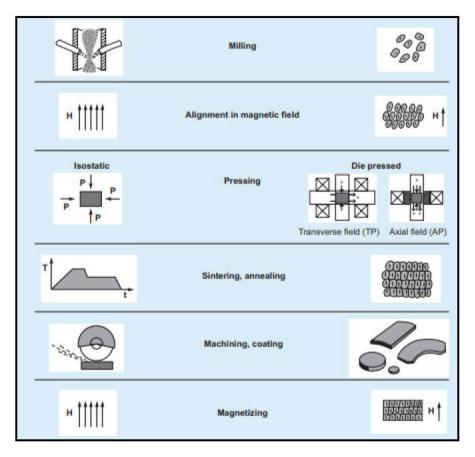


Figure 6. Process Flow Diagram for e-VAC Sumter Facility

2.3.2 Staffing and Operational Timeframe

Operation of the facility will contribute to the generation of approximately 300 mostly highly skilled jobs, along with indirect job creation through associated companies and industries. The first set of production parts is scheduled for July 2025; the start of regular production is scheduled for September 2025.

Project Eagle will have three 8-hour shifts working 24 hours a day, 6 days a week at full production. Each shift will involve 100 operators (this includes all workers at the facility). As a result, worker traffic will be split throughout the day and will not occur at one time. No overlapping traffic is anticipated between shifts because all incoming workers will be at the facility before the shift hour begins, and all outgoing workers will leave the facility after the shift hour ends.

2.3.3 Shipping and Receiving

Incoming raw materials will be trucked to the Project site and received at the drive-in loading and unloading areas on either side of the mechanical processing facility. Regular deliveries by large trucks, including gas trucks, with production materials are anticipated to occur 313 days per year, with 10 semi trucks visiting the site each day. Similarly, products will be transported from the facility to customers with an anticipated frequency of two semi trucks per day.

2.3.4 Waste Management

During operations, the facility will generate hazardous and nonhazardous waste associated from the manufacturing processes employed, along with general solid nonhazardous waste associated with routine building operations and maintenance. All waste generated at the facility will be collected, categorized, and disposed of and/or recycled in accordance with all applicable federal, State, and local environmental regulations. All applicable hazardous waste generator requirements will be complied with. Waste will be stored in the waste management canopy area located west of the mechanical processing building. The facility will also generate and pre-treat wastewater that will result in condensate effluent discharges to the City of Sumter publicly owned treatment works (POTW) and distillate bottoms that will be handled as solid waste and transported off-site by a qualified vendor for landfilling or energy recovery. The SCDHEC pretreatment operating permit will be modified as necessary to address actual wastewater constituents, as identified during operational monitoring. Similarly, testing will be performed on distillate bottoms to confirm disposal has been performed in compliance with all applicable regulations.

Based on the design of Project Eagle, as well as experience at the other manufacturing locations, e-VAC anticipates the waste streams and associated management methods listed below. A more detailed description of waste streams, estimated generation volumes, and management methods is provided in **Section 3.10**. A thorough regulatory review will be completed, and final waste determinations will be documented prior to commencement of operations. This involves the following:

- Non-hazardous waste will be transported off-site and disposed of at an EPA-approved Class I/II landfill that has been designed to accept both industrial and municipal waste
- Hazardous waste will be accumulated and transported off-site for disposal at a certified waste facility
- Scrapped or off-specification NdFeB magnets will be collected and recycled within the facility
- Sputtering targets, metals, and miscellaneous recyclable materials will be collected and recycled offsite
- Air pollution control waste, consisting of dry powder or wet sludge powder, will be collected and recycled within the facility
- Pretreated wastewater condensate effluent will be discharged to the City of Sumter POTW, according to the industrial wastewater discharge permit (placeholder for permit number)
- Wastewater treatment distillate bottoms will be accumulated and transported off-site for disposal at a certified waste facility)
- All hazardous liquids will be contained inside the facility, either in tanks or in closed containers stored within secondary containment structures (**Section 3.9**).

3. ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

In each of the following sections, a specific resource area is addressed with both qualitative and, where applicable, quantitative information to concisely describe the nature and characteristics of the resource that may be affected by Project Eagle as well as the potential direct and indirect impacts on that resource from Project Eagle given Project controls. A conclusion regarding the significance of impacts is provided for each resource area.

Section 3.12 provides a review of the present and reasonably foreseeable federal and nonfederal actions that may contribute to a cumulative impact when added to the impacts of the Proposed Action. The impacts of past actions were reviewed; these are included as part of the affected environment to establish the current condition of the resource (the baseline condition) that may be affected by the Proposed Action.

3.2 Cultural Resources

The archaeological Area of Potential Effect (APE) encompasses the entirety of the 85.6-acre Project site, which would be subject to potential disturbances from clearing, grading, and the construction of buildings. The architectural APE covers 75.96 acres, which is designated for new above-ground structures, with an additional 0.5-mile buffer zone surrounding this developable area.

Previous cultural surveys and investigations in and around the Project site were initiated in 2008, during the acquisition phase of the 320-acre Pocotaligo Industrial Park by the City of Sumter. Using the information from the previous surveys and consultations, DOE concluded that no historic properties would be affected, and the SC State Historic Preservation Office (SHPO) concurred with the finding (assigned as SHPO Project Number 24-JS0046) on February 23, 2024 (**Appendix A**). The SC SHPO noted that studies to date have consistently identified no historic properties within the APE; however, White Family Cemetery lies just outside the Project site. In alignment with State laws protecting cemeteries, and in accordance with the SC SHPO's recommendation, Project Eagle would institute a 25-foot buffer around the cemetery, as delineated by orange barrier fencing, to safeguard it against the impacts of construction-related activities and heavy machinery.

Because of the absence of adverse impacts on cultural resources within and surrounding the Project site, impacts on cultural resources as a result of Project Eagle would not be significant.

3.2.1 Native American Interests

As part of its Section 106 review process, DOE sent a request on November 28, 2023, to three federally recognized tribes for information on nearby cultural resources and any comments or concerns they had on the potential for those resources to be affected by Project Eagle.

The following tribes were contacted:

- Catawba Indian Nation (aka Catawba Indian Tribe of South Carolina)
- Cherokee Nation
- Muscogee (Creek) Nation

Two responses (one from the Catawba Indian Nation and one from the Cherokee Nation) have been received, acknowledging no immediate concerns with regard to traditional cultural properties, sacred sites, or Native American archaeological sites within the boundaries of the Project site. The Catawba

Indian Nation requested to be contacted if any human remains or Native American cultural items are located during the ground-disturbance phase of the Project. The Cherokee Nation requested to be contacted immediately for further consultation and for DOE to halt all Project activities immediately if items of cultural significance are discovered during the course of Project Eagle. No other responses or comments have been received to date.

No adverse impacts on traditional cultural properties are anticipated due to the low likelihood of traditional cultural properties occurring within the Project site, as evidenced by DOE tribal correspondence and SHPO consultation (**Appendix A**) as well as the previously disturbed nature of the Project site. Therefore, impacts on cultural resources, including Native American interests, as a result of Project Eagle would not be significant.

3.3 Water Resources

3.3.1 Groundwater and Surface Water

The City of Sumter Water Plants Division would provide water service to the Project site. Sumter, located in the Coastal Plain province, utilizes Black Creek and underlying Middendorf Aquifers as its sources of water. These aquifers are part of the largest groundwater system in SC, with well flows ranging from 700 to 2,000 gallons per minute. The Water Plants Division pumps, treats, and distributes approximately 12 million gallons of potable water daily, or 5 billion gallons of potable water annually (City of Sumter 2024). It is anticipated that Project Eagle would require 6,000 to 7,000 gallons per day for operations and 1,700 to 2,000 gallons per day for general purposes over the course of 250 days per year. Accordingly, Project Eagle's estimated total water demand would be approximately 1.93 to 2.25 million gallons per year. The City of Sumter has adequate capacity to serve Project Eagle's anticipated potable water needs. Project Eagle anticipates sanitary sewer waste discharges of 7,905 gallons per day, comprising 3,150 gallons per day of domestic waste from restrooms, showers, etc., and 4,755 gallons per day of waste process water. Pretreatment for process water is discussed further in **Section 3.10**.

The Project site drains to a small stream that connects a non-jurisdictional wetland, situated along the northern boundary of the Project site, to a series of streams that ultimately converge at the Pocotaligo River, which is directly west of the site.

Project construction activities have been permitted under a NPDES General Permit for Stormwater Discharges from Construction Activities (SCR100000) as well as a Sumter County land disturbance permit. As part of these permitting processes, Project Eagle maintains a SWPPP, which describes the nonstructural and structural controls implemented on-site to eliminate unauthorized non-stormwater discharges during construction, and SESC Plan, which minimizes off-site erosion and sedimentation during construction.

A stormwater detention pond in the southwest portion of the Project site, included in the baseline condition for Project Eagle, would capture and absorb surface stormwater and site runoff during construction and operation of Project Eagle. The stormwater detention pond and swales would account for approximately 11.67 acres on the Project site. Approximately 9.48 acres on the Project site would be impervious surface as a result of Project Eagle, including the facility, parking lot, entrance road, and facility roads. Temporary conveyance channels and a detention pond would be used to trap sediment during construction, with anticipated 99.49 percent trapping efficiency for a 10-year storm event. In addition, a double-row silt fence is installed around the perimeter of Project Eagle's area of disturbance.

During operations, all hazardous liquids would be contained inside the facility, either in tanks or in closed containers stored within secondary containment structures (**Section 3.9**). Potential spills or releases of liquids during delivery would be addressed in accordance with the controls described in the SPCC Plan and PIPP, which are in place for the existing facility (**Section 3.9**, **Appendix B**).

Because of the existing water supply, the physical setting, and adherence to the permitting measures and plans included in the SWPPP, SESC, SPCC, and PIPP BMPs, Project Eagle would not result in significant impacts on surface water or groundwater.

3.4 Air Quality

3.4.1 Setting

The Project site is located in Sumter County, SC, which has been designated as an attainment area for all criteria pollutants under the National Ambient Air Quality Standards (NAAQS). Criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂), ozone, particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀), particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}), sulfur dioxide (SO₂), and lead.

The State has incorporated the NAAQS into the EPA-approved State Implementation Plan (SIP) under SC Regulation 61-62.5, Standard No. 2.¹ As part of an application for a State Construction Permit, the applicant must present evidence that emissions from the project would not cause or contribute to an exceedance of an air quality standard. With the exception of emissions of nitrogen oxides (NO_x) from the three natural-gas-fired non-emergency generators, emissions from all air emission sources would be less than the exemption thresholds established by SCDHEC and presumed to have a negligible impact on NAAQS attainment. An air dispersion modeling analysis was completed for NO_x emissions to demonstrate there would be no adverse impacts with respect to the NO₂ standards. Through this modeled assessment, e-VAC demonstrated that emissions from Project Eagle would not cause or contribute to an exceedance of an air quality standard.

SCDHEC issued a State Construction Permit (CP-50000152, v1.0) pertaining to air quality on February 20, 2024. Project Eagle's potential to emit is summarized in **Table 5**. The air permit authorizes construction of Project Eagle and notes the need to apply for an operating permit under the Title V operating permit program and the National Emission Standards for Hazardous Air Pollutants (NESHAP). However, Project Eagle would not have the potential to emit pollutants that would be above the major-source thresholds of the Prevention of Significant Determination (PSD) permitting program. The air permit to construct would ensure that Project Eagle would not cause or contribute to an exceedance of an air quality standard and that emissions levels would be protective of human health and the environment. A Title V operating permit would be received after completion of construction.

3.4.2 Emissions Analysis

During construction, Project Eagle would generate fugitive dust emissions from ground-clearing activities, vehicles traveling on unimproved roads, and ground-disturbing activities such as grading and infrastructure construction. The operation of construction vehicles and equipment would generate limited combustion emissions from the use of diesel fuel or gasoline. Implementation of several of the BMPs is anticipated to prevent, limit, and control fugitive dust resulting from the surface area disturbance associated with construction activities at the Project site. These BMPs would include, but would not be limited to, requirements for the use of water trucks and limits on vehicle speeds in disturbed areas. These BMPs would be implemented in order to comply with the state-wide fugitive dust emission standards outlined in SC Regulation 61-62.6, Control of Fugitive Particulate Matter. The air quality effects from emissions of fugitive dust and the use of construction vehicles and equipment would be temporary and minimal because the effects would occur only during construction and would be reduced through appropriate BMPs.

¹ For revised NAAQS standards, such as the recently proposed revision to the 2006 annual PM_{2.5} standard, once the NAAQS are finalized at the federal level, the new standards must then be incorporated into SC Regulation 61-62.5, Standard No. 2, before becoming effective at the state level.

Dellectoret	Total			
Pollutant	lb/hr	tpy		
SO ₂	1.74	0.55		
NO _X	22.17	74.41		
VOC	46.84	182.46		
PM10	12.76	54.75		
PM _{2.5}	12.76	54.74		
CO	40.29	156.59		
Max. HAP (formaldehyde)ª	1.62	7.05		
Total HAP ^a	2.77	12.05		

Table 5. Project Potential to Emit

^{a.} Accounts for the federally enforceable limit applicable to major sources under 40 CFR 63, Subpart ZZZZ. $CO = carbon monoxide; lb/hr = pounds per hour; NO_X = nitrogen oxides; PM_{10} = particulate matter with diameters 10$ $microns and smaller; PM_{2.5} = particulate matter with diameters 2.5 microns and smaller; SO₂ = sulfur dioxide; tpy =$ tons per year; VOC = volatile organic compound; HAP = hazardous air pollutant

Operation of the facility would produce several sources of air pollutants that would result in the emissions levels presented in **Table 5**. However, controls would be implemented, in accordance with State and federally enforceable limits, which are based on specific equipment types, including:

- Dust collectors on metal-powder handling equipment with a permitted removal efficiency of up to approximately 99 percent for PM₁₀ and PM_{2.5} emissions
- Two-stage wet separators on grinding and sawing equipment with a permitted removal efficiency of up to 99.8 percent for PM₁₀ and PM_{2.5} emissions
- Oxidation catalysts on each of the three natural-gas-fired non-emergency generators with a permitted removal efficiency of approximately 75 percent for CO and 85 percent for formaldehyde emissions

Because of the location of the Project site and existing air quality conditions in an attainment area; the air permit to construct, ensuring Project Eagle would not cause or contribute to an exceedance of an air quality standard; emission levels that would be protective of human health and the environment; and the controls that would be implemented during construction and operation, impacts on air quality as a result of Project Eagle would not be significant.

3.5 Traffic and Transportation

All roadways within the vicinity of the Project site are paved two- to four-lane roadways/highways and suitable for construction and operational traffic; no modifications or expansions of existing local roads are expected to be necessary. U.S. 521 South is a paved four-lane highway that has been classified as a minor arterial (rural) roadway. It had an annual average daily traffic (AADT) volume count of 10,600 in 2022, as recorded in 2 miles north of the Project site. The SC Department of Transportation has identified portions of U.S. 521 as having congestion in the vicinity of the Project site. Therefore, U.S. 521 has been identified as being significantly under capacity.

All Project traffic traveling to and from the Project site, both during construction and operation, would use U.S. 521 South. The highway has adequate capacity to handle the additional Project-related vehicle and truck trips summarized below. In addition, U.S. 521 South has an existing median turn lane, which would allow vehicles and trucks to safely make left-hand turns into the facility without impeding passing north—south traffic along the highway. The Project site would be accessed via a new entrance road that would connect to U.S. 521 South at a location east of the Project site. As shown in **Figure 4**, the new access road would be a two-lane road with separate entrance and exit lanes that would connect to U.S. 521 South, ensuring that vehicles could safely ingress/egress without interfering with traffic.

As discussed in **Section 2.2.2**, construction of the Sumter e-VAC facility would be expected to create approximately 350 temporary construction jobs in total. At peak construction, construction workers would work one shift 5 days a week.

Once fully operational, the Sumter e-VAC facility would create approximately 300 jobs in total. Worker traffic during facility operations would be split among various shifts throughout the day; therefore, workers would travel to and from the site intermittently, not all at once. Specifically, Project Eagle would have three 8-hour shifts working 24 hours a day, 6 days a week at full production. Each shift would involve 100 operators (this includes all workers at the facility). This would eliminate overlapping traffic between shifts because all incoming workers would be at the facility before the shift begins, and all outgoing workers would leave the facility after the shift hour ends.

In addition to employee vehicle trips, Project operations would require an estimated 10 semi trucks per day to deliver raw materials and production materials. Incoming vehicles and their loads would be received at the proposed drive-in loading and unloading areas on either side of the proposed mechanical processing facility. Similarly, products would be transported from the facility to customers with an anticipated frequency of approximately two semi trucks per day.

For the reasons outlined above—specifically, that U.S. 521 has been identified as significantly under capacity in the vicinity of the Project site—the additional daily car and truck trips on the existing regional transportation corridors resulting from Project Eagle would not overload existing transportation systems; therefore, impacts would not be significant.

3.6 Aesthetic and Visual Resources

The Project site is located within the Pocotaligo Industrial Park, approximately 4.5 miles south of Sumter. The site is presently undeveloped and zoned for heavy industrial. The Project site would be accessed via a new entrance road that would connect to U.S. 521 South, which is located to the east. Other nearby prominent roadways near the Project site include Old Manning Road (approximately 1.5 miles west of the site) and U.S. 15 (approximately 2.3 miles northwest of the site).

The areas surrounding the Project site consist of agricultural lands, scattered industrial and residential areas, and wetland areas at the Pocotaligo River, which borders the Project site to the west. The Pocotaligo Waste Treatment Plant is immediately south of the site, and an existing warehouse is immediately to the north. Various rural residences are scattered throughout the vicinity of the Project site to the east and across U.S. 521 South. The area is generally flat, with various patches of dense vegetation that become sparser as you travel farther out from the Pocotaligo River. There are no elevated viewpoints or topographic features of note that provide prominent views of the Project site. See **Figure 2**, which shows the Project site and vicinity.

As discussed in **Section 2**, Project Eagle would be developed across an approximately 85.6-acre site. It would consist primarily of a new 413,000-square-foot manufacturing facility with various external structures (i.e., a HAZMAT building, waste management canopy with an additional truck canopy,

wastewater treatment building, guardhouse/pumphouse) as well as various concrete pads without buildings or structures (i.e., for a tank yard, chiller yard, genset yard). The buildings would be approximately 32 to 45 feet above the native ground surface. In addition, as noted in **Section 3.5**, above, a new entrance road would be constructed that would connect the Project site to US 521 South.

Project Eagle would result in permanent visual changes in the vicinity of the site due to the development of buildings, accessory structures, and facilities on what is currently undeveloped land; however, these changes would be expected to be minimal. The buildings would be painted with muted colors, similar to the color schemes found at nearby industrial facilities (e.g., the Pocotaligo Waste Treatment Plant to the south). Visual elements related to Project Eagle would be consistent with these existing nearby industrial properties and would not attract attention or be visually incongruent with the surrounding setting. In addition, views of the new structures would generally be confined to those locations along US 521 South located immediately to the east. The Project site is not expected to be visible from more distant viewpoints, including those to the west across the Pocotaligo River, because existing dense vegetation would block the viewer's line of sight. In addition, operations would result in minor increases in nighttime lighting; however, new lighting fixtures would be downcast so as to confine nighttime lighting to the Project site and its on-site working areas.

Based on the proposed design for Project Eagle, the presence of existing industrial facilities nearby, and the existing vegetation surrounding the Project site that would generally shield views of Project components from nearby viewpoints/roadways, impacts on aesthetic and visual resources resulting from the Project would not be significant.

3.7 Special-Status Species

Using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool, five species were identified as either federally protected or proposed for listing as possibly occurring near the Project site (U.S. Department of the Interior n.d.):

- Tricolored bat (Perimyotis subflavis), proposed endangered
- Red-cockaded woodpecker (Picoides borealis), endangered
- Monarch butterfly (Danaus plexippus), candidate
- American chaffseed (Schwalbea americana), endangered
- Canby's dropwort (Oxypolis canbyi), endangered

The Project contains no critical habitats and would have no effect on any federally listed species.

The tricolored bat would experience no effects because the Project site does not contain potentially suitable roosting habitat for the species. Although the area could be used as foraging habitat, Project Eagle would not change the overall nature and quality of foraging habitat in the area.

The Project site does not contain suitable nesting or foraging habitat for the red-cockaded woodpecker. There are no pine stands of sufficient age for nesting on or immediately adjacent to the site. The SC Department of Natural Resources had no occurrence records for the red-cockaded woodpecker, and field surveys did not identify nests. Accordingly, the red-cockaded woodpecker would experience no effects.

The Monarch butterfly is not expected to be present at the Project site due to its heavily disturbed use as an agricultural field. It is expected that Monarch butterflies would avoid the forested areas of the site due to surrounding use of synthetics such as pesticides, which were used in conventional farming. Hence, Monarch butterflies would not be affected by Project Eagle.

The Project site does not contain suitable habitat for American chaffseed. There are no wet savannas, moist pine flatwoods, or open grass-sedge systems at the Project site. Therefore, American chaffseed would experience no effects due to Project Eagle.

Canby's dropwort would very likely experience no effects from Project Eagle due to the absence of suitable habitat. There are no wet pineland ponds, savannas, wet meadows, or open cypress ponds at the site.

The USFWS IPaC tool did not identify any critical habitats within the Project area for the aforementioned species. Moreover, the Project area would not include habitat that would be suitable for or able to support these species. Therefore, Project activities would not affect any threatened or endangered species or critical habitats.

DOE is using the USFWS Clearance Letter for Species and Habitat Assessments in SC as concurrence or agreement that implementation of Project Eagle would have no effect on federally listed species or designated critical habitat (**Appendix A**).

An online search of the SC Heritage Program web application yielded a list of tracked species for Sumter County, SC (South Carolina Heritage Trust Program 2023). Fourteen species were reported from that search that have federal and/or State protection. Three were reported in the USFWS species list; the remaining 11 are as follows:

- Shortnose sturgeon (Acipenser brevirostrum)
- Spotted turtle (Clemmys guttata)
- Rafinesque's big-eared bat (Corynorhinus rafinesquii)
- Swallow-tailed kite (*Elanoides forficatus*)
- Carolina pygmy sunfish (Elassoma boehlkei)
- Bald eagle (Haliaeetus leucocephalus),
- Southern hog-nosed snake (*Heterodon simus*)
- Carolina gopher frog (*Lithobates capito*)
- Broadtail madtom (*Noturus* sp. 2)
- Least tern (*Sternula antillarum*)
- Canby's cowbane (*Tiedemannia canbyi*)

These species have not been specifically identified at the Project site. Further, no adverse impacts on these species would occur as a result of Project construction or operation, given the land clearing and grading activities that have already occurred, as included in the baseline condition.

Because of the Project site's lack of suitable habitat; prior disturbance from agricultural use; existing land disturbance, as included in the baseline condition; and proximity to other industrial activities, impacts on special-status species would not be significant.

3.8 Socioeconomics and Environmental Justice

3.8.1 Socioeconomics

The Project site is at the Pocotaligo Industrial Park in Sumter, SC. Specifically, it lies within a "heavy industry" zone with industrial development to the south (Sumter Wastewater Treatment Plant), undeveloped land to the west, as-yet undeveloped land on the Pocotaligo Industrial Park to the north, and limited residential and agricultural development to the east.

Once operational, Project Eagle would be expected to bring more than a half-billion-dollar investment to the area, with significant commitments from the State and Sumter County as part of approved job development credits from the SC Coordinating Council for Economic Development, a Rural Infrastructure Fund grant to Sumter County, and a LocateSC grant, as discussed earlier.

Project Eagle would be expected to create 350 construction jobs. E-VAC is working with its construction contractor to ensure that the jobs comply with prevailing wage and apprenticeship requirements. Project Eagle would also create 300 permanent jobs. These jobs would require executive and management personnel, technical and professional personnel, administrative and clerical personnel, skilled production workers, and unskilled production workers. This would be particularly beneficial to the immediate community because the Caterpillar hydraulics plant in Sumter will close in early 2024, affecting approximately 150 workers (Columbia Regional Business Report 2023).

Project Eagle would be expected to create skilled and unskilled jobs, with wages that would be above the county average. E-VAC would also engage with local workforce development programs early on to ensure that the local workforce would be ready to fill those jobs. For example, through the readySC program, SC's Technical College System would help e-VAC recruit and train potential employees. readySC is an entry program for the Sumter community that feeds into the Apprenticeship Carolina program, which is aligned with the SC Technical College System, as well as the Central Carolina Technical College (CCTC). The State also offers programs through the SC Works Center, the SC Department of Employment and Workforce, the SC Department of Social Services, the Commission of the Blind, Adult Education, and the SC Department of Vocational Rehabilitation to leverage SC's workforce by providing services such as career guidance, job referrals, and testing and training to meet the needs of job seekers, employers, and those looking to further their careers.

e-VAC would also leverage the experience it gained from successful apprenticeship programs under Germany's Vocational Training Act. As part of e-VAC's German affiliate, VAC, traditional vocational training courses and concurrent-enrollment courses, offered in cooperation with various universities, would provide resources for workplace development, ensuring that the local workforce would be ready to fill the various jobs.

Given the economic growth and employment opportunities during construction and the 300 permanent jobs that would be added to the labor market during operation, as well as the associated community and apprenticeship programs, Project Eagle would benefit the regional economy. No significant adverse socioeconomic impacts are expected.

3.8.2 Environmental Justice

LPO's review of EJ issues focuses on Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; the National-Scale Air Toxics Assessment (NATA) cancer risk and respiratory hazard index, as defined in EPA's EJ screening tool; and site-specific population centers (e.g., schools, day-care centers) near the Project site.

Executive Order 12898 directs federal agencies to address environmental and human health conditions in minority and low-income communities. The evaluation of EJ is dependent on determining if high and adverse impacts from a project would disproportionately affect minority or low-income populations in the affected community.

In accordance with EPA's EJ guidelines, minority populations should be identified when either 1) the minority population of the affected area exceeds 50 percent or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

The ethnic and racial composition of Sumter County and SC is presented in **Table 6**. Minority populations are 54.4 percent of the population in the county, which is meaningfully higher than the percentage in the state (35.6 percent). EPA's EJ screening tool (EPA 2024) identified the percentage of people of color for the block groups where the Project site is located (i.e., Block Groups 450850006001 and 450850006002 [46 and 43 percent, respectively]) (see **Table 7**). **Table 7** provides EJ indexes for Census Tract 450850006000 and the two block groups that contain the Project site (i.e., Block Groups 450850006001 and 450850006002].

The U.S. Census Bureau found that the percentage of persons in poverty was 3.3 percent lower in the county (10.7 percent) than in the rest of the state (14.0 percent) (see **Table 6**). Using EPA's EJ screening tool (EPA 2024), the low-income population for the census tract was 33 percent, which was lower than the state average of 36 percent (48th percentile) but higher than the U.S. average of 31 percent (60th percentile). For Block Groups 450850006001 and 450850006002, the low-income population was 15 and 34 percent, respectively (**Table 7**).

Using EPA's EJ screening tool (EPA 2024), those with less than a high school education in the census tract made up 19 percent of the population, which was higher than the state average of 13 percent (76th percentile) and higher than the U.S. average of 12 percent (79th percentile). For Block Groups 450850006001 and 450850006002, those with less than a high school education made up 17 and 14 percent, respectively (**Table 7**).

	County	State
Total population	105,556	5,373,555
Race/ethnicity		
White	47.7%	68.9%
Black or African American	47.9%	26.3%
American Indian and Alaska Native	0.5%	0.6%
Asian	1.4%	2.0%
Native Hawaiian and other Pacific Islander	0.1%	0.1%
Hispanic or Latino	4.5%	6.6%
Poverty	10.7%	14.0%

Table 6. Population, Ethnicity, and Poverty

Note: All population and ethnicity data gathered from the U.S. Census Bureau web page. Accessed March 14, 2024.

	Value	State Average	Percentile in State	U.S. Average	Percentile in U.S.
Census Tract 450850006000					
NATA* cancer risk (lifetime risk per million)	30	30	9	25	52
NATA* respiratory hazard index	0.4	0.41	18	0.31	70
People-of-color population	48%	38%	66	39%	65
Low-income population	33%	36%	48	31%	60
Less than high school education	19%	13%	76	12%	79
Block Group 450850006001					
NATA* cancer risk (lifetime risk per million)	30	30	9	25	52
NATA* respiratory hazard index	0.4	0.41	18	0.31	70
People-of-color population	46%	38%	64	39%	63
Low-income population	15%	36%	17	31%	28
Less than high school education	17%	13%	72	12%	77
Block Group 450850006002					
NATA* cancer risk (lifetime risk per million)	30	30	9	25	52
NATA* respiratory hazard index	0.4	0.41	18	0.31	70
People-of-color population	43%	38%	60	39%	61
Low-income population	34%	36%	49	31%	61
Less than high school education	14%	13%	61	12%	68

Table 7. EPA's EJ Screen Reports

Selected Variables – Block Group: 450850006001, SC, EPA Region 4. Approximate population: 1,333; Block Group: 450850006002, CA, EPA Region 4. Approximate population: 1,017.

*More information on the NATA can be found at https://www.epa.gov/national-air-toxics-assessment.

The NATA cancer risk and respiratory hazard indices are a way to see how local residents compare to everyone else in the state as well as the entire U.S. For the NATA respiratory hazard index and the NATA cancer risk index (i.e., lifetime risk per million), the Project site is in an area ranked as the 70th percentile in the U.S. Although these NATA percentiles are higher in comparison to the rest of the U.S., Project emissions were reviewed by the State environmental agency in connection with e-VAC's Minor-Source Construction Air Permit and the PSD permitting program (see **Section 3.4** for more detail). Permitted emission levels of criteria pollutants and hazardous air pollutants are considered to be protective of human health and the environment. Also, based on the permit, controls would be implemented during operation to minimize emissions and potential air quality impacts.

Census Tract 45085000600 was also analyzed using CEQ's Climate and Economic Justice Screening Tool, which determined the tract is not considered disadvantaged because it does not meet any burden threshold or at least one associated socioeconomic threshold. However, there are disadvantaged communities in the surrounding tracts, areas from which the Project workforce is anticipated to be sourced. This would result in beneficial socioeconomic impacts on communities in surrounding census tracts (i.e., Census Tracts 45085001300, 45085001100, 45085000700, 45085002000, 45085000901).

Given the jobs created during construction (350 temporary) and operation (300 permanent jobs), as well as the associated community and apprenticeship programs, Project Eagle would benefit the surrounding communities. Disproportionate impacts on minority or low-income populations would not be anticipated in the affected area; therefore, EJ impacts would not be significant.

3.9 Health and Safety

Project Eagle would have health and safety risks associated with construction and operation of a manufacturing facility. These risks may include, but would not be limited to, the operation of heavy machinery and equipment, equipment failures, employee and facility operator errors, chemical and waste management scenarios, and emergency situations. The design, construction, and operation of the facility would follow all federal, State, and local requirements as well as industry BMPs to address the potential risks. In addition, plans and procedures would be developed in accordance with federal OSHA regulations as well as SC OSHA regulations to project the health and safety of employees and the public.

During operations, e-VAC would develop plans and procedures that would adhere to federal, State, and local regulations, thereby ensuring the health and safety of e-VAC workers, the public, and the surrounding environment. Project Eagle would use various chemicals to produce the NdFeB PMs, including inert gases, isopropyl alcohol, terbium sputtering targets, grinding lubricants, alkaline cleaners, and glues. The various chemicals would be delivered in small containers, 55-gallon drums, intermediate bulk containers, or tanker trucks, as required for production. E-VAC would implement a program to evaluate new chemicals, assess regulatory requirements, and determine if their presence on-site would exceed reporting or regulatory thresholds. An SDS would be kept on-site for each chemical, in accordance with OSHA requirements.

Chemicals would not be used or stored on-site in quantities that would be above Clean Air Act Section 112I threshold quantities; therefore, a formal Risk Management Plan (RMP) would not be required. e-VAC would monitor on-site chemical storage and usage, ensuring that the facility would stay under the RMP thresholds. If the facility should exceed the thresholds, an RMP would be developed. In addition, implementation of an SPCC Plan and SWPPP would allow the facility to identify, monitor, and address any hazards associated with chemical storage on-site, ensuring bulk chemicals would be stored in compatible tanks or containers with secondary containment to protect employees, the public, and the environment in the event of a chemical release.

e-VAC would develop an emergency action plan, detailing the hazards on-site, potential emergency scenarios, and associated emergency response plans. Emergency scenarios may include fires, floods, chemical releases, or security breaches. The emergency action plan would identify the emergency coordinators who would take charge and lead the response in an emergency. The emergency coordinators would also be responsible for escalating to outside authorities, as required by the plan. The emergency action plan would be reviewed and updated as the facility changes, if the plan fails in an emergency, or as emergency coordinators change.

The Sumter Fire Department's Manning Road Station is approximately a 3-mile drive from the Project site. This station would be called on to provide emergency services, including fire and rescue, medical response, and response to hazardous materials incidents. During the construction and operational

phases of Project Eagle, the Sumter Fire Department would be provided with a copy of emergency plans and engaged to familiarize the department with the facility and provide feedback on the emergency response plan.

With implementation of plans and procedures to address health and safety, including BMPs; compliance with federal, State, and local regulations and standards; and plans for preventing chemical spills and the potential mishandling of hazardous materials, impacts on the health and safety of workers and the public from Project construction and operation would not be significant.

3.10 Waste Management

All solid waste generated during the construction and operational phases of the Project would be managed, transported, and disposed of/or recycled in accordance with all federal, State, and local regulations. This section provides an overview of the waste streams expected to be generated at the facility and the anticipated disposal methods.

Waste streams are expected to be generated from pollution control equipment (e.g., baghouse dust and wastewater pre-treatment sludges), equipment cleaning and maintenance, laboratory activities, and chemical and raw material containers. During operations, e-VAC would evaluate waste streams for reduction, reuse, and recycling opportunities to limit the Project's waste footprint.

Given the Project design and e-VAC's experience at other manufacturing locations, the waste streams, generation volumes, and associated management methods listed below in **Table 8** would be anticipated. A thorough regulatory review would be completed, and final waste determinations would be documented prior to commencement of operations.

Any new waste streams generated by Project Eagle would first be evaluated for recycling or reuse opportunities. If the waste cannot be recycled, it would be sent to a landfill or, if hazardous, a certified waste facility. NdFeB PMs that do not meet specifications and quality control requirements would be recycled or used as new magnet manufacturing material once processing is completed. General waste from the facility would be routinely evaluated for recycling opportunities, making sure that the maximum amount possible is recycled or reused.

As part of Project Eagle, e-VAC plans to construct a pretreatment process in which process water would be treated in a distillation process. Waste streams generated through this process would include the wastewater that would be sent to the City of Sumter Pocotaligo Wastewater Treatment Plant as well as the distilled bottoms to be handled as solid waste. e-VAC is in the process of applying for the required construction permit for wastewater facilities through the SCDHEC for the new pretreatment system and a wastewater discharge permit through the City of Sumter. Solid waste would be transported by a qualified vendor.

Prior to operations, e-VAC would determine the applicable hazardous waste generator category, per the RCRA, and submit the appropriate registration to obtain an EPA identification number. e-VAC anticipates that the facility would be an LQG of hazardous waste during operations. Based on the generator category determination, an Integrated Contingency Plan would be developed to cover the hazardous waste streams on-site, their hazards, and the associated medical response if personnel are exposed.

Due to planned waste management practices that would be in place at the facility, including waste minimization practices and a hazardous waste program, impacts from waste management activities related to Project Eagle would not be significant.

Waste Type	Anticipated Waste Classification	Estimated Generation Volume	Collection Method	Disposal Method
WWTP sludge	TBD	TBD	TBD	Disposed of at a certified waste facilit
Rare-earth sludge/grinding slurry	Hazardous	16,600 kg/week	55-gallon barrels	Disposed of at a certified waste facilit
Verbrauchtes KSS	Hazardous	25 m ³ /week	Tank	Disposed of at a certified waste facilit
Residual solvent	Hazardous	240 gallons/week	ASB container	Disposed of at a certified waste facility/recycled
Lab waste	Hazardous/Non- hazardous	TBD	55-gallon barrels	Disposed of at a certified waste facilit
Air pollution control powder and sludge powder	Non-hazardous	TBD	TBD	Recycled within the plant
Adhesive waste	Non-hazardous	TBD	55-gallon barrels	Disposed of at a certified waste facilit
Process materials (grinding & sawing)	Non-hazardous	1,100 kg/week	55-gallon barrels	Disposed of at a certified waste facilit
Production byproduct material (i.e., off-spec magnets)	Non-hazardous	45 barrels	55-gallon barrels	Recycled within the plant
General recycling streams (steel parts, aluminum, paper, plastic)	Non-hazardous	4 ft x 40 ft container/week	Dumpster	Recycled
Wood pallets	Non-hazardous	40 ft container/week	Dumpster	Recycled
Electric/electronic parts	Non-hazardous	1 yd ³ /week	Gaylord	Recycled
General waste	Non-hazardous	26 yd ³ /week	Dumpster	Disposed of at a certified waste facilit
Oxidized powder and green body residues	Non-hazardous	500 kg/week	55-gallon barrels	Disposed of at a certified waste facilit
Secondary raw materials	Non-hazardous	7,500 kg/week	Super sack	Recycled
Used cleaning cloths (reusable and disposable)	Non-hazardous	4 yd³/week	Gaylord	Laundered and reused/disposed of at certified waste facility
Clean solid scrap (without adhesive)	Non-hazardous	1,400 kg/week	55-gallon drums	Recycled
Contaminated solid scrap (with adhesive)	Non-hazardous	375 kg/week	55-gallon drums	Disposed of at a certified waste facilit

Table 8. Project Waste Management

Note: The information provided in this table reflects the best data available at the time of submission. Waste streams, generation rates, and management methods may all be subject to change.

TBD = to be determined; WWTP = wastewater treatment plant; kss = German abbreviation for the central cooling agent filtration system for grinding processes (KuehlSchmierStoff); m^3 = cubic meters; ASB = German abbreviation for safe storage for hazardous waste liquids (e.g., isopropanol rests for disposal) (Abschliessbarer Sammel Behälter); yd^3 = cubic yards; ft = feet; kg = kilogram

3.11 Soils and Prime Farmlands

Prime farmland, as defined by the U.S. Department of Agriculture (USDA), is land that has the best combination of characteristics for producing food, feed, forage, fiber, and oilseed crops. The Project site is classified as prime farmland or farmland of statewide importance, even though the entire site (85.6 acres) is situated in an industrial park and zoned for heavy industrial use. According to the Natural Resources Conservation Service (NRCS), construction activities for Project Eagle would convert roughly 81.8 acres of land, making it unavailable for farming.

Sumter County has 167,672 acres in farm production (U.S. Department of Agriculture 2017) and more than 335,000 acres of farmable land. Therefore, Project Eagle would represent a negligible reduction (less than 0.0307 percent) in total farmable land for the county.

In accordance with the Farmland Protection Policy Act (FPPA), DOE completed a Farmland Conversion Impact Rating Form (USDA Form AD-1006) on February 13, 2024. The review resulted in a farmland conversion rating that was below the threshold for further protection considerations (**Appendix A**).

Although up to 76 acres on the Project site is developable land, minimal adverse impacts on soils or farmland would occur as a result of Project Eagle due to the land clearing and grading activities that have already occurred, as included in the baseline condition. Therefore, affected soils are limited to those associated with construction and operation of the Project's permanent facilities (e.g., plant, roads, parking, support facilities). Short-term impacts could include soil loss through erosion or compaction as well as a loss of structure in soils that are disturbed or driven on during construction. After construction, disturbed or compacted areas not needed for operation would be regraded, loosened, and revegetated. Impacts on soils during the operational phase of Project Eagle would be largely associated with the limited soil erosion induced by vehicle traffic on existing unpaved roads; however, soil erosion from this source is expected to be negligible. e-VAC would monitor and repair any areas of erosion or soil instability.

Given the baseline condition of the Project site, the limited amount of prime farmland that would be affected by Project Eagle, the FPPA assessment scoring for Project land, and the extensive additional farmland resources within Sumter County, the overall impacts on soils and prime farmland from Project Eagle would not be significant.

3.12 Cumulative Impacts

Cumulative impacts are potential effects on the environment from the incremental impact of a project when added to other past, present, and reasonably foreseeable future actions undertaken by other agencies (federal or nonfederal) or persons (40 CFR Part 1508.1[g]). Other past, present, and reasonably foreseeable future actions were identified through a review of active project lists and planning documents from Sumter County, the Sumter Chamber and Economic Alliance, and the applicant. The effects of past actions are incorporated into the baseline conditions and the effects described in Sections 3.2 through 3.11.

In late summer 2024, Duke Energy will begin construction of a new 2.75-acre electrical substation in the southwestern corner of the Project site. The substation is independent of Project Eagle and the e-VAC manufacturing facility. (This substation is shown in some site drawings but it is not included in the scope of the Proposed Action.) No other current or reasonably foreseeable future actions were identified in the area that would contribute to cumulative impacts from Project Eagle.

Given the Project's location within an industrial park that can be expected to undergo some form of industrial development in the future, air quality and climate change are identified as resources that may be affected by both Project Eagle and other projects in the region in the future. In addition, the closure of another industrial facility in the region is addressed by including socioeconomics in the evaluation of cumulative impacts that follows.

Project Eagle, when considered together with the identified past, present, and reasonably foreseeable future actions in the region, would not have the potential to result in significant cumulative impacts on other resources due to the geographic location and separation of the projects, the disturbed nature of the project sites, and/or the lack of construction or operational overlap that would cause an incremental impact on a particular resource.

3.12.1 Air Quality and Climate Change

Project Eagle is expected to generate minor temporary emissions of criteria pollutants during construction and minor ongoing emissions of criteria pollutants during operations (e.g., facility process emissions and employee commute emissions). These minor temporary and ongoing emissions increases are not expected to be significant. The scale and temporary nature of construction-related emissions would not cause significant regional cumulative impacts on air quality. Ongoing operational emissions would be required to comply with all applicable air quality permitting to prevent exceedances of the NAAQS. The region is currently in attainment with all NAAQS and, as detailed in **Section 3.4**, e-VAC has sufficiently demonstrated to SCDHEC that emissions from Project Eagle would not affect attainment of the NAAQS. Therefore, Project Eagle would not cause significant cumulative impacts on air quality.

3.12.2 Greenhouse Gas Emissions and Climate Change

The current science and study of the Earth's climate shows with 95 percent certainty that human activity has been the dominant cause of observed global warming since the mid-twentieth century. Since the beginning of the industrial era, circa 1750, human activities have increased the concentration of GHGs in the atmosphere, primarily carbon dioxide (CO₂), NO_x, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Rising global temperatures have been accompanied by changes in weather and climate (e.g., changes in rainfall that result in more floods, droughts, or intense rain; rising sea levels, Arctic Sea ice decline, more frequent and severe heat waves). It is now well established that rising atmospheric GHG emission concentrations are significantly affecting the Earth's climate (Intergovernmental Panel on Climate Change 2013 and 2023). The CEQ has determined climate change in a fundamental environmental issue and that its effects on the human environment are squarely within NEPA's purview (U.S. Council on Environmental Quality 2016; *Federal Register* 2023).

Project Eagle is expected to generate minor temporary emissions of GHGs during construction and ongoing emissions of GHGs during operations (e.g., facility process emissions and employee commute emissions). Up to 43,799 metric tonnes per year of CO₂ equivalent emissions would be emitted from Project Eagle's facility processes once fully operational.

Electricity consumption would account for more than 99 percent of the facility's CO_2 equivalent emissions. The remainder of the CO_2 equivalent emissions would come from the combustion of distillate fuel oil No. 2 in the facility's fire pump engine. In emergency situations, backup generators may also contribute to GHG emissions, but these would be temporary and have a negligible impact. Project emissions are summarized in **Table 9**.

Emission Source		Category	CO _{2e} (metric tonnes)
Fire Pump Engine	Scope 1 Stationary Combustion		43
General Power Supply	Scope 2 Purchased and Consumed Electricity		43,756
TOTAL			43,799

Table 9. GHG Emissions Produced by Source and Category

CO_{2e =} carbon dioxide equivalent

Project Eagle's GHG emissions are expected to be offset as internal-combustion vehicles (ICEs) are replaced by the EVs that use the PMs produced at the Project facility. As stated by the U.S. Department of Energy, "These technologies [rare earth permanent magnets] enable... the manufacturing of more efficient, more powerful, and lighter-weight motors in electric vehicles (EVs)" (U.S. Department of Energy 2022). Project Eagle's NdFeB magnets, a type of rare-earth PM, would reduce the carbon footprint of EVs by reducing energy use, reducing the weight and size of the motor, and extending the vehicle's range. According to a 2021 comparative study conducted by the International Energy Agency regarding life-cycle GHG emissions, an average EV saves between 20.8 and 22.2 metric tonnes of carbon dioxide equivalent over its lifetime compared to an ICE vehicle (International Energy Agency 2021 and 2022). This would mean that EVs—the end-product of e-VAC's NdFeB PMs—could reduce GHG emissions by 50 to 53 percent compared to incumbent ICE vehicles.

The magnitude of potential annual reductions in gallons of petroleum would depend on the number of EVs using the traction motors containing the product produced by Project Eagle. Based on projections for full capacity, as well as assumptions regarding end-customer vehicle mix, Project Eagle is expected to produce enough magnets to supply more than 557,000 EVs annually, or about 8,355,000 EVs over a 15-year period. Therefore, it is expected that the petroleum displaced (i.e., saved) would total approximately 202.9 million gallons per year (based on annual mileage of 12,000 miles and current 2025 average fuel economy of 31.5 miles per gallon for light-duty vehicles) after the first year of full production. The annual displaced CO₂ for the first year is then calculated from Project Eagle's annual fuel consumption savings (202.9 million gallons) multiplied by the U.S. Energy Information Administration's fuel emission factor of 19.37 pounds of CO₂ per gallon for gasoline (U.S. Energy Information Administration 2023). Therefore, the use of EV traction motors containing magnets produced by Project Eagle would reduce highway-generated CO₂ by approximately 1.97 million tons per year after the first year, with additional reductions from new production in each following year over a total of about 15 years, which is the average anticipated life of an EV traction motor.

In general, the potential benefits associated with reducing CO₂ emissions would include reduced GHG concentrations and the associated climate change impacts (e.g., increases in atmospheric temperature, changes in precipitation, increases in the frequency and intensity of extreme weather events, rising sea levels). Because Project Eagle would support GHG emissions reductions, impacts related to GHG emissions and climate change would be beneficial in the long term.

3.12.3 Socioeconomics and Environmental Justice

Project Eagle would be designed to spur the local economy through substantial investment, job creation, and targeted workforce development while concurrently addressing the socioeconomic disparities and EJ concerns in designated disadvantaged communities in the surrounding region. It would also be expected to create 300 permanent jobs and more than 350 construction jobs. Project Eagle would involve collaboration with local workforce development programs, including readySC, to enhance the skills and employability of the local workforce.

Through the readySC program, SC's Technical College System would help e-VAC recruit and train potential employees. readySC is an entry program for the Sumter community that feeds into the Apprenticeship Carolina program, which is aligned with the SC Technical College System, as well as CCTC. This program would provide a qualified pipeline of training candidates and train candidates to the specifications identified for entry-level positions. readySC would assign a project team composed of various experts tailored to e-VAC's specific needs and develop a plan to meet those needs. Once assessed, readySC would document the work processes and the skills, knowledge, and abilities required of the local workforce. Once assessment and documentation are complete, readySC would develop tailored training curricula. Training would include, but would not be limited to, blended instruction, standard classroom, and lab, vendor, and workstation training. Training can take place on the job or at the CCTC Advanced Manufacturing Technology Training Center, a modern training facility that was recently established on the site of an abandoned Walmart and Kroger shopping center.

The State also offers programming through the SC Works Center, the SC Department of Employment and Workforce, the SC Department of Social Services, the Commission of the Blind, Adult Education, and the SC Department of Vocational Rehabilitation to leverage SC's workforce system by providing services such as career guidance, job referrals, and testing and training to meet the needs of job seekers, employers, and those looking to further their careers.

The CCTC Advanced Manufacturing Technology Training Center in Sumter, which opened on October 15, 2015, is a significant component of the workforce development strategy for Project Eagle. The center focuses on advanced manufacturing training through programs in mechatronics technology, engineering graphics technology, and machining and CNC technology. Funding for CCTC is aimed at acquiring necessary equipment to support these programs, with the intention of preparing students for employment in the local industry, including jobs created by this new facility. The CCTC is located in a disadvantaged community, as identified by the climate and economic justice screening tool for Census Tract 45085000901, aiming to provide quality training and resources to students in Sumter and the surrounding counties of Clarendon, Kershaw, and Lee. Further, Project Eagle would be introduced at a time when the local job market faces challenges, notably the closure of Caterpil'ar's hydraulic cylinder plant in Sumter, which affects approximately 150 positions. The company has announced plans to consolidate operations, transferring workers to other plants or offering severance packages. e-VAC aims to contribute to the local economy by creating job opportunities, potentially absorbing some of the workforce displaced by Caterpil'ar's closure.

Accordingly, Project Eagle would be anticipated to offer short-term and long-term socioeconomic and environmental justice benefits to Sumter County and the surrounding region by boosting the local economy through job creation, skill development, and community engagement, with a focus on supporting disadvantaged areas and populations.

4. DRAFT FINDING

Based on this EA, DOE has determined that providing a federal loan to e-VAC Magnetics, LLC, to build a fully integrated rare-earth PM production plant for automotive applications like EVs at the Pocotaligo Industrial Park in Sumter, SC, would not have a significant effect on the human environment. Preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.

This Finding of No Significant Impact should not be construed as a final decision about the issuance of a federal loan.

Todd Stribley NEPA Compliance Officer DOE Loan Programs Office Date

5. **REFERENCES**

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6. LIST OF AGENCIES CONTACTED

The agencies and Native American tribes contacted during preparation of this EA are listed below.

6.1 Federal Agencies

- U.S. Fish and Wildlife Service, South Carolina Ecological Services
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Army Corps of Engineers, Charleston District

6.2 State, County, and Local Agencies

- South Carolina Department of Commerce
- South Carolina Department of Health and Environmental Control
 - o Bureau of Air Quality
 - o Ocean and Coastal Resource Management, Coastal Zone Consistency Section
 - State Clearinghouse
- South Carolina Department of Transportation
- South Carolina Department of Archives and History
 - o State Historic Preservation Office
- Sumter County, South Carolina
 - o Sumter County Stormwater Utility
- City of Sumter, South Carolina
 - Public Services
- Sumter Economic Development

6.3 Native American Tribes

- Catawba Nation
- Cherokee Nation
- Muscogee (Creek) Nation

7. LIST OF PREPARERS

7.1 Department of Energy

Name	Project Role	Agency	Qualifications	Years of Experience
Anna Eskridge, Ph.D.	Deputy Director, Environmental Compliance	U.S. DOE	Ph.D., Policy Studies; M.A., Geography; B.S., Environmental & Natural Resources	16
Molly Cobbs	NEPA Document Manager	U.S. DOE	B.S., Environmental Studies; B.A., Political Science	21

7.2 Applicant

Name	Project Role	Agency	Qualifications	Years of Experience
David Strohm, II	NEPA Project Director	Trinity Consultants	B.S., Meteorology	17
Karen Hanley	NEPA Project Manager, NEPA Planner	Trinity Consultants	M.S., Biological Sciences; B.S., Biology and Marine Science	15
Stephen Kang	NEPA Planner	Trinity Consultants	B.S., Chemical and Biomolecular Engineering	5
Jenna Kube	Health and Safety; Waste Management Subject Matter Expert	Trinity Consultants	M.S., Environmental Engineering; B.S., Civil Engineering	4
Mackenzie Lewis	NEPA Planner	Sespe Consulting, Inc. (Trinity Consultants)	B.S., Environmental Management and Protection	3
Srusti Maddala	Water and Soil Subject Matter Expert; Technical Editor	Trinity Consultants	M.S., Cell and Molecular Biology; B.S., Environmental, Soil, and Water Science; B.S., Biochemistry	1
Shannon O'Dell	Wastewater Subject Matter Expert	Trinity Consultants	B.S., Earth and Atmospheric Science	15
Megan Neal, P.E.	Air Quality; GHG Subject Matter Expert	Trinity Consultants	B.S., Chemical Engineering	10
Graham Stephens	NEPA Planner; Land Use Subject Matter Expert	Sespe Consulting, Inc. (Trinity Consultants)	B.A., Environmental Studies	10
Emily Wen	NEPA Planner	Trinity Consultants	M.S., Environmental Engineering; B.S., Chemical Engineering	6

APPENDIX A – AGENCY AND TRIBAL CORRESPONDENCE

Copies of the items shown in bold in Tables A-1 and A-2 are included in this appendix. Proprietary information has been redacted.

Table A-1. Federal, State, County, and Local Agencies Contacted

Organization/Agency	Date and Summary of Contact
U.S. Fish and Wildlife Service, South Carolina Ecological Services	 11/30/2023: initial IPaC report generated 02/06/2024: LPO notifies USFWS of intent to use clearance letter 02/07/2024: USFWS confirms use of clearance letter is appropriate for no effect determinations 03/08/2024: Official Species List; IPaC report
U.S. Department of Agriculture, Natural Resources Conservation Service	01/10/2024: LPO contacts NRCS regarding FPPA review 01/18/2024: LPO submits initial portions of AD-1006 to NRCS 01/23/2024: NRCS reviews AD-1006 and returns to LPO 02/13/2024: LPO returned completed AD-1006 to NRCS
U.S. Army Corps of Engineers, Charleston District	01/31/2024: outreach to acknowledge no WOTUS affected by Project; intent to prepare an EA
South Carolina Department of Commerce	01/16/2024: cc'ed on State Clearinghouse initiation letter
South Carolina Department of Health	and Environmental Control
Bureau of Air Quality	01/16/2024: cc'ed on State Clearinghouse initiation letter
 Ocean and Coastal Resource Management, Coastal Zone Consistency Section 	01/11/2024: outreach via email to confirm whether CZMA applied
 State Clearinghouse (Environmental Affairs Administration) 	11/28/2023: initiation letter delivered via email 01/16/2024: initiation letter to State Clearinghouse delivered via email
South Carolina Department of Transportation	01/16/2024: cc'ed on State Clearinghouse initiation letter
South Carolina Department of Archives and History, State Historic Preservation Office	01/29/2024: NHPA Section 106 consultation package submitted (Attachments 2–5 removed to protect sensitive information) 02/23/2024: SHPO concurrence received
Sumter County, South Carolina – Stormwater Utility	01/16/2024: cc'ed on State Clearinghouse initiation letter
City of Sumter, South Carolina – Public Services	01/16/2024: cc'ed on State Clearinghouse initiation letter
Sumter Economic Development	01/16/2024: cc'ed on State Clearinghouse initiation letter

Tribal Government	Date and Summary of Contact
Catawba Nation	11/28/2023: initiation letter delivered via email
	11/28/2023: tribe requested hard-copy letter
	01/19/2024: hard-copy letter received by tribe
	02/26/2024: tribal concurrence letter received by LPO
Cherokee Nation	11/28/2023: initiation letter delivered via email
	01/11/2024: LPO makes follow-up call to tribe
	02/27/2024: LPO sends follow-up email to tribe
	02/27/2024: tribal concurrence letter received by LPO
Muscogee (Creek) Nation	11/28/2023: initiation letter delivered via email
	01/11/2024: LPO makes follow-up call to tribe
	02/27/2024: LPO sends follow-up email to tribe

Table A-2. Native American Tribes Contacted

Good Morning Molly,

If the determinations for all species is "no effect" then you may use the species and habitat clearance letter found on our website.

For future projects, that may qualify (does not sound like this one did) on our Information for Planning and Consultation (IPaC) website, we have a determination key titled "Clearance to Proceed with Federally-Insured Land and Grant Project Requests". This determination key is for all Federal loan transfers (i.e. HUD, DOE, etc.) and funded project requests for existing commercial, industrial, and residential structures that may be completed without requiring additional clearing of undisturbed habitat. If any of your other projects qualify, it will generate an letter that can be used to serve as our response and there is no need to send in the project for review. We also now have a state-wide determination key in IPaC that will cover other projects as well.

Melanie

From: LPO_Environmental <lpo_environmental@hq.doe.gov>
Sent: Tuesday, February 6, 2024 1:59 PM
To: Charleston Regulatory, FW4 <charleston_regulatory@fws.gov>
Cc: Eskridge, Anna <anna.eskridge@hq.doe.gov>; Cobbs, Molly <molly.cobbs@hq.doe.gov>
Subject: [EXTERNAL] eVAC Magnetics: ESA Section 7, Informal Consultation Opportunity

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Thomas and South Carolina Ecological Services Team,

Our office is evaluating whether to provide a Federal loan guarantee to eVAC Magnetics (applicant) for a new permanent magnet production facility in Sumter County, South Carolina. We have initiated the National Environmental Policy Act review process and are preparing an Environmental Assessment to inform our decision on the loan application. The applicant has started site construction using state and private funding.

The applicant's consultant generated an IPaC report in 2019 and completed field surveys and effects determinations in 2019. In November 2023, the consultant generated an updated IPaC report to confirm/check species (see 2023 species list below). In addition to the species identified in the 2019 report, the November 2023 IPaC report also returned the Tricolored bat (*Perimyotis subflavus*). In January 2023, the applicant's consultant assessed the project's effect on the Tricolored bat. The applicant's consultant recommends a no effect determination for all species.

We are considering use of the South Carolina Clearance Letter to satisfy our ESA Section 7 requirements. We want to offer your office an opportunity to provide input (informally) on this approach. Please let me know if you would like to visit on the project, the proposed no effect determinations, or the proposed use of the Clearance Letter.

11/30/2023 IPaC Species List

- Tricolored bat (Perimyotis subflavus)
- Red-cockaded Woodpecker (Picoides borealis)
- Monarch butterfly (Danaus plexippus)
- American chaffseed (Schwalbea americana)
- Canby's dropwort (Oxypolis canbyi)
- Bald eagle (Haliaeetus leucocephalus)

Thanks, Molly

Molly R. Cobbs Loan Programs Office U.S. Department of Energy molly.cobbs@hq.doe.gov 240-687-7266 (Eastern time)





United States Department of the Interior FISH AND WILDLIFE SERVICE

176 Croghan Spur Road, Suite 200 Charleston, South Carolina 29407



U.S. Fish and Wildlife Service Clearance Letter for Species and Habitat Assessments

Updated: January 3, 2023

The U.S. Fish and Wildlife Service (Service) is one of two lead Federal Agencies mandated with the protection and conservation of Federal trust resources, including threatened and endangered (T&E) species and designated critical habitat as listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) (ESA). Development of lands in South Carolina have the potential to impact federally protected species. Accordingly, obligations under the ESA, National Environmental Policy Act (NEPA), Clean Water Act (CWA), Federal Power Act (FPA), and other laws, require project proponents to perform an environmental impact review prior to performing work on the site. These projects may include a wide variety of activities including, but not limited to, residential or commercial developments, energy production, power transmission, transportation, infrastructure repair, maintenance, or reconstruction of existing facilities on previously developed land.

Project applicants, or their designated representatives, may perform initial species assessments in advance of specific development proposals to determine the presence of T&E species and designated critical habitat that are protected under the ESA. These reviews are purposely speculative and do not include specific project or site development plans. Many of these speculative proposals are for previously developed or disturbed lands such as pasture lands, agricultural fields, or abandoned industrial facilities. Due to historical uses and existing conditions, these sites often do not contain suitable habitat to support T&E species. Therefore, an assessment may conclude that any future development of the site would have no effect to T&E species or adversely modify designated critical habitat. If the applicant, or their designee, determines there is <u>no effect or impact</u> to federally protected species or designated critical habitat, no further action is required under the ESA.

Clearance to Proceed

For all sites with potential projects that <u>have no effect or impact</u> upon federally protected species or designated critical habitat, no further coordination with the Service is necessary at this time. This letter may be downloaded and serve as the Service's concurrence or agreement to the conclusions of the species assessment. <u>Any protected species survey or assessment conducted</u> for the property should be included with this letter when submitting the project to Federal <u>permitting agencies</u>. Due to obligations under the ESA potential impacts must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

Please note this Clearance Letter applies only to assessments in South Carolina and may not be used to satisfy section 7 requirements for projects that have already been completed or currently under construction.

If suitable habitat for T&E species or designated critical habitat occurs on, or nearby, the project site, a determination of no effect/impact may not be appropriate. In these cases, direct consultation requests with the Service should be initiated by the Federal action agency. Additional coordination with the Service may also be required if the potential project requires an evaluation under another resource law such as, but not limited to, NEPA, CWA, FPA, and the Coastal Zone Management Act.

The Service appreciates your cooperation in the protection of federally listed species and their habitats in South Carolina.

Sincerely,

Thomas D. McCoy

Thomas D. McCoy Field Supervisor



United States Department of the Interior

FISH AND WILDLIFE SERVICE South Carolina Ecological Services 176 Croghan Spur Road, Suite 200 Charleston, SC 29407-7558 Phone: (843) 727-4707 Fax: (843) 727-4218



In Reply Refer To: Project Code: 2024-0059868 Project Name: Project March 08, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <u>Migratory Bird Permit | What We Do | U.S. Fish & Wildlife</u> <u>Service (fws.gov)</u>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <u>https://www.fws.gov/partner/council-conservation-migratory-birds</u>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services

176 Croghan Spur Road, Suite 200 Charleston, SC 29407-7558 (843) 727-4707

PROJECT SUMMARY

Project Code:	2024-0059868
Project Name:	Project
Project Type:	New Constr - Above Ground
Project Description:	A manufacturing project seeking federal funding will occur within the
	provided project footprint, which is located within the 320-acre
	Pocotaligo Industrial Park and is privately owned land.

Project Location:

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@33.85429725,-80.31742995227181,14z</u>



Counties: Sumter County, South Carolina

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/10515</u>	Proposed Endangered
BIRDS	
NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7614</u>	Endangered
INSECTS	
NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9743</u>	Candidate

FLOWERING PLANTS STATUS NAME STATUS American Chaffseed Schwalbea americana Endangered No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1286</u>

Canby's Dropwort *Oxypolis canbyi* No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7738</u>

Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:Private EntityName:Karen HanleyAddress:405 S. 8th St. Suite 331City:BoiseState:IDZip:83702Emailkaren.hanley@trinityconsultants.comPhone:7863011430

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Energy



January 23, 2024

Loan Programs Office U.S. Department of Energy LP 10 1000 Independence Avenue, SW Washington D.C. 20585

Attention: Molly R. Cobbs, Loan Programs Office, U.S. Department of Energy

Subject: Project Eagle

I have reviewed the information provided in your correspondence dated January 18, 2024, concerning the proposed new construction of a rare earth magnet production plant in Sumter, Sumter County, South Carolina. This review is part of the National Environmental Policy Act (NEPA) evaluation for the U.S. Department of Energy. I have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

Attached is a completed AD-1006 form for the proposed project. The proposed site includes 61.8 acres of prime and unique farmland and 20 acres of statewide important farmland. This proposed project will impact important farmland in the county because .0307% of important farmland will be converted. The NRCS encourages the exploration of alternative sites to limit adverse effects on prime and important farmland. The NRCS also encourages the use of erosion control methods during construction.

For future reference, NRCS policy and procedures on prime and unique farmlands are published in the Code of Federal Regulations 7CFR657. The website is: <u>https://www.ecfr.gov/cgi-bin/text-</u> <u>idx?SID=a5afcfaf7f6185ee7c835d365b1d478c&mc=true&tpl=/ecfrbrowse/Title07/7</u> tab_02.tpl. Detailed information can be found in Section 657.5 on this website.

If you have further questions, please contact me at 803.253.3896 or by email at <u>kristine.ryan@usda.gov</u>.

Sincerely, **KRISTINE RYAN** Digitally signed by KRISTINE RYAN Date: 2024.01.23 11:30:51 -05'00'

Kristine Ryan State Soil Scientist

> Natural Resources Conservation Service 1835 Assembly Street, Room 950 Columbia, South Carolina 29201 (803) 253-3935 Helping People Help the Land An Equal Opportunity Provider and Employer

U.S. Department of Agriculture FARMLAND CONVERSION IMPACT RATING								
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request 01/18/2024					
Name of Project eVAC Project Eagle			Federal Agency Involved U.S. Department of Energy					
Proposed Land Use Magnet Production/Mfg. Plant			County and StateCity of Sumter, Sumter County, South Carolina					
PART II (To be completed by NRCS)	3	Date Request Received By NRCS 1/18/2024 Person Completing Form: Kristine Ryan						
Does the site contain Prime, Unique, Statew	ide or Local Important Farmland		ES NO	Acres	rrigated		Average Farm Size	
(If no, the FPPA does not apply - do not con	nplete additional parts of this for	<i>n)</i>	\checkmark	19,133		320		
Major Crop(s)	Farmable Land In Govt.	Jurisdiction	i	Amount of	Amount of Farmland As Defined in FPPA			
soybeans, corn, small grains	Acres: 335,233 % 79	9.3		Acres: 26	6,419 %	63		
Name of Land Evaluation System Used LESA	Name of State or Local S	Site Assess	ment System	Date Land 1/23/2024		Returned by N	RCS	
PART III (To be completed by Federal Ager	ncy)			Alternative Site Rating				
A. Total Acres To Be Converted Directly				Site A 81.7	Site B	Site C	Site D	
B. Total Acres To Be Converted Indirectly				01.7				
C. Total Acres In Site				81.7				
PART IV (To be completed by NRCS) Land	t Evaluation Information			01.7				
A. Total Acres Prime And Unique Farmland				01.0				
B. Total Acres Statewide Important or Local	Important Farmland			61.8				
C. Percentage Of Farmland in County Or Local	•			20		-		
D. Percentage Of Farmland in Govt. Jurisdic		ivo Valuo		.0307				
				53				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points) PART VI (To be completed by Federal Agency) Site Assessment Criteria			Maximum	90				
(Criteria are explained in 7 CFR 658.5 b. For		CPA-106)	Points	Site A	Site B	Site C	Site D	
1. Area In Non-urban Use			(15)	14				
2. Perimeter In Non-urban Use			(10)	0				
3. Percent Of Site Being Farmed			(20)	19				
4. Protection Provided By State and Local Government			(20)	0				
5. Distance From Urban Built-up Area			(15)	15		2		
6. Distance To Urban Support Services			(15)	0		3		
7. Size Of Present Farm Unit Compared To Average			(10)	0				
8. Creation Of Non-farmable Farmland			(10)	0				
9. Availability Of Farm Support Services			(5)	5				
10. On-Farm Investments			(20)	0				
11. Effects Of Conversion On Farm Support	Services		(10)	0				
12. Compatibility With Existing Agricultural Use			(10)	0			2	
TOTAL SITE ASSESSMENT POINTS			160	53	0	0	0	
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)			100	90	0	0	0	
Total Site Assessment (From Part VI above or local site assessment)			160	53	0	0	0	
TOTAL POINTS (Total of above 2 lines)			260	143	0	0	0	
Site Selected: Site A	Date Of Selection 02/13/20	024		Was A Loca YE		NO VO		
Reason For Selection: Existing land use and zoning (Heavy Industrial) at the site is consistent with the proposed project. Site allows for minimization of impacts to environmental and cultural resources.								
Name of Federal agency representative completing this form: Molly R. Cobbs Date: 02/13/20 (See Instructions on reverse side) Form AD 1006 Form AD 1006								
(See Instructions on reverse side) Form AD-1006 (03-02)								

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.
- Step 2 Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip public/USA map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM (For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

- 1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
- 2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.
- Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).
- 1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
- 2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

 $\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

From:	LPO Environmental
То:	SAC.RD.Conway@usace.army.mil; CESAC-RD-MailSAC@usace.army.mil
Cc:	Eskridge, Anna; Cobbs, Molly
Subject:	FW: eVAC: No WOTUS - Courtesy notice re: pending loan application
Date:	Wednesday, January 31, 2024 10:18:00 AM
Attachments:	image001.png Locator Map.png Project Site Map.png

Dear USACE Charleston District,

Austin Dartez forwarded my original message to you, however, I wanted to ensure that you also received the attachments.

We will update our contact lists with your information.

Please let me know if you have any questions.

Thanks, Molly

From: LPO_Environmental
Sent: Wednesday, January 31, 2024 10:11 AM
To: Austin.r.dartez@usace.army.mil
Cc: Eskridge, Anna <anna.eskridge@hq.doe.gov>; Cobbs, Molly <molly.cobbs@hq.doe.gov>
Subject: eVAC: No WOTUS - Courtesy notice re: pending loan application

Hi Austin,

The U.S. Department of Energy (DOE) is evaluating whether to provide a Federal loan to E-VAC Magnetics LLC (eVAC) to support the construction of a rare earth magnet production plant in Sumter, South Carolina (Project). The 85.6-acre Project site is contained within the 320-acre Pocotaligo Industrial Park (maps attached).

USACE completed an Approved Jurisdictional Determination (AJD) for the Pocotaligo Industrial Park on September 23, 2019 (SAC-2000-34105). A portion of non-jurisdictional wetland, NJW-F (0.88 acres), is within the project area's northern boundary (AJD form 3 of 4). Otherwise, eVAC's 85.6-acre project site does not contain jurisdictional waters. Based on this, our assessment is that no USACE permits are needed.

DOE is using the National Environmental Policy Act (NEPA) process to assist in determining whether to issue a loan to eVAC to support the Project. I will notify you when the draft Environmental Assessment is available for review and comment, if interested.

We will remind the applicant that the September 23, 2019, AJD is valid for five years.

Please let me know if you have any questions.

Thanks, Molly

Molly R. Cobbs Loan Programs Office U.S. Department of Energy molly.cobbs@hq.doe.gov 240-687-7266 (Eastern time)



From:	Stout, Christopher
To:	Cobbs, Molly
Cc:	Martin, Holli; Eskridge, Anna
Subject:	[EXTERNAL] RE: eVAC: Early Coordination, CZMA Subpart D
Date:	Thursday, January 11, 2024 4:34:46 PM
Attachments:	image002.png
	image003.png

Molly

Thank you for reaching out and I think I may be able to address these questions in an email response. The short answer is that a review of this project would not be necessary by our office.

The project site is located outside of the coastal zone and the project is not, based upon the information provided, covered by any of the Subparts of the CZMA for consistency reviews. The federal loan from Department of Energy is not a federal funding assistance to a State or Local government which would fall under Subpart F. The Department of Energy loaning the money is not a listed federally activity for the South Carolina Coastal Program which would require a review under Subpart C. Even if the loan would be a covered activity our office would have to make a claim for reasonably foreseeable coastal effects resulting from the loan, which would not be likely. The same case would need to be made if the project required a federal permit or license covered under Subpart D, which again for a facility that will be located approximately 30 miles (as the crow flies) would again not be likely.

Please let me know if you need any additional information or if you have any further questions and we can certainly schedule a call.

Regards Chris

Christopher M. Stout Manager, Coastal Zone Consistency Section S.C. Dept. of Health & Environmental Control Office: (843) 953-0691 Mobile: (843) 340-3112 Connect: www.scdhec.gov Facebook Twitter



From: Cobbs, Molly <molly.cobbs@hq.doe.gov>
Sent: Thursday, January 11, 2024 4:14 PM
To: Stout, Christopher <stoutcm@dhec.sc.gov>
Cc: Martin, Holli <martinhd@dhec.sc.gov>; Eskridge, Anna <anna.eskridge@hq.doe.gov>
Subject: eVAC: Early Coordination, CZMA Subpart D

*** Caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. *** Hi Chris,

Our office is evaluating whether to issue a Federal Ioan to eVAC, a magnetics company, for components of a new manufacturing facility in Sumter County, South Carolina (see maps, attached). The Federal Ioan would support the building construction and the purchase of manufacturing equipment to be housed inside the building(s). Site clearing, grubbing, and grading is being paid for by state and private funds. The project site is not within a coastal zone or critical area. A Federal Ioan for construction/operation of a manufacturing facility is not a listed Federal action for South Carolina. We are just beginning the effects analysis. Do you have a few minutes to visit in the next few days to advise on next steps for our team? For example, does Subpart D include a negative determination process comparable to Subpart C? Please suggest a few times that work for you (or someone on your staff) and I'll send a call invite.

Thanks, Molly

Molly R. Cobbs Loan Programs Office U.S. Department of Energy molly.cobbs@hq.doe.gov 240-687-7266 (Eastern time)



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Department of Energy

Washington, DC 20585

November 28, 2023

Leigh Plummer Deputy Director EQC Region 4 145 East Cheves Street Florence, SC 29506

SUBJECT: The U.S. Department of Energy's (DOE) intent to Prepare an Environmental Assessment for a Proposed Federal Loan Guarantee to E-VAC Magnetics LLC in Sumter, SC.

Dear Ms. Plummer,

Under Section 136 of the Energy Independence and Security Act of 2007, which established the Advanced Technology Vehicles Manufacturing Loan (ATVM) program, DOE is evaluating whether to provide a Federal Loan to E-VAC Magnetics LLC (eVAC) to support the construction of a magnet production plant in Sumter, South Carolina. The decision to prepare an Environmental Assessment (EA) was made in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The purpose and need for DOE's action is to comply with our mandate under Section 136 of the Energy Independence and Security Act to select projects for financial assistance that are consistent with the goals of the Act. Pursuant to the Act, the ATVM program was established to provide loans to automobile and automobile parts manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components. DOE has determined the construction of a fully integrated neodymium iron boron (NdFeB) permanent magnet production plant as proposed by e-VAC is consistent with the goals of the Act and is using the NEPA process to assist in determining whether to issue a loan to e-VAC to support the proposed project.

e-Vac is proposing to use financial assistance from the ATVM Program to establish a rare earth magnet manufacturing plant in Sumter, SC (the Project) to increase domestic production of permanent magnets for automotive applications like electric vehicles that would reduce air emissions such as ozone precursors, particulate matter, and greenhouse gases that contribute to global warming, as is consistent with the primary goal of the ATVM Program. DOE's financial support of e-VAC's Project would help bring approximately 1,600 metric tons of domestically manufactured permanent magnets to market, thereby reducing overall national emissions of air pollutants and human-caused greenhouse gases.

The 87-acre site consists of the central production hall building, which will host the process equipment and most of the infrastructural utilities and office areas. The front area will be completed with an administration building, safety facilities and a parking lot, while the back area holds the central utilities (e.g., gas farm, electric supply, and waste storage).

A Project Location Map (Figure 1), Project Site Map (Figure 2) and a Site Layout (Figure 3) are attached in the email.

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

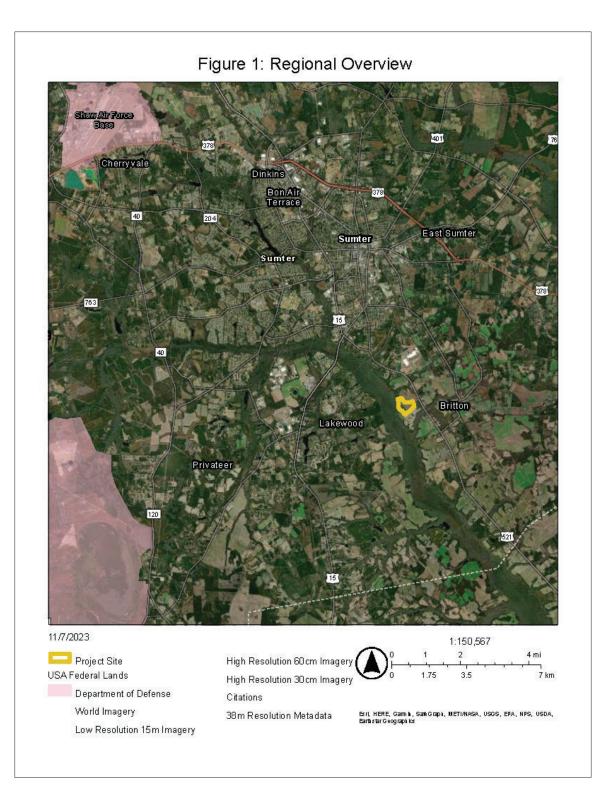
If you or your staff would like to receive further information concerning this project or DOE's NEPA process for ATVM loans, please contact me in the DOE Loan Program Office by email at <u>LPO_Environmental@hq.doe.gov</u>.

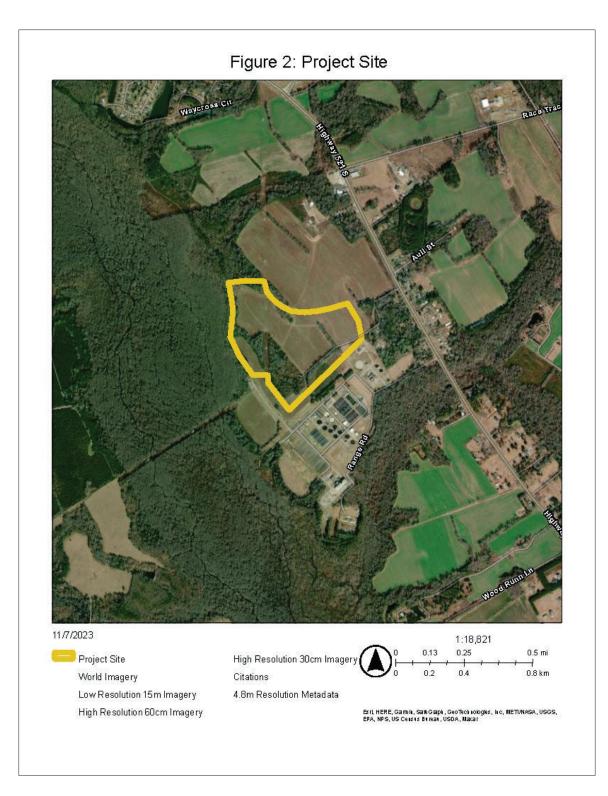
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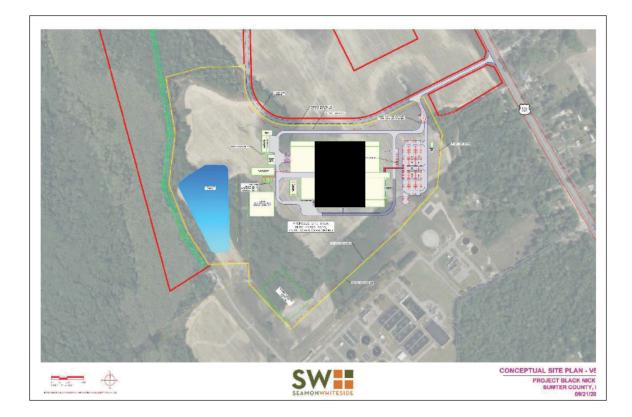
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Kara Harris Environmental Protection Specialist Loan Programs Office

Attachments: Figure 1: Project Location Map Figure 2: Project Site Map Figure 3: Site Layout









Washington, DC 20585

January 16, 2024

Myra Reece Director, Environmental Affairs Department of Health and Environmental Control 2600 Bull Street Columbia, SC 29201

SUBJECT: Intent to Prepare an Environmental Assessment (EA) for a Proposed Federal Loan to E-VAC Magnetics LLC in Sumter, South Carolina

Dear Director Reece,

Under Section 136 of the Energy Independence and Security Act of 2007 (Act), which established the Advanced Technology Vehicles Manufacturing Loan (ATVM) program, the U.S. Department of Energy (DOE) is evaluating whether to provide a Federal loan to E-VAC Magnetics LLC (eVAC) to support the construction of a rare earth magnet production plant in Sumter, South Carolina (Project). The Project will increase domestic production of permanent magnets for automotive applications like electric vehicles that reduce air emissions such as ozone precursors, particulate matter, and greenhouse gases.

The ATVM program was established to provide loans to automobile and automobile parts manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components. DOE has determined that the construction of a fully integrated rare earth mineral permanent magnet production plant, as proposed by eVAC, is consistent with the goals of the Act. DOE's financial support of eVAC's Project would help bring approximately 1,600 metric tons of domestically manufactured permanent magnets to market, thereby reducing overall national emissions of air pollutants and human-caused greenhouse gases, consistent with the primary goal of the ATVM program.

DOE is using the National Environmental Policy Act (NEPA) process to assist in determining whether to issue a loan to eVAC to support the Project. A decision to prepare an EA was made in accordance with the requirements of the NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The Project involves the development of a fully integrated rare earth magnet manufacturing plant that can cover metal, alloy, and magnet making in the Pocotaligo Industrial Park in Sumter, South Carolina (Attachments 1 and 2). The 85-acre (approximate) project site will include construction of a new 245,000-square-foot manufacturing facility, including: a tank yard; waste management canopy; fire pump house; wet cooling tower yard; wastewater treatment, hazardous materials, and solid waste facilities; other associated structures and facilities; a parking lot; on-site facility roads; a stormwater basin; and additional areas for stockpiling, laydown, operations, or long-term storage (Attachment 3). The Project will also include construction of a new entrance road from US Highway 521 South to the Project property line and upgrade of an internal industrial park road.

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

Our office provided initial notification of this project to Leigh Plummer on November 28, 2023. Ms. Plummer forwarded the initial letter to the South Carolina Department of Health and Environmental Control's Columbia office. This letter references the same project as the November letter. The purpose of this letter is to ensure coordination across the different state agencies needing to be notified of the intent to prepare an EA.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process for ATVM loans, please contact me in the DOE Loan Programs Office by email at <u>LPO Environmental@hq.doe.gov</u>.

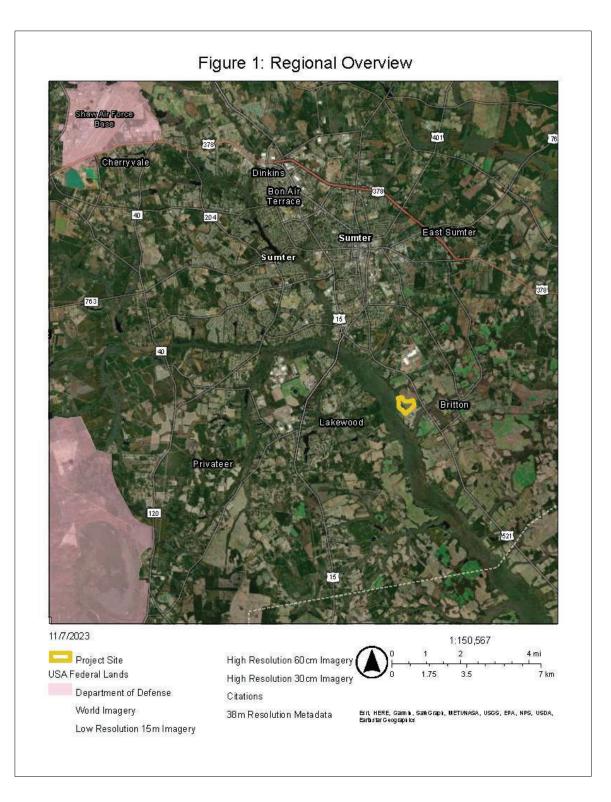
Respectfully, Molly R.

Cobbs Molly R. Cobbs Physical Scientist Loan Programs Office

Digitally signed by Molly R. Cobbs Date: 2024.01.16 11:22:38 -05'00'

Attachments

- Figure 1 Regional Overview Map
- Figure 2 Project Site Map
- Figure 3 Conceptual Site Plan (Site Layout)



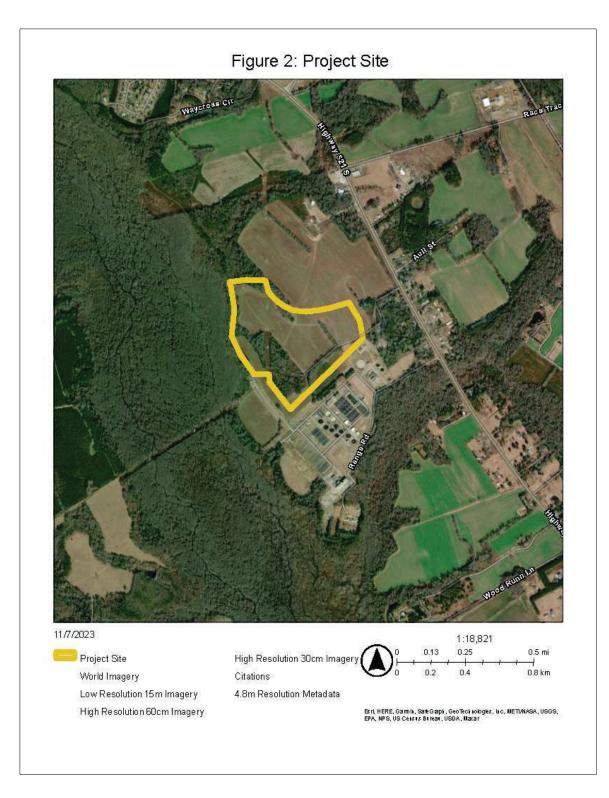


Figure 3: Conceptual Site Plan





Washington, DC 20585

January 29, 2024

Dr. Eric W. Emerson, Ph.D. State Historic Preservation Officer South Carolina Department of Archives and History 8301 Parklane Road Columbia, SC 29223

SUBJECT: U.S. Department of Energy, Project Eagle in Sumter, South Carolina; Section 106 Initiation

Dear Dr. Emerson:

Pursuant to its authority under Section 136 of the Energy Independence and Security Act of 2007, which established the Advanced Technology Vehicles Manufacturing Loan (ATVM) program, the U.S. Department of Energy (DOE), Loan Programs Office (LPO) is evaluating whether to provide a Federal loan to E-VAC Magnetics LLC (eVAC) to support the construction of a rare earth magnet production plant (Project) in Sumter, South Carolina (DOE's proposed action and undertaking).

The purpose of this letter is to initiate consultation with the South Carolina State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR Part 800, present the DOE undertaking, present the archaeological and architectural areas of potential effects (APEs), and seek your concurrence with the APEs and DOE's finding of No Historic Properties Affected for this project.

DOE Undertaking and APE

DOE's undertaking is the issuance of the proposed Federal loan to e-VAC Magnetics LLC for the Project in South Carolina. eVAC's Project involves the development of a fully integrated rare earth magnet manufacturing plant. The 85.6-acre Project site is contained within the 320-acre Pocotaligo Industrial Park (Attachments 1 and 2). The Project will include construction of the following components (Attachment 3¹):

- A new 413,000 square-foot manufacturing facility, which includes the:
 - Mechanical processing building,
 - Infrastructure area and
 - Powder production building, and

¹ Attachment 3 also identifies potential areas for future expansion – such future development is not under consideration or included in DOE's current undertaking.

- associated structures and facilities (parking lot, on-site facility roads, and a stormwater detention pond).
- The following external structures:
 - o Hazmat
 - Waste management canopy with additional truck canopy
 - Wastewater treatment
 - Guardhouse/pumphouse
- The following concrete pads with no building structures:
 - Tank yard
 - Chiller Yard
 - Genset Yard

The Project will also include construction of a new entrance road from US Highway 521 South to the Project property line, a utilities corridor to the Project property, and upgrade of an internal industrial park road.

The archaeological Area of Potential Effect (APE) includes the entirety of eVAC's 85.6acre project site, all of which may be disturbed due to site clearing, grading, and or building footprints (Attachment 3). The architectural APE includes 75.96 developable acres where new above-ground structures would be located, as well as a 0.5-mile buffer surrounding that area (Attachment 3).

Current DOE Section 106 Activities

Relevant investigations of the site date back to 2008, when the property was being acquired by the City of Sumter. A 2008 Cultural Resource Literature Review and Reconnaissance Survey of the 320-acre Pocotaligo Industrial Park identified two archaeological sites (38SU1078 and 38SU1079), nine above-ground resources (0066-0068, 0076-0080, and 0208), and one cemetery (White Family Cemetery). Site 0067, the Bradford House, was recommended as eligible for the NRHP. However, as of January 2018, the structure is no longer extant. Of the 320-acre industrial park, 193 acres were recommended for additional survey. The SHPO agreed with these recommendations in a December 12, 2008, letter (Attachment 4).

In May 2019, a Cultural Resources Identification Survey (CRIS) was completed for the Pocotaligo Industrial Park as recertification of the 2008 reconnaissance survey. No archaeological sites were identified, and the acreage recommended for a Phase I survey was decreased to 159.8 acres. A limited architectural survey was completed, and three above-ground resources (PIP-1 through PIP-3) were identified, five above-ground resources were revisited and photographed, and the White Family Cemetery was revisited. The above-ground resources were not evaluated for inclusion in the NRHP, per the CRIS guidelines. Ultimately, the White Family Cemetery was excluded from the project area and will not be impacted by project development activities. In a July 17, 2019, letter, the SHPO agreed with the revised Phase I recommendations and specified the need for site numbers,

a 25-foot buffer from the White Family Cemetery, survey forms, and eligibility determinations for PIP-1 through PIP-3, should state or Federal permits, licenses, funds, loans, grants, or assistance for development be required (Attachment 4).

The Phase I archaeological survey was completed in August 2020 for 159.8 acres. The survey identified three new archaeological sites (38SU1117 through 38SU1119), five isolated finds (IF-1 through IF-5), and two previously recorded archaeological sites (38SU1078 and 38SU1079). The new archaeological sites, five isolated finds, and two previously recorded sites were recommended not eligible for inclusion in the NRHP. The SHPO concurred with these recommendations in a September 28, 2020, letter and reiterated the requirements for PIP-1 through PIP-3 (Attachment 5).

Because of the proposed Federal loan to eVAC's construction and operations within a portion of the Pocotaligo Industrial Park, eVAC's consultants have assigned SHPO site numbers to PIP-1, PIP-2, and PIP-3. Site numbers 2607, 2608, and 2609, respectively, and completed survey forms were provided to the SHPO on January 17, 2024. Sites 2607, 2608, and 2609 are recommended not eligible for inclusion in the NRHP.

In accordance with Section 106, DOE identified other potential consulting parties to include Native American Tribes that have an interest in the project area. DOE has notified the Catawba Indian Tribe of South Carolina, the Cherokee Nation, and the Muscogee (Creek) Nation to see if they have an interest in the project.

Requesting your Concurrence and Next Steps

As part of the Section 106 process, DOE requests your concurrence on the archaeological and architectural APEs and our proposed determination of "no historic properties affected" as described in 36 CFR §800.4(d)(1). Additionally, we welcome any comments you may have on the proposed action.

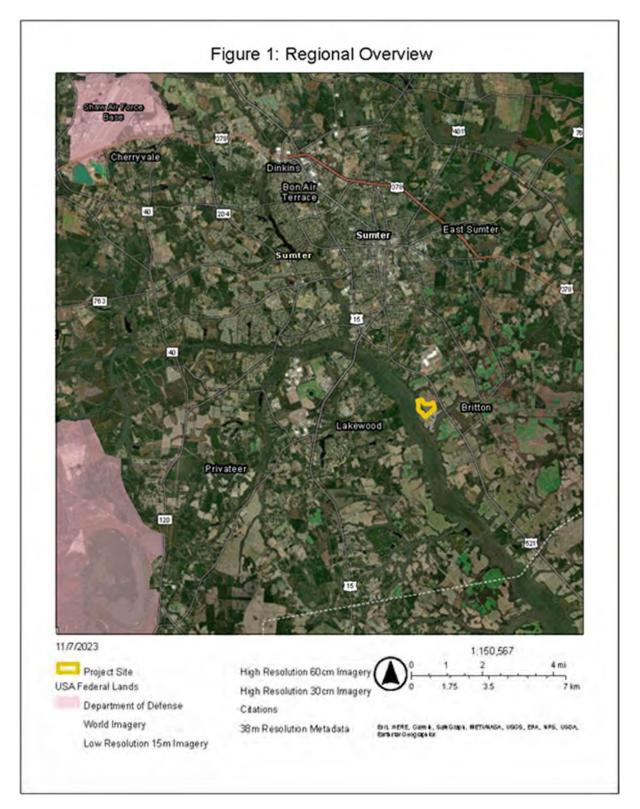
We look forward to consulting with your office throughout the Section 106 process. If you have any questions or would like to discuss this project further, please contact me in the DOE Loan Programs Office at (240) 687-7266, or email at LPO Environmental@hq.doe.gov.

Respectfully,

Molly R. Cobbs Physical Scientist Loan Programs Office

Attachment 1 Regional Overview Map
Attachment 2 Project Site Map with Cemetery Location and Archaeological Finds
Attachment 3 Conceptual Site Plan
Attachment 4 Phase I Archaeological Survey Report (includes SHPO letters of December 12, 2008, and July 17, 2019)
Attachment 5 SHPO letter of September 28, 2020

Attachment 1 Regional Overview Map



Project Site Map with Cemetery Location and Archaeological Finds

Conceptual Site Plan

Phase I Archaeological Survey Report (includes SHPO letters of December 12, 2008, and July 17, 2019)

SHPO letter of September 28, 2020



February 23, 2024

Molly R. Cobbs Loan Programs Office US Department of Energy molly.cobbs@hq.doe.gov

Re: Project Eagle, Federal loan to E-VAC Magnetics LLC (eVAC) to support the construction of a rare earth magnet production plant Sumter vicinity, Sumter County, South Carolina SHPO Project No. 24-JS0046 (ref. 08-CW0009)

Dear Ms. Cobbs:

Thank you for your January 29, 2024 letter and project review submittal, which we received electronically on January 30, 2024, regarding the above referenced proposed undertaking. We also received maps, site plans, and a copy of a prior Phase I Archaeological Survey Report Pocotaligo Industrial Park (dated September 2020) that includes SHPO letters of December 12, 2008 and July 17, 2019. We also commented on the Pocotaligo Industrial Park Tract surveys on September 28, 2020 and January 29, 2024.

The State Historic Preservation Office is providing comments to the US Department of Energy (DOE) pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes including those with state recognition, local governments, or the public.

The undertaking's Area of Potential Effect (APE) includes the 85.6-acre Project site that is contained within the 320-acre Pocotaligo Industrial Park, which has been subject to previously cultural resources surveys reviewed by our office. The previous surveys identified no historic properties. The White Family Cemetery was identified by previous surveys, but it is not within the Project site. Cemeteries are protected in accordance with <u>state laws</u>. We recommend establishing a 25-foot buffer around the White Family Cemetery, marked with orange barrier fencing. Any construction related ground-disturbing, staging area activities, or heavy vibratory truck traffic should be avoided within the 25-foot buffer area around the White Family Cemetery.

Based on the description of the undertaking, its Area of Potential Effect (APE), and the identification of no historic properties within the APE, our office concurs with assessment that the proposed undertaking will result in no historic properties affected.

Please refer to SHPO Project Number 24-JS0046 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6129 or <u>jsylvest@scdah.sc.gov</u>.

Sincerely,

John D. Sylvest Supervisor of Survey and Review & Compliance State Historic Preservation Office



Washington, DC 20585

November 28, 2023

Chief Brian Harris Catawba Indian Tribe of South Carolina 996 Avenue of the Nations Rock Hill, SC 29730

SUBJECT: U.S. Department of Energy's Proposed Federal Loan Guarantee to e-VAC Magnetics LLC in Sumter, South Carolina; NEPA and NHPA Invitation to Consult

Dear Chief Harris

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to e-VAC Magnetics LLC (e-VAC) to establish a fully integrated neodymium-iron-boron (NdFeB) permanent magnet (PM) production plant in Sumter, South Carolina (the Project). DOE has determined that issuance of this loan constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, as a part of this environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the NHPA.

The proposed Project involves the development of a fully integrated NdFeB PM production plant that can cover metal, alloy and magnet making in the Pocotaligo Industrial Park in Sumter, South Carolina (Figure 1). This plant will supply PMs for more than a dozen selectric vehicle models. The Project will include construction of the new 245,000-square-foot manufacturing facility, inclusive of the following: a tank yard; waste management canopy; fire pump house; wet cooling tower yard; wastewater treatment, hazmat, and solid waste facilities; other associated structures and facilities; a parking lot; on-site facility roads; a stormwater basin; and additional areas for stockpiling, laydown, operations, or long-term storage (Figure 2). The project will also include construction of a new entrance road from US Highway 521 South to the Project property line and upgrade of an internal industrial park road.

This letter is intended to notify you of the proposed Federal project (a potential loan to e-VAC), identify if you have an interest in the proposed project site in Sumter, South Carolina, and provide you with the opportunity to comment and engage DOE in government-to-government consultation on the proposed project. Any comments or concerns you provide will help ensure that DOE considers Tribal interests and complies with its NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues or concerns you may have regarding the sites.

I would greatly appreciate notification if you do or do not have an interest in the project sites, as well as any comments or concerns you may have, within thirty (30) days of receipt of this letter. Should you have an interest in the project sites, I will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any comments or concerns by email at LPO_Environmental@hq.doe.gov or by phone at 202-586-8716.

Respectfully,

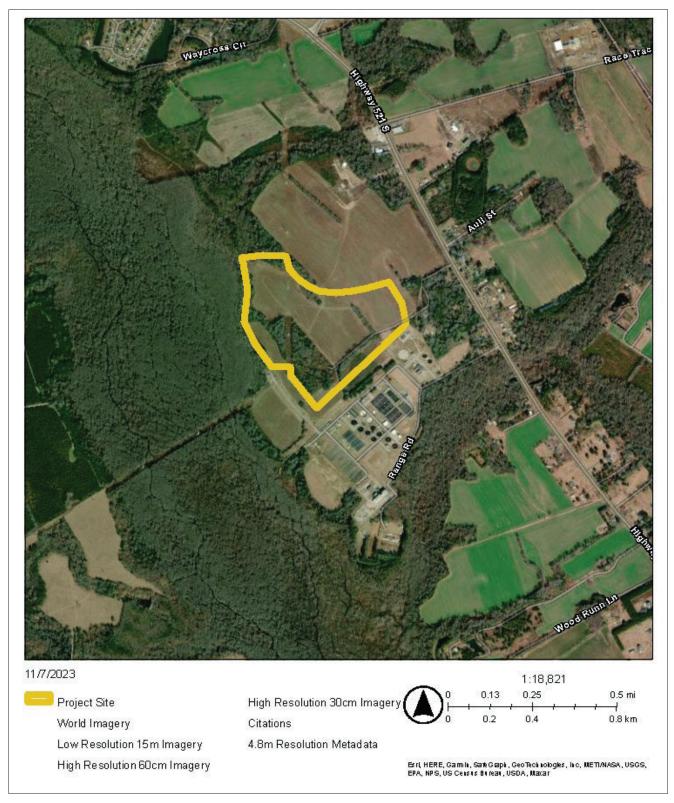
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Kara Harris Environmental Protection Specialist Loan Programs Office

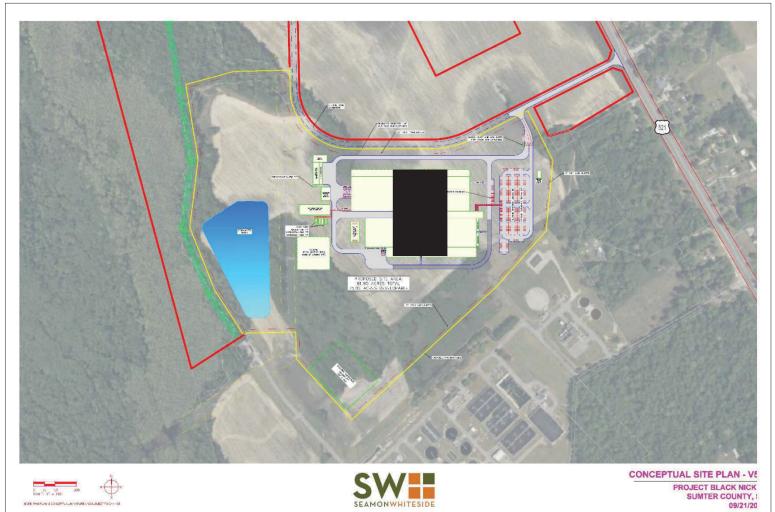
Attachments: Attachment 1: Facility Location Map Attachment 2: Facility Proposed Plan

cc: Dr. Wenonah G. Haire, Tribal Historic Preservation Officer & Catawba Cultural Center Executive Director

Attachment 1 Facility Location Map



Attachment 2 Facility Proposed Plan





Washington, DC 20585

January 10, 2024

Chief Brian Harris c/o Caitlin Rogers Catawba Indian Tribe of South Carolina 1536 Tom Steven Road Rock Hill, SC 29730

SUBJECT: U.S. Department of Energy's Proposed Federal Loan Guarantee to e-VAC Magnetics LLC in Sumter, South Carolina; NEPA and NHPA Invitation to Consult

Dear Chief Harris:

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to determine whether to issue a Federal loan to e-VAC Magnetics LLC (e-VAC) to establish a fully integrated neodymium-iron-boron (NdFeB) permanent magnet production plant (the Project) in Sumter, South Carolina. DOE has determined that issuance of this loan constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, as a part of the environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the NHPA.

Our office provided notification of the Project to the Catawba Tribe via e-mail on November 28, 2023. Dr. Wenonah Haire promptly responded and requested that a hard copy letter be sent to the Tribe, in care of Caitlin Rogers. This letter is the follow-up requested by Dr. Haire.

The proposed Project involves the development of a fully integrated NdFeB permanent magnet production plant that can cover metal, alloy, and magnet making in the Pocotaligo Industrial Park in Sumter, South Carolina (Attachments 1 and 2). This plant will supply permanent magnets for more than a dozen set to be the electric vehicle models. The Project will include construction of a new 245,000-square-foot manufacturing facility, including: a tank yard; waste management canopy; fire pump house; wet cooling tower yard; wastewater treatment, hazardous materials, and solid waste facilities; other associated structures and facilities; a parking lot; on-site facility roads; a stormwater basin; and additional areas for stockpiling, laydown, operations, or long-term storage (Attachment 3). The project will also include construction of a new entrance road from US Highway 521 South to the Project property line and upgrade of an internal industrial park road.

This letter is intended to notify you of the proposed Federal action (a potential loan to e-VAC), identify if you have an interest in the proposed project site in Sumter, South Carolina, and provide you with the opportunity to comment and engage DOE in government-to-government consultation on the proposed project. Any comments or concerns you provide will help ensure that DOE considers Tribal interests and complies with its NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues or concerns you may have regarding the sites.

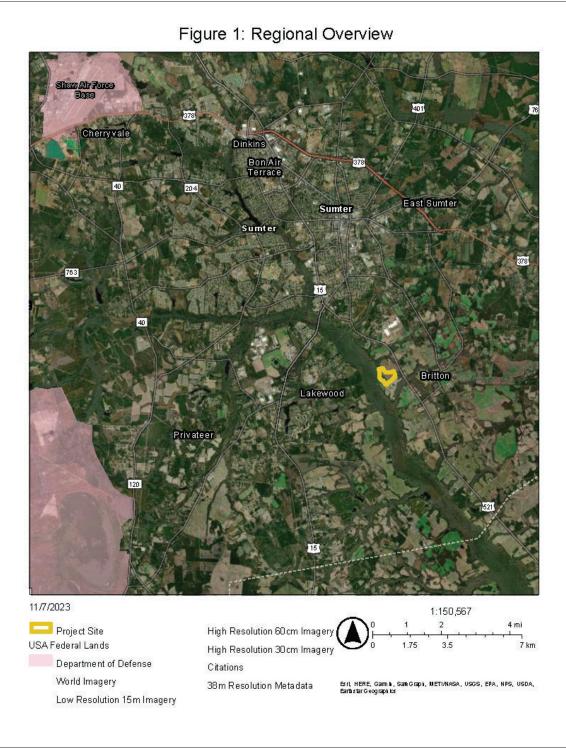
I would greatly appreciate notification if you do or do not have an interest in the project sites, as well as any comments or concerns you may have, within thirty (30) days of receipt of this letter. Should you have an interest in the project site, I will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any comments or concerns by email at LPO_Environmental@hq.doe.gov or by phone at 240-687-7266.

Respectfully, Molly R. Digitally signed by Molly R. Cobbs Date: 2024.01.10 09:14:32-05'00' Molly R. Cobbs Physical Scientist Loan Programs Office

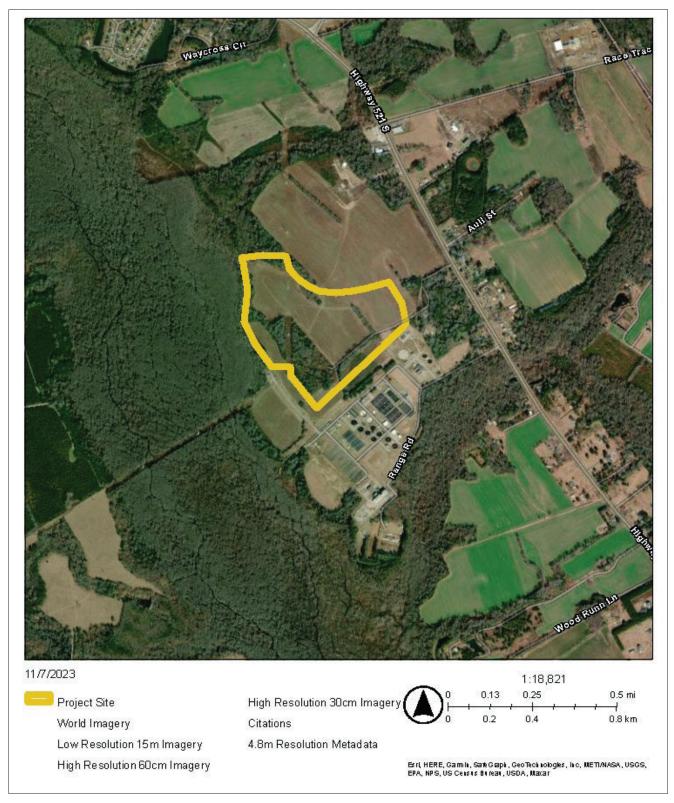
Attachments

Attachment 1Regional Overview MapAttachment 2Facility Location MapAttachment 3Proposed Facility Conceptual Site Plan

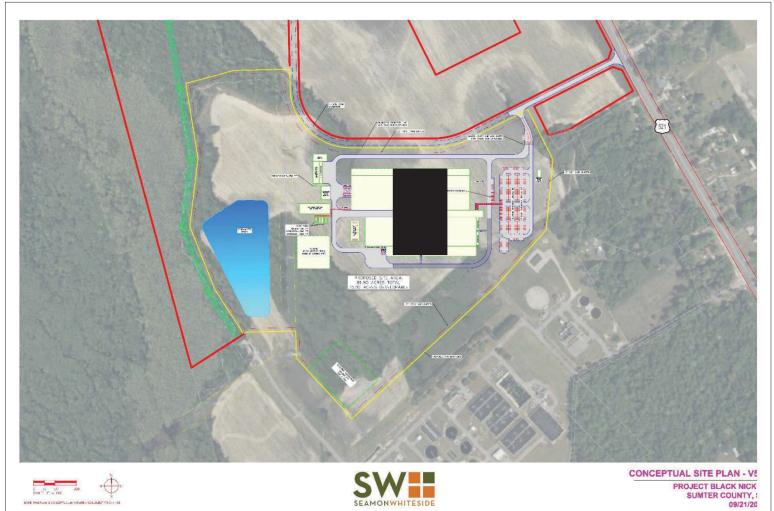
Attachment 1 Regional Overview Map



Attachment 2 Facility Location Map

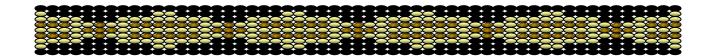


Attachment 3 Proposed Facility Conceptual Site Plan



Catawba Indian Nation Tribal Historic Preservation Office 1536 Tom Steven Road Rock Hill, South Carolina 29730

Office 803-328-2427



February 26, 2024

Attention: Molly Cobbs Department of Energy Washington DC 20585

Re. THPO #TCNS #Project Description2024-510-1E-VAC Magnetics LLC in Sumter, SC

Dear Ms. Cobbs,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.

If you have questions, please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Cattle Rogers for

Wenonah G. Haire Tribal Historic Preservation Officer



Washington, DC 20585

November 28, 2023

Ms. Elizabeth Toombs Tribal Historic Preservation Officer Cherokee Nation P.O. Box 948 Tahlequah, OK 74465

SUBJECT: U.S. Department of Energy's Proposed Federal Loan Guarantee to e-VAC Magnetics LLC in Sumter, South Carolina; NEPA and NHPA Invitation to Consult

Dear Ms.Toombs,

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to e-VAC Magnetics LLC (e-VAC) to establish a fully integrated neodymium-iron-boron (NdFeB) permanent magnet (PM) production plant in Sumter, South Carolina (the Project). DOE has determined that issuance of this loan constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, as a part of this environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the NHPA.

The proposed Project involves the development of a fully integrated NdFeB PM production plant that can cover metal, alloy and magnet making in the Pocotaligo Industrial Park in Sumter, South Carolina (Figure 1). This plant will supply PMs for more than a dozen selectric vehicle models. The Project will include construction of the new 245,000-square-foot manufacturing facility, inclusive of the following: a tank yard; waste management canopy; fire pump house; wet cooling tower yard; wastewater treatment, hazmat, and solid waste facilities; other associated structures and facilities; a parking lot; on-site facility roads; a stormwater basin; and additional areas for stockpiling, laydown, operations, or long-term storage (Figure 2). The project will also include construction of a new entrance road from US Highway 521 South to the Project property line and upgrade of an internal industrial park road.

This letter is intended to notify you of the proposed Federal project (a potential loan to e-VAC), identify if you have an interest in the proposed project site in Sumter, South Carolina, and provide you with the opportunity to comment and engage DOE in government-to-government consultation on the proposed project. Any comments or concerns you provide will help ensure that DOE considers Tribal interests and complies

with its NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues or concerns you may have regarding the sites.

I would greatly appreciate notification if you do or do not have an interest in the project sites, as well as any comments or concerns you may have, within thirty (30) days of receipt of this letter. Should you have an interest in the project sites, I will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any comments or concerns by email at <u>LPO Environmental@hq.doe.gov</u> or by phone at 202-586-8716.

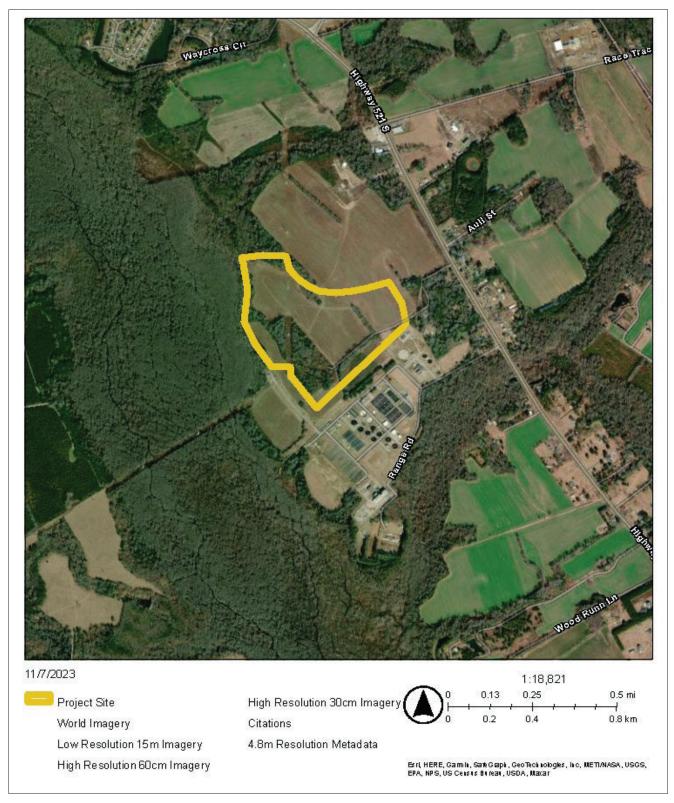
Respectfully,

Kara J. Harris Date: 2023.11.28 10:23:04 -05'00'

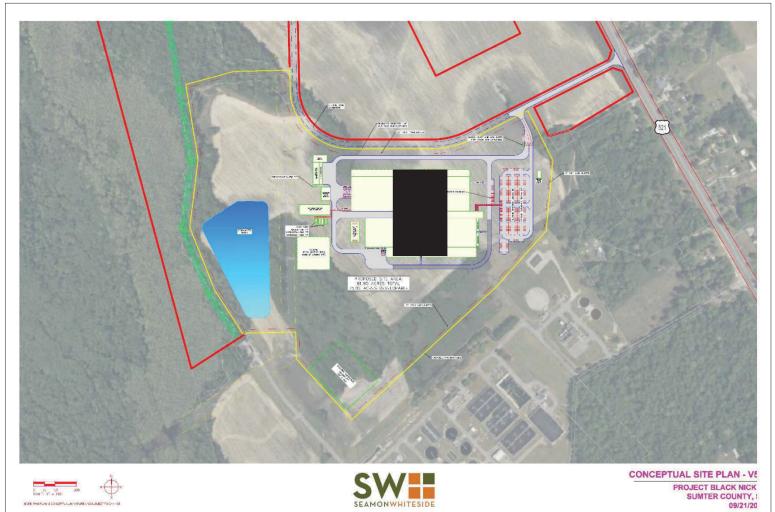
Kara Harris Environmental Protection Specialist Loan Programs Office

Attachments: Attachment 1: Facility Location Map Attachment 2: Facility Proposed Plan

Attachment 1 Facility Location Map



Attachment 2 Facility Proposed Plan







P.O. Box 948 • Tahlequah, OK 74465-0948 918-453-5000 • www.cherokee.org Chuck Hoskin Jr. Principal Chief GP ቁወዮ \$Л\$ ዑደፀር*አ*

Bryan Warner Deputy Principal Chief รัZภิโ่งภิ พิศภา DLdภา 0-EOGภิ

February 27, 2024

Molly Cobbs United States Department of Energy Washington, D.C. 20585

Re: e-VAC Magnetics LLC, Sumter, South Carolina

Ms. Molly Cobbs:

The Cherokee Nation (Nation) is in receipt of your correspondence about **e-VAC Magnetics LLC**, and appreciates the opportunity to provide comment upon this project. This communication is intended for government-to-government consultation with a sovereign federally recognized Tribal Nation. Information received in consultation will be deemed confidential unless explicit consent is provided by the Nation.

The Nation maintains databases and records of cultural, historic, and pre-historic resources in this area. Our Historic Preservation Office (Office) reviewed this project, cross referenced the project's legal description against our information, and found no instances where this project intersects or adjoins such resources. Thus, the Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time.

However, the Nation requests that the United States Department of Energy (DOE) halt all project activities immediately and re-contact our Office for further consultation if items of cultural significance are discovered during the course of this project. Additionally, the Nation requests that the DOE conduct appropriate inquiries with other pertinent Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

If you require additional information or have any questions, please contact me at your convenience. Thank you for your time and attention to this matter.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer Cherokee Nation Tribal Historic Preservation Office elizabeth-toombs@cherokee.org 918.453.5389



Washington, DC 20585

November 28, 2023

Chief David Hill Principal Chief Muscogee (Creek) Nation P.O. Box 580 Okmulgee, OK 74447

SUBJECT: U.S. Department of Energy's Proposed Federal Loan Guarantee to e-VAC Magnetics LLC in Sumter, South Carolina; NEPA and NHPA Invitation to Consult

Dear Chief Hill,

The U.S. Department of Energy (DOE) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan to e-VAC Magnetics LLC (e-VAC) to establish a fully integrated neodymium-iron-boron (NdFeB) permanent magnet (PM) production plant in Sumter, South Carolina (the Project). DOE has determined that issuance of this loan constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, as a part of this environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the NHPA.

The proposed Project involves the development of a fully integrated NdFeB PM production plant that can cover metal, alloy and magnet making in the Pocotaligo Industrial Park in Sumter, South Carolina (Figure 1). This plant will supply PMs for more than a dozen selectric vehicle models. The Project will include construction of the new 245,000-square-foot manufacturing facility, inclusive of the following: a tank yard; waste management canopy; fire pump house; wet cooling tower yard; wastewater treatment, hazmat, and solid waste facilities; other associated structures and facilities; a parking lot; on-site facility roads; a stormwater basin; and additional areas for stockpiling, laydown, operations, or long-term storage (Figure 2). The project will also include construction of a new entrance road from US Highway 521 South to the Project property line and upgrade of an internal industrial park road.

This letter is intended to notify you of the proposed Federal project (a potential loan to e-VAC), identify if you have an interest in the proposed project site in Sumter, South Carolina, and provide you with the opportunity to comment and engage DOE in government-to-government consultation on the proposed project. Any comments or concerns you provide will help ensure that DOE considers Tribal interests and complies with its NEPA and NHPA Section 106 responsibilities. We want to give you the opportunity to raise any issues or concerns you may have regarding the sites.

I would greatly appreciate notification if you do or do not have an interest in the project sites, as well as any comments or concerns you may have, within thirty (30) days of receipt of this letter. Should you have an interest in the project sites, I will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any comments or concerns by email at <u>LPO Environmental@hq.doe.gov</u> or by phone at 202-586-8716.

Respectfully,

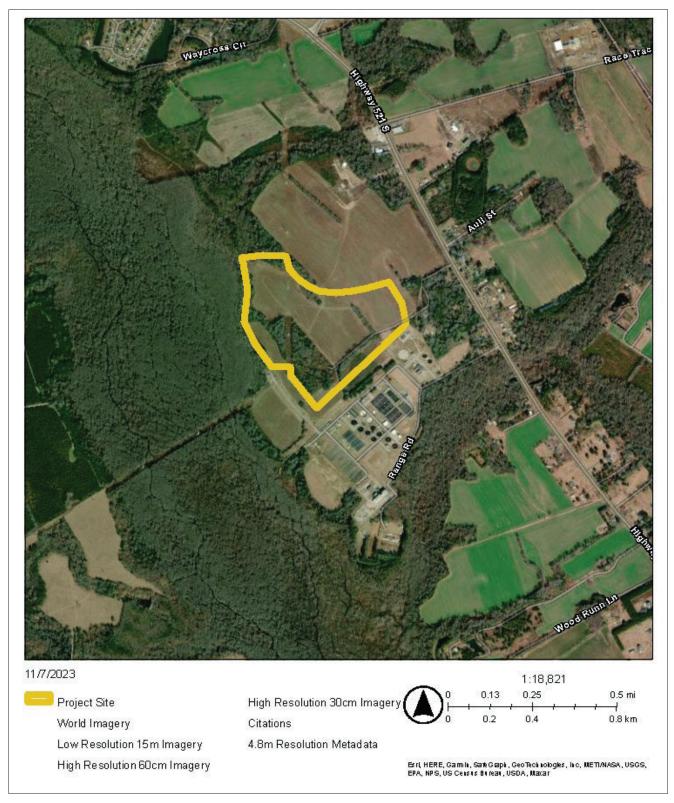
Kara J. Harris Digitally signed by Kara J. Harris Date: 2023.11.28 10:24:42 -05'00'

Kara Harris Environmental Protection Specialist Loan Programs Office

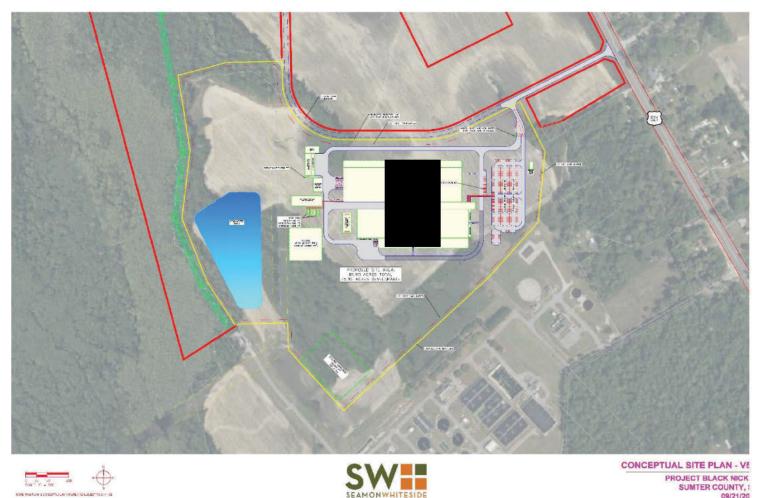
Attachments: Attachment 1: Facility Location Map Attachment 2: Facility Proposed Plan

cc: Turner Hunt, Tribal Historic Preservation Officer

Attachment 1 Facility Location Map



Attachment 2 **Facility Proposed Plan**





PROJECT BLACK NICK SUMTER COUNTY, 1 09/21/20

APPENDIX B – PERMITS AND APPROVALS

Action	Applicable Permit	Permitting Agency	Status	Issue/Approval Date
Land Purchase	Not applicable	Not applicable	Completed	December 12, 2023
Construction Site Access Driveway	Construction Site Access Driveway Permit	SC DOT	Completed	December 11, 2023
Land Disturbance	Commercial Land Disturbance Permit	Sumter City-County Planning Department	Completed	December 14, 2023
Encroachment	Encroachment Permit	Sumter City-County Planning Department	Completed	December 11, 2023
Foundations and Underground MEP	Foundations and Underground MEP Permit	City of Sumter Building Department	Completed	January 26, 2024
Building Permit (including electrical, mechanical, plumbing)	Building Permit	City of Sumter Building Department	Completed	February 14, 2014
Sewer Line Construction	Sewer Line Construction Permit	Sumter County Stormwater Utility	Completed	November 16, 2023
Water Line Construction	Water Line Construction Permit	Sumter County Stormwater Utility	Completed	November 16, 2023
Stormwater Pollution Prevention Plan (SWPPP)	SWPPP	SCDHEC	Completed	December 13, 2023
Industrial Stormwater Discharge – Construction	National Pollutant Discharge Elimination System Permit Stormwater Permit (authorization to discharge)	SCDHEC	Completed	November 28, 2023
Industrial Wastewater Discharge	NPDES Concurrence Letter	City of Sumter Wastewater Division of the Utilities Department	Submitted	Anticipated mid- summer 2024
Wastewater Operator	Wastewater Operators Permit	SCDHEC	In vendor selection	To be completed Q3 2024
Construction Air Permit	True Minor State Construction Permit	SCDHEC	Completed	February 20, 2024
Operating Air Permit	Title V Major-Source Operating Permit	SCDHEC	To be completed following construction	To be completed
Phase I Environmental Site Assessment	Not applicable	Not applicable	Completed	June 3, 2019
Phase I Environmental Site Assessment	Not applicable	Not applicable	Completed	November 27, 2023

Table B-1. Environmental Permits and Approvals