

**FINDING OF NO SIGNIFICANT IMPACT
FOR
LITHIUM HEXAFLUOROPHOSPHATE (LiPF₆) MANUFACTURING UNIT
PROJECT
MEXICHEM FLUOR, INC.
ST. GABRIEL, LOUISIANA
DOE/EA-2236**

RESPONSIBLE AGENCY: U.S. Department of Energy (DOE)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: The DOE National Energy Technology Laboratory (NETL) completed the Final Environmental Assessment (EA) for Mexichem Fluor's (Mexichem) Lithium Hexafluorophosphate (LiPF₆) Manufacturing Unit Project (DOE/EA-2236). Based on analyses in the EA, DOE determined that its Proposed Action – providing funding for Mexichem's LiPF₆ Manufacturing Unit Project (the Proposed Project) – would result in no significant adverse impacts.

BACKGROUND: Mexichem received a grant under the DOE Funding Opportunity Announcement (FOA) DE-FOA-0002678, titled "Battery Materials Processing and Battery Manufacturing," which aims to accelerate the development of a resilient supply chain for high-capacity batteries by increasing investments in battery materials processing and battery manufacturing projects. The Proposed Project would produce at least 10,000 megatons (MT) of LiPF₆ annually. LiPF₆ is a crucial component in lithium-ion batteries. DOE's Proposed Action would provide \$100 million in funding towards the Proposed Project.

Based on the scope of the Proposed Project, DOE prepared an EA to evaluate the potential environmental and socioeconomic consequences of providing financial assistance for the proposed project in accordance with the requirements of the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.).

PURPOSE AND NEED: The overall purpose and need for DOE action pursuant to DE-FOA-0002678 is to accelerate the development of a resilient supply chain for high-capacity batteries by increasing investments in battery materials processing and battery manufacturing projects. Mexichem's Proposed Project would support this goal by producing at least 10,000MT of LiPF₆ annually, which is a crucial component in lithium-ion batteries.

DESCRIPTION OF THE PROPOSED ACTION: DOE's Proposed Action is to provide \$100 million in funding towards Mexichem's Proposed Project. Mexichem's Proposed Project is the construction and operation of a LiPF₆ manufacturing unit at Mexichem's property in St. Gabriel, Iberville Parish, Louisiana that would produce at least 10,000MT of LiPF₆. Mexichem currently owns and operates a facility that manufactures hydrofluorocarbon (HC-134a), referred to as the KLEA unit, and a transloading and

blending facility within its 155-acre tract of land at 4990B Ici Road in St. Gabriel, Louisiana. Mexichem is bound to the west by Olin Chlor Alkali Products (Olin), by Syngenta Crop Protection LLC (Syngenta) to the north, and undeveloped property to the south and east.

The proposed LiPF₆ plant would utilize existing infrastructure at the Mexichem facility to the extent that is possible. This would be accomplished by modification of the existing facility to support LiPF₆ production that includes increased boiler use, rail loading, and fugitive emissions. Additionally, a new cooling tower and wastewater treatment unit would be constructed to support LiPF₆ production. The LiPF₆ plant expansion would include two new detention ponds, the LiPF₆ unit, warehouses, an administrative building, and parking. The LiPF₆ would manufacture an electrolyte material used in lithium-ion batteries.

ALTERNATIVES CONSIDERED: In addition to the Proposed Action, DOE considered the No-Action Alternative as required under NEPA. Without DOE funding, the project would not be completed as proposed. Mexichem would need to identify other funds equal to the amount of funding that would be received from DOE under the above-listed funding opportunity. If DOE would not fund the proposed action, this project schedule could be delayed while Mexichem seeks other funding opportunities. If alternative funding sources do not equal the amount provided by DOE, the proposed project may require de-scoping or additional schedule delays. Additionally, expedited domestic production of high quality and reliable LiPF₆ to support standalone storage, energy storage systems, and military systems could be delayed and possibly not occur if DOE would not fund this project. For the purposes of establishing an environmental baseline of current conditions and comparing that baseline to potential impacts if the Proposed Project were to proceed, the analysis of impacts assumes that the Proposed Project would not likely proceed under the No Action Alternative, and all resource areas would remain unchanged from current conditions.

ENVIRONMENTAL CONSEQUENCES: DOE considered the potential effects of the Proposed Action and No-Action Alternative on numerous environmental resource areas in preparation of the EA; however, not all resource areas were evaluated at the same level of detail. DOE determined that Community Resources, Parks and Recreation, Aesthetics and Visual Resources, and Land Use were not likely to be impacted by the DOE's Proposed Action or Mexichem's Proposed Project, so these resource areas were dismissed from detailed analysis in the EA. The resource areas analyzed in detail in the EA include socioeconomics, cultural resources, wetlands and floodplains, surface water and groundwater, vegetation and wildlife, air quality, noise and vibration, geology, topography and soils, waste management, utilities and energy use, transportation and traffic, and public and occupational health and safety. DOE determined that the Proposed Action would have a minor beneficial impact on socioeconomics. For all other resource areas, DOE determined that the Proposed Action would have no, negligible, minor, or moderate potential environmental impacts.

AIR QUALITY: The Proposed Project would have minor impacts on air quality with construction and operation. Construction of the proposed project would result in a temporary increase in emissions from sources such as vehicle transportation of equipment and materials, use of construction machinery, and welding. Use of electricity above the baseline may indirectly increase emissions depending on electric generation sources and methods employed by local utilities serving the site. However, a conformity analysis was performed to determine if emissions from the construction phase of the proposed project would be under the *de minimis* thresholds set by a five parish State Implementation Plan (SIP), which sets emission thresholds for seven criteria air pollutants. Nitrogen Oxide (Nox) and Volatile Organic Compounds (VOCs) can react with each other and Carbon Monoxide (CO) to produce ground level ozone. Thus, NOx and VOCs were the two critical criteria pollutants analyzed in the conformity analysis. The conformity analysis demonstrated that the construction phase of the project would be under the 100 tons per year (tpy) thresholds set by the SIP. The conformity analysis can be found in Appendix D of the Final EA.

For facility operations, Mexichem applied to modify its minor source air permit to include the LiPF₆ facility on June 30, 2025. The permit modification request was approved on December 18, 2025. Overall, it is anticipated that a long-term, but minor increase in overall emissions would result from the Proposed Project. Anticipated permitted emissions can be found in Chapter 3 of the Final EA.

NOISE AND VIBRATION: The Proposed Project would have negligible impacts on noise and vibration during construction and operation. According to the U.S. Department of Transportation – Federal Highway Administration, the average construction noise level at 50 feet from the source is 85 dBA. The anticipated noise level at the southwest and southeast borders of Mexichem’s property were calculated to be approximately 59 dBA, and pile driving activities were estimated to be at least 1,000 feet away from the perimeter of the site. Construction activities would last approximately 32 months. For onsite receptors (i.e. construction workers), noise mitigation strategies would be implemented to reduce noise impact. These mitigation strategies include the use of noise-reducing equipment attachments (i.e. mufflers, silencers, etc) and personal protective equipment (PPE) for workers to comply with Occupational Health and Safety Administration (OSHA) noise exposure standards.

During operation, noise and vibration levels are expected to align with those of the existing facility and surrounding industrial operations. The facility would be required to comply with OSHA noise and vibration standards to ensure worker safety. Traffic-related noise impacts during operation are expected to be less than those during construction, though they would be long-term. According to the City of St. Gabriel Comprehensive Zoning Ordinance Section 18.01, industrial properties must adhere to a maximum permissible sound level of 65 dBA at Zone Boundary and a maximum vibration level ranging from 0.05 in/sec (lot line) to 0.10 in/sec (zone boundary). A noise study was completed for the existing facility in 2018. The noise levels along the Mexichem site boundary caused by unit operations range from 57 to 61.8 db. A high noise source located near the site boundary emits noise at approximately 89.2 dB, however, noise from this source is blocked

from offsite attenuation by office buildings. The Zone Boundary between the M2 industrial area and the nearest residential area is approximately 0.35 miles southwest of the proposed project. Operational noise levels are currently below 65 dB at the site boundary, and operational noise levels are expected to be less than 65 dB at the Zone Boundary. A noise contour map is included in Appendix E of the Final EA.

GEOLOGY, SOILS, AND TOPOGRAPHY: Impacts on geology, soils, and topography are anticipated to be minor for facility construction, and negligible for facility operation. Construction would involve the installation of approximately 300 to 350 piles, with depths ranging from 80 to 110 feet. A Geotechnical Report prepared by Eustis Engineering in 2024 recommends the use of square precast concrete piles installed with a diesel hammer. Pile installation may extend through the confining clay layer of the Mississippi River Alluvial Aquifer (MRAA), which occurs at depths of approximately 75 to 100 feet below ground surface in Iberville Parish. The MRAA is not designated as a sole source aquifer. During driving, friction between the piles and surrounding soils is expected to result in soil displacement and compaction around the pile shafts, thereby limiting the potential for vertical migration along the pile-soil interface. The proposed construction activities would not alter the regional geologic framework. Site operations are anticipated to have negligible impacts on underlying geologic formations and would have no adverse impacts on soil resources.

SURFACE WATER AND GROUNDWATER: Construction for the Proposed Project is anticipated to have minor impacts to surface water and groundwater, and operational impacts to surface and groundwater are anticipated to be moderate.

Construction of the proposed project would have minor and temporary impacts on surface waters from sheet flow from the construction site during rain events. Potential impacts to surface waters from direct run-off would be minimized through the implementation of a Construction Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMP) as required under Section 402 of the Clean Water Act (specifically 40 CFR §122.26(b)(14)(x)) and the Louisiana Pollutant Discharge Elimination System Construction Stormwater Permit LAR100000 for stormwater discharges. BMP's may include silt fencing, hay bales, and check dams strategically placed throughout the project site. A detention pond would be constructed at the project site to settle and contain solids that may be present in stormwater prior to discharge. The BMP's would be checked frequently as indicated in the SWPPP and would be properly maintained. A Water Quality Certification was issued by the Louisiana Department of Environmental Quality on December 9, 2025, which satisfies Section 401 of the Clean Water Act. There are no anticipated impacts to groundwater during construction.

For facility operations, a Drainage Impact Study (included in Appendix C of the Final EA) was conducted to optimize site drainage and stormwater storage capacity. The study identified the need for two detention ponds to be constructed to contain stormwater. Pond A1 would be located on the southwest border of the proposed project area. Pond A1 would be approximately 8.8 acres in size with a depth of 6.5-feet. This pond would have a capacity of over 18 million gallons. Pond A2 would be located on the

southernmost part of the project area and would be approximately 1.1 acres with a depth of 7-feet. This pond would have a capacity of 2.5 million gallons. The proposed ponds would limit the outfall location's post-developed flow rate (based on the 100-year storm event) to less than or equal to the pre-developed flow rate (based on the 10-year storm event) through the use of the outfall pipes being used as control structures. The LiPF₆ plant would require approximately 119,520 gallons per day (gpd) of water for its process operations and 4,725 gpd for potable water. The LiPF₆ plant would cause the facility as a whole to increase its process and potable water by 30 and 112% respectively. Water for process operations would come from existing water wells and from Olin, a neighboring facility. Consumption of raw water is estimated to increase by 67% from 2023 use rates. Potable water would come from a new tie into the Iberville Parish municipal water system. Mexichem would obtain a permit from Iberville Parish prior to starting work on the municipal water tie-in. Operations of the LiPF₆ unit would require only a 0.88% increase in demand on the Mississippi River Alluvial Aquifer (MRAA). Overall operations would result in moderate impacts to groundwater relative to Mexichem's current operations but would be negligible relative to the increase in demand on the MRAA.

WETLANDS AND FLOODPLAINS: The Proposed Project is anticipated to have minor impacts on wetlands and floodplains during construction, and negligible impacts during operations. Mexichem's facility was sited to avoid impacts to wetlands to the extent possible. However, construction of the facility is expected to impact approximately 0.25 acres of Palustrine Forested (PFO) wetlands and approximately 4,613 linear feet of jurisdictional Waters of the United States. Mexichem applied for a Section 404 permit (MVN-2022-00332-CR) on July 25, 2025, and approval under Nationwide Permit Number 39 and 46 was granted on May 26, 2026. As part of the Section 404 permit, Mexichem purchased 0.5 acres of wetland mitigation credits at the Morgan Branch Mitigation bank owned by Resource Environmental Solutions to compensate for the unavoidable impacts to the 0.25 acres of PFO wetlands. The letter confirming the purchase of mitigation credits, dated April 1, 2026, is included in Appendix C of the Final EA. The Iberville Parish Floodplain Administrator was contacted to issue a base flood elevation (BFE) for the Proposed Project and returned an official letter from the U.S. Army Corps of Engineers (USACE) on October 18, 2023, stating the BFE for the Flood Zone A within the proposed project boundary is 17 feet. The letter from the USACE is provided in Appendix C of the Final EA. According to the Iberville Parish Council Code of Ordinances Section 7.5, the lowest floor (including basement) of a structure shall be elevated one foot above the base flood elevation. The LiPF₆ unit would be constructed with a base elevation equal or higher than 18 feet.

Operations are not anticipated to affect wetlands or the floodplain. With the facility elevated above the BFE, the risk of flooding during a 100-year storm event is effectively mitigated. Furthermore, the project is designed to ensure no offsite drainage impacts.

DOE completed a Floodplain and Wetlands Assessment as part of the EA process for DOE's Proposed Action and Mexichem's Proposed Project, which can be found in Chapter 3.4 of the Final EA. DOE's statement of findings is that a small portion of floodplains and

wetlands would be directly impacted by Mexichem's proposed project and DOE's proposed action. However, due to design elements incorporated by Mexichem, impact minimization measures, wetland mitigation credits purchased, and permits issued by the USACE and Iberville Parish Floodplain Administrator, the impacts to wetlands and floodplains are expected to be minor.

VEGETATION AND WILDLIFE: The Proposed Project is anticipated to have minor impacts to vegetation and wildlife during construction, and negligible impacts to vegetation and wildlife during operations. The construction of the proposed facility would convert approximately 40 acres of woodland habitat to industrial setting. Given this information, the proposed facility was strategically located to avoid woodland and wetland habitats whenever possible, as well as using BMPs such as mulching, vegetation, and dust control to prevent soil erosion in construction and non-construction areas. A U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) was completed to identify any potential habitats within the proposed project area for threatened and/or endangered species as well as migratory birds and bald/golden eagles. The IPaC revealed one proposed endangered species - Tricolored Bat (*Perimyotis subflavus*) and two proposed threatened species - Alligator Snapping Turtle (*Macrochelys Temminckii*) and Monarch Butterfly (*Danaus Plexippus*). The IPaC listed that there are no critical habitats for these species within the proposed project area. A Determination Key was subsequently completed for the Tricolored Bat. A Determination Key is a structured questionnaire on the IPaC website that assists users in determining whether a project qualifies for a predetermined consultation outcome based on USFWS standing analysis. The Proposed Project received a determination of "May Effect" for the Tricolored Bat due to the tree clearing and potential for an increase in artificial lighting. The Determination Key is provided in Appendix A of the Final EA.

DOE initiated informal consultation via email with the USFWS – Louisiana Ecological Services Field Office regarding the Proposed Project and the "May Effect" determination for the Tricolored bat on February 5, 2026. Representatives from DOE, Mexichem, CSRS, and the USFWS also met on February 19, 2026, to discuss Mexichem's Proposed Project and proposed conservation measures based on the "May Effect" determination for the Tricolored bat. In particular – it is assumed that the 40 acres of woodland habitat to be converted to industrial use from Mexichem's Proposed Project is suitable habitat for the Tricolored bat. However, Mexichem has proposed (and would adhere to) two conservation measures for the Tricolored bat. The first conservation measure is time of year restrictions on tree clearing. No tree clearing would take place during pup season (May 1 – July 15). Additionally, any required lighting that is within 1,000 feet of suitable habitat (forested areas) and has the potential to increase ambient light levels would be downward facing, full cut-off lens lights. These lights decrease ambient light exposure outside of the lit area and are the recommended mitigation for the Tricolored bat by USFWS. Full details of the proposed conservation measures are included in Appendix B of the Final EA. DOE submitted these conservation measures to the Louisiana Ecological Services Field Office on April 10, 2026, for review and approval. The USFWS - Louisiana Ecological Services Field Office responded that the proposed conservation measures would justify a "not likely to adversely effect" determination for

the Tricolored Bat on May 5, 2026. USFWS consultation documents are provided in Appendix B of the Final EA. DOE's determination of effect is that the Proposed Action and Mexichem's Proposed project is Not Likely to Adversely Affect the Tricolored bat, Alligator snapping turtle, or Monarch butterfly. DOE submitted a copy of the Draft EA to the USFWS - Louisiana Ecological Services Field Office for review and comment on this determination and the Draft EA as a whole. No further comments were received from the Louisiana Ecological Services Field Office on the Draft EA. Facility operations are not anticipated to impact vegetation and wildlife.

WASTE MANAGEMENT (SOLID AND HAZARDOUS WASTES): Mexichem's Proposed Project is anticipated to have minor impacts during construction, and moderate impacts during operations. Solid and sanitary waste generated during construction activities would be limited to common construction-related waste streams and sanitary waste. Typical solid waste may include scrap lumber, concrete debris, packaging materials, metal fragments, and general refuse associated with construction operations. All construction-related waste would be managed in accordance with applicable federal, state, and local regulations, and BMPs would be employed to minimize waste generation and encourage recycling where feasible. Construction waste would be segregated by type and transported to approved disposal or recycling facilities, including landfills permitted to receive such waste streams. It is estimated that 1,130 cubic yards of waste associated with clearing and grubbing, pile driving, and heavy construction would be generated during the construction phase. Waste collection activities, transport, and disposal would be documented through manifests and logs maintained for the duration of the construction period, and construction contractors would be required to follow site-specific waste management plans to ensure accountability and compliance. Routine inspections would be conducted to verify proper waste handling, segregation, labeling, and storage practices, and corrective actions would be implemented as necessary. All waste management activities would be recorded and summarized in project compliance reports to demonstrate adherence to regulatory requirements and to provide transparency to oversight agencies.

The proposed operations at the facility would involve the use, storage, and management of several hazardous and toxic materials, including hydrogen chloride (HCl), phosphorus trichloride (PCl₃), chlorine gas (Cl₂), hydrofluoric acid (HF), elemental phosphorus (P), phosphorus pentafluoride (PF₅), lithium fluoride (LiF), and LiPF₆. The volume of universal and hazardous materials accepted by the facility each year would see an increase of 35 to 40% under the proposed project. The key component produced on-site (LiPF₆) would result in the generation of a solid hazardous waste byproduct. This waste would be in a solid phase (crystalline or powder). It would be removed from the process system as part of regular maintenance cleanouts of unit operations, which would take place approximately every nine to ten days. This waste product would cause an estimated increase of 38 tons per year of hazardous waste to be shipped offsite to a permitted landfill. The waste is considered hazardous because it will have residual HF in the material. The finished LiPF₆ product would be stored in a warehouse equipped with a loading dock on the eastern portion of the project site. As a large-quantity generator of hazardous waste, the facility is required to have a Preparedness and Prevention Program

and a Resource Conservation and Recovery Act Contingency Plan in accordance with 40 CFR 262.34(a)(4) and to train its employees on the safe and proper handling of hazardous waste.

UTILITIES AND ENERGY USE: The Proposed Project would have negligible impacts to utilities and energy usage during construction, and moderate impacts during operations. During construction, the Proposed Project site would rely on a new tie into Iberville Parish water system and portable bathrooms to accommodate increase in demand for water and sewer from workers and equipment on the project site. Iberville parish would construct the tie in point with a 4-inch flange from which Mexichem would install their own pipeline to transport potable water to the project site. The transformers that are currently on Mexichem's property would be utilized to provide power to the project site during construction.

For operations, the Proposed Project would require the installation and use of utility services on the project site. It would have long-term, moderate impacts on local utilities and energy use as the industrial processes involved will increase the demand for electricity, water, gas, and sewer at the proposed project site. Infrastructure tie-ins to existing services and limited upgrades to existing utility infrastructure are anticipated to be necessary for facility operation. To meet increased electricity demands from operation of the proposed project (31,407,998 kilowatt-hours per year) the transformer that is currently on site would be upgraded from a 10 megavolt-amperes (MVA) to a 20 MVA transformer. The upgraded transformer would remain within the same footprint as the previous transformer.

The proposed project is anticipated to increase demand for potable water by approximately 185,055 gallons per year, a quantity that would be procured by Mexichem from Iberville Parish. The tie-in point that will be established during the construction period would be utilized for the ongoing operation of the facility. To address wastewater generated by operations, the proposed project would use its existing internal pretreatment, then send water to an outfall at Olin. The anticipated increase in wastewater produced is 102,400 gpd.

TRANSPORTATION AND TRAFFIC: Impacts of the Proposed Project on transportation and traffic are expected to be minor for construction and operations. Short-term impacts to traffic and transportation are expected during the construction phase of the proposed project. During the site preparation phase of the proposed project, the estimated traffic count would be 35 to 40 vehicles a day with a peak of 40 vehicles for six months. During the pile driving stage, the estimated traffic count would be 35 to 40 vehicles, with a peak of 40 vehicles for three months. During the heavy construction phase the traffic count is estimated to start off at 100 and continually increase to a peak of 200 for four months. The total construction period is anticipated to be 31 months from start to finish. The roads most impacted will be Ici Road and Highway 75. Those roads are designed to accommodate industrial truck traffic and are not anticipated to be adversely affected by the increase in traffic.

The proposed project would generate minor long-term increases to traffic from the anticipated daily truck and personal vehicle traffic into and out of the industrial park. The number of full-time employees commuting to and from the site is expected to increase from 80 to 160. However, approximately half of these employees would be commuting to the site during the day and the other half at night. A traffic study was completed in June of 2025 and determined that no off-site improvements were needed to accommodate the increase in traffic. Traffic generated from the transportation of raw materials and final products is anticipated to increase from previous operations. Raw materials would enter the facility through railcar, pipeline, and trucks. The finished product would be packed in containers and transported via trucks offsite. There are no anticipated upgrades to rail or roadway infrastructure as a result of operations of the proposed project.

PUBLIC AND OCCUPATIONAL HEALTH AND SAFETY: The impacts of construction and operation of the Proposed Project on public and occupational health and safety are expected to be negligible. The Mexichem facility maintains robust public and occupational health and safety protocols through the implementation of a facility-specific Emergency Response Plan (ERP). This plan establishes a systematic framework for identifying, mitigating, and managing process hazards and emergency scenarios, ensuring compliance with OSHA, the U.S. Environmental Protection Agency (EPA), and other regulatory requirements. The ERP defines critical personnel roles, emergency response procedures, incident communication protocols, and regulatory reporting requirements that ensure a structured and coordinated approach to risk management.

Additionally, a Hazard and Safety Plan (HASP) would be developed for the site that would incorporate protocols and action items for identified hazards onsite and mitigation measures for each hazard. The HASP will also outline clear roles and responsibilities for all personnel to ensure accountability and consistent implementation of safety procedures. In addition, it would establish emergency response protocols, communication channels, and incident reporting requirements to promote swift and coordinated action in the event of an unforeseen event. Regular training sessions and safety drills would be incorporated to reinforce awareness and preparedness among staff. The plan would be reviewed and updated on a routine basis to account for changes in site conditions, applicable regulations, and newly identified hazards. Finally, monitoring and inspection procedures would be built into the HASP to ensure compliance and continuous improvement of safety practices.

Mexichem has also recently implemented targeted enhancements to further strengthen its existing safety and health programs. As part of these enhancements, hazard analysis practices have been expanded to ensure that potential risks associated with both process and non-process systems are systematically evaluated. This includes additional consideration of transient operational states such as startup, shutdown, and decontamination activities, as well as credible exposure scenarios involving unintended or indirect pathways. Additionally, Mexichem has implemented a requirement for pre-task risk assessments for activities involving vacuum system connections and decontamination operations. These assessments are designed to reinforce real-time hazard recognition and ensure that appropriate controls are in place prior to initiating work.

Additional procedures have been developed to address the proper removal of contaminated insulation materials and the decontamination of exposed equipment and surfaces. These procedures establish standardized methods to safely handle and remediate contaminated materials while minimizing potential employee exposure. Minimum PPE requirements have been enhanced for specific higher-risk activities. Additional evaluations have been conducted to determine and update PPE requirements, associated procedures, and training for Level B work performed in horizontal or supine positions. These updates ensure that protective measures appropriately account for differences in exposure risk and suit performance when work is conducted outside of standard upright configurations. Permit requirements have also been enhanced to require that work areas be thoroughly cleaned or covered with appropriate protective materials prior to the performance of tasks in horizontal positions. These controls are intended to reduce the potential for contamination transfer and incidental exposure during such activities. Connections and disconnections involving vacuum systems now require Level B PPE, including chemical-resistant suits, gloves, boots, and supplied air respiratory protection, to provide an increased level of protection against potential chemical exposures. Specific requirements have been implemented for the management of protective equipment following use, including mandatory decontamination of Level B and Level C suits prior to exiting controlled work areas. Suits that cannot be effectively decontaminated or are damaged are required to be removed from service and properly disposed of. In addition, procedures require the decontamination or replacement of standby personnel gloves between worker interactions during donning activities to prevent cross-contamination. Mexichem has also expanded the scope of activities subject to line-breaking requirements to include connections and disconnections involving the ejector vacuum system. These measures ensure that protective controls are consistently applied to systems where HF exposure is a credible risk. Additionally, ejector vacuum system components and piping have been incorporated into the facility's preventive maintenance system to support ongoing integrity assurance.

SOCIOECONOMICS: The Proposed Project would result in minor beneficial impacts on socioeconomics during construction and operations. The Proposed Project is estimated to create 250 temporary jobs during construction, and 100 permanent jobs (80 full-time equivalent employees and 20 nested contract personnel) during operations. The influx of job opportunities would have a positive impact on the unemployment rate in the city of St. Gabriel and Iberville Parish. It could also provide increased tax revenue at a municipal, parish, and state level. In addition to construction jobs, secondary jobs related to the increased economic activity stimulated by the proposed project may be created, including additional retail and business employment. Since 86% of the employees at existing facility live within 25 miles of the facility, there is no expected impact to the housing demand and population as a result of the proposed project. Mexichem is planning to hire a majority of the employees for the proposed project from local communities.

CULTURAL RESOURCES: The Proposed Project would have no impact on cultural resources. All Phases Archaeology conducted the *2023 Phase I Cultural Resource Survey* (CRS) for Mexichem's Proposed Project. It was noted in the 2023 Phase I CRS that there

are no listed National Register of Historic Places properties or historic districts within a one-mile radius of the proposed facility. During the 2023 Phase I CRS for the Proposed St. Gabriel Property, All Phases Archaeology conducted 174 shovel tests consisting of 166 negative shovel tests and 8 untestable locations due to asphalt, gravel, and/or standing water. The Phase I CRS identified no cultural resources or historic properties, and no further cultural investigations were recommended by All Phases Archaeology.

DOE initiated consultation with the Louisiana Office of Cultural Development (LOCD) - Division of Historic Preservation on April 14th, 2025, and initiated tribal consultation with the Alabama-Coushatta Tribe of Texas, Apache Tribe of Oklahoma, Chitimacha Tribe of Louisiana, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, and the Seminole Tribe of Florida in April 2025.

On May 8, 2025, LOCD determined that the proposed project would have no effect on properties listed in or eligible for listing in the NRHP, and that no future coordination would be required with LOCD unless the proposed project changes or if archaeological materials or human remains are discovered during the course of the proposed project. The Alabama-Coushatta Tribe of Texas responded on May 19, 2025, that the Tribe has no comments on the proposed project, but noted that if the project were to change in any way or if items of cultural significance are discovered during the project, the Tribe's Historic Preservation Office should be further consulted. Mexichem and DOE will adhere to the stipulations noted by LOCD and the Alabama-Coushatta Tribe of Texas.

Copies of the Draft EA were submitted to LOCD, along with Tribal Historic Preservation Officers and Tribal leaders of the eight tribal nations noted above for review and comment. No comments were received from the LOCD or Tribal Nations on the Draft EA.

Based on the results of the Phase I Cultural Resources Survey, and comments received from LOCD and the Alabama-Coushatta Tribe of Texas, DOE's Proposed Action and Mexichem's Proposed Project would have no effects on cultural resources within and near the project area.

PUBLIC AVAILABILITY: The Draft EA was released for public review and comment on May 29, 2026. DOE advertised its release and invitation for comment in *The Advocate*. The Draft EA was published online on DOE's NETL EA website (<https://netl.doe.gov/node/6939>) and the DOE NEPA EA website (<https://www.energy.gov/nepa/doe-environmental-assessments>). In addition, DOE sent one hard copy of the Draft EA for public review to the East Iberville Parish Library in St. Gabriel, LA. The public was invited to provide oral, written, or e-mailed comments on the Draft EA to DOE during the comment period, which occurred from May 29 through June 12, 2026. Copies of the Draft EA were also distributed to cognizant federal and state agencies and Tribal Nations. The Draft EA was also distributed to floodplain administrators of St. Gabriel and Iberville Parish.

During development of the Draft EA, and prior to the public comment period, DOE initiated consultations with the LOCD and the USFWS – Louisiana Ecological Services Field Office. DOE also initiated consultations with the Apache Tribe of Oklahoma, Caddo Nation of Oklahoma, United Keetoowah Band of Cherokee Indians in Oklahoma, Coshatta Tribe of Louisiana, Delaware Nation – Oklahoma, Osage Nation, Quapaw Nation, and the Shawnee Tribe. Through these consultations, DOE provided information about the Proposed Project and solicited input for consideration prior to finalizing and releasing the Draft EA for public comment.

COMMENTS RECEIVED: No comments on the Draft EA were received from the public during the public comment period. DOE received comments from Region 6 of the U.S. EPA. Through consultations prior to issuance of the Draft EA, comments were received from the USFWS – Louisiana Ecological Services Field Office, the LOCD, and the Alabama-Coushatta Tribe of Texas. All comments received are included in Appendix A and/or addressed throughout the Final EA.

MITIGATION REQUIREMENTS: No additional mitigation measures beyond those established during agency consultation or contained in permits obtained or to be obtained by Mexichem from the appropriate permitting authorities are required.

DETERMINATION: Based on information presented in the Final EA (DOE/EA-2236), DOE finds that the Proposed Action to provide a grant to Mexichem would not significantly affect the quality of the physical, biological, or human environment. Therefore, preparation of an Environmental Impact Statement is not required, and DOE is issuing this FONSI.

Copies of the Final EA and this FONSI are available at DOE's NETL EA website at: <https://netl.doe.gov/node/6939>.

Copies of the Final EA and FONSI can also be obtained by sending a request to:

Mr. Stephen Witmer
NEPA Compliance Officer
U.S. Department of Energy
National Energy Technology Laboratory
626 Cochran Mill Road, M/S 921-227
Pittsburgh, PA 15236
412-386-7589
stephen.witmer@netl.doe.gov

Sean I. Plasynski, Ph.D.
Director, National Energy Technology Laboratory (Acting)