



MEMORANDUM FOR NEPA FILE

FROM: MARK LUSK
NEPA DOCUMENT MANAGER

SUBJECT: Supplement Analysis for the Exide Technologies' Proposed Project under the Electric Drive Vehicle Battery and Component Manufacturing Initiative (DOE/EA-1712)

New Information: Proposed Minor Change to Exide Technologies' Proposed Project

Location: Exide Technologies' Plant in Bristol, Tennessee

Proposed by: Exide Technologies

1. Introduction

This proposed project was one of 30 projects DOE selected for financial assistance on August 5, 2009 under funding opportunity announcement DE-FOA-0000026, *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative*. DOE's Proposed Action would provide a \$34.3 million financial assistance grant in a cost-sharing arrangement with Exide Technologies. The total cost of the proposed project is estimated at \$70 million.

The original proposed project, as analyzed in DOE/EA-1712, includes: (1) the installation and operation of new manufacturing equipment in an existing building at Exide Technologies' Bristol, Tennessee, plant and (2) installation and operation of equipment in a newly constructed 44,000-square-foot addition, together with other minor building modifications, at Exide Technologies' Columbus, Georgia, plant. Exide Technologies would manufacture batteries using two technologies at these plants: (1) a spiral wound absorbed glass mat design at the Bristol plant and (2) a flat plate absorbed glass mat design at the Columbus plant.

2. NEPA Analysis to Date

The National Energy Technology Laboratory (NETL) completed its environmental review for Exide Technologies' proposed project under the Electric Drive Vehicle Battery and Component Manufacturing Initiative. An environmental assessment (DOE/EA-1712) was prepared in accordance with the Council on Environmental Quality's *National Environmental Policy Act* (NEPA) regulations (40 CFR Parts 1500 to 1508) and DOE NEPA implementing regulations (10 CFR Part 1021).

The EA analyzed the potential environmental impacts of providing funding to Exide Technologies, and Exide's proposed project to expand the manufacturing advanced lead-acid batteries at two existing plants. Although the proposed project would increase air emissions and require amendments to existing air permits, these changes would be minor and the project proponent would be required to adhere to permit requirements during operations. All other environmental impacts analyzed in the EA would be negligible. Based on the analysis in the EA, DOE determined that providing funding to Exide Technologies, and Exide Technologies' proposed project, would result in no significant adverse impacts to the human environment. DOE issued the Final EA and Finding of No Significant Impact (FONSI) on March 18, 2010.

3. Description of the Project

Exide Technologies decided that an additional 12,150 square feet of manufacturing floor space needs to be added to an existing building at their Bristol, TN location in order to optimize the floor plan for their proposed expansion of advanced battery manufacturing at that plant and allow for future unrelated plans. The majority of this expansion would occur by adding an approximately 170 feet by 50 feet (8500 square feet) extension to the north end of an existing building (marked B in the attached figure). A second smaller addition, approximately 63 feet by 58 feet (3,650 square feet), would be constructed at the southeast corner of this same building. Exide also plans to move an existing internal partition that would gain an additional 8,125 square feet for their proposed expansion. See attachments for additional details. Additionally, the layout or configuration of equipment within the building would also be altered, but no new equipment would be added from the original proposal

4. Analysis

- The EA analyzed potential impacts for reconfiguring this existing building for manufacturing of advanced batteries for automotive applications. The changes proposed by Exide Technologies would occur within their existing footprint and would not impact any of the resource areas evaluated in the EA
- The proposed minor expansion would result in only minor change to the analysis of air emission impacts. No additional equipment or emission sources would be permanently added. A small increase in air emissions during construction may occur for a short duration.
- The proposed minor expansion would result in no change to the analysis of water resource impacts. The minor expansion would extend the footprint of an existing building but would not encroach on any water bodies or wetlands. No additional process water is needed for this activity.
- The proposed minor expansion would result in no significant change to the analysis of socioeconomic impacts. However, an additional small number of temporary construction workers would be needed for this work, with a similar small increase in the deliveries needed for construction materials.
- The proposed minor expansion would result in no change to the analysis of utilities, energy and materials impacts. This would be a minor expansion of the existing building's size to accommodate a reconfiguration of the original floor plan.
- The proposed minor expansion would result in only minor change to the analysis of waste management impacts. A small amount of construction debris may be generated but would be managed as needed.

- The proposed minor expansion would result in only minor change to the analysis of occupational health and safety impacts. Additional construction-related injuries could occur during the expansion but would be much smaller than what was analyzed for the Columbus, GA location.

5. Findings

The changes proposed by Exide Technologies would occur well within their existing plant boundary and would not significantly change the analysis of impacts for any of the resource areas evaluated in the EA. DOE has therefore determined that the proposed changes to the project fall within the scope of the analyses documented in the EA completed in March 2010. DOE has further determined that the potential impacts that may be associated with Exide's proposed project, as well as the proposed minor changes to that project, have been adequately evaluated by the EA and the Finding of No Significant Impact issued in March 2010 is still valid for this project. Therefore, a supplement to the EA, or any other additional NEPA analysis, is not needed at this time.

DISTRIBUTION:

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Original to NEPA File (451)

Bristol Orbital – Plant Layout Proposal
Final Data
May 10, 2010



 **Start Positive. Stay Positive.™**

- **Plant Layout**

- **Proposal**

- Increase building area by approximately 34% (Outside ARRA Grant Scope) without affecting Project Milestones, Costs, or Timelines

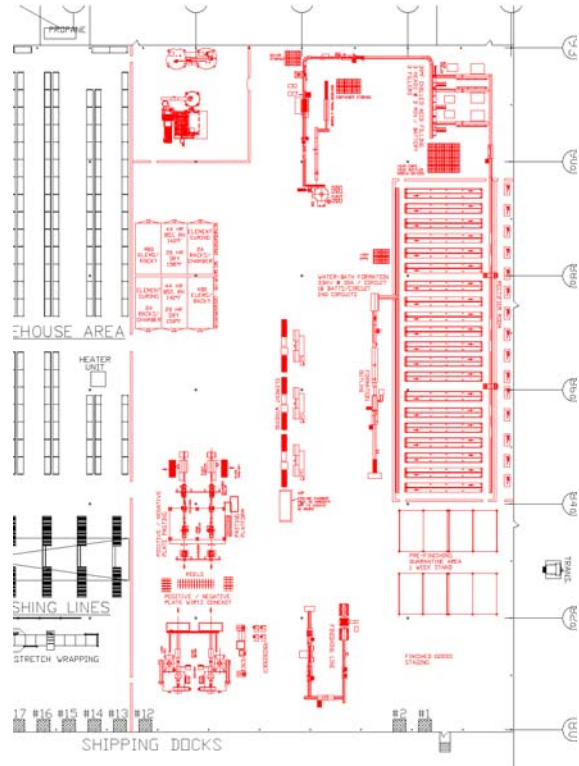
- **Benefits**

- Allows for expected future production and job increases as separate projects
 - Allows for Next Generation Designs currently being developed to be brought to market quickly
 - Improves production flow of Formation and Oxide Production Rooms

- **Risks**

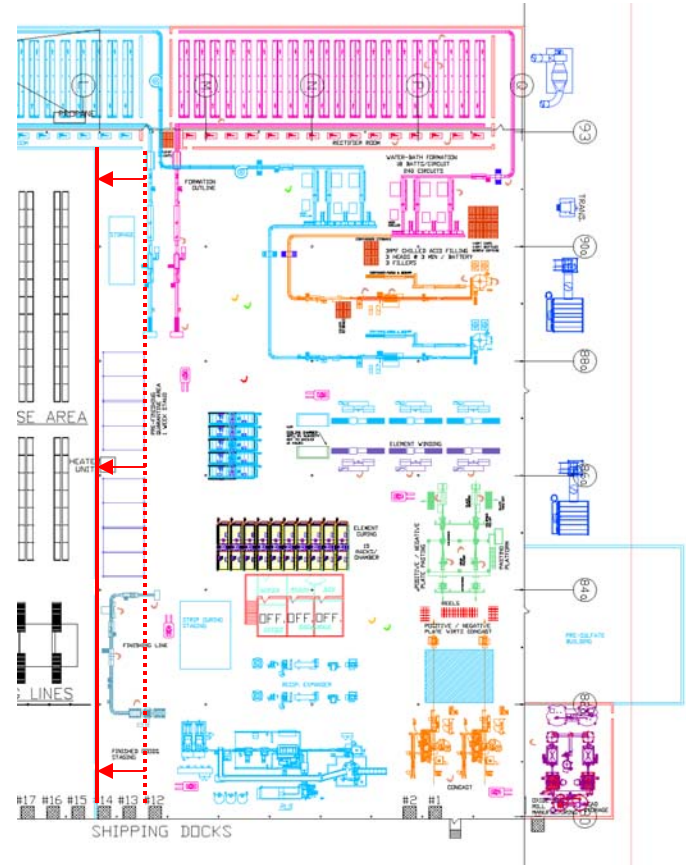
- None

Bristol Orbital – Plant Layout Proposal



Original Proposal

Est. 59,000 FT²

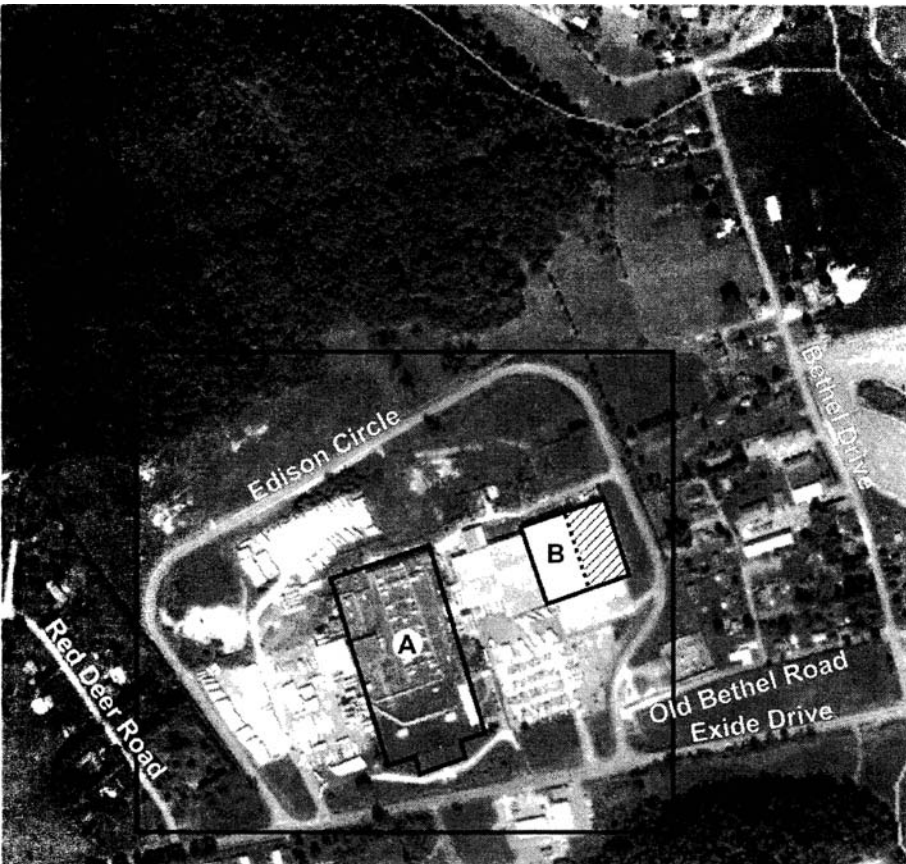


Optional Proposal

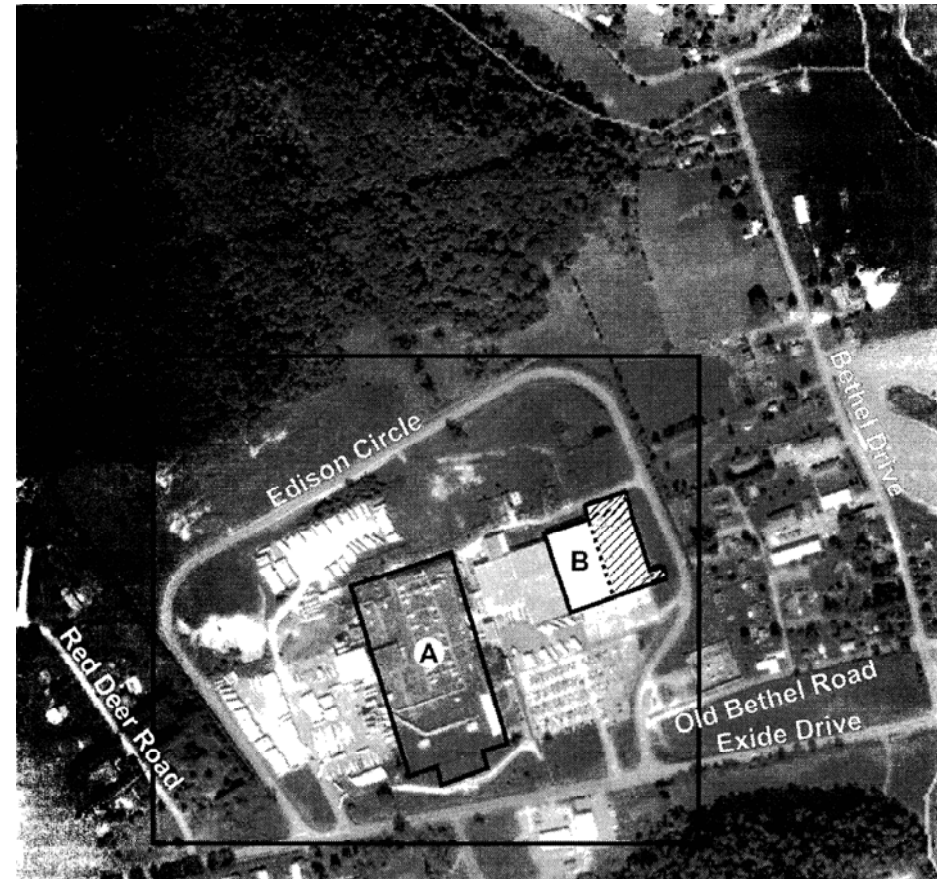
Est. 79,400 FT² – Increase 34%

- Shifting the Dividing Wall: 325' x 25', 8125 FT² (10% of total)
- North Extension – Formation: 170' x 50', 8500 FT² (11% of total)
- East Extension – Oxide: 63' x 58', 3650 FT² (5% of total)

Bristol Orbital – Plant Layout Proposal – Campus View



Original Proposal



Optional Proposal

Proposed layout change does not alter the position of the new facility with the Exide Bristol Campus.

There is no change in the planned output or type of equipment for the current project.