



January 25, 2012

MEMORANDUM FOR NEPA FILE  
FROM: *Pierina Fayish*  
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SUBJECT: Supplement Analysis for Electric Drive Vehicle Battery and Component Manufacturing Initiative Application (DOE/EA-1722)  
New Information: Proposed Modification to Toxco, Incorporated Proposed Project  
Location: Lancaster, Ohio  
Proposer: Toxco, Incorporated

1. Introduction

In April 2010, the Department of Energy (DOE) issued DOE/EA-1722, *Final Environmental Assessment for Electric Drive Vehicle Battery and Component Manufacturing Initiative Application, Lancaster, Ohio*. On April 21, 2010, a Finding of No Significant Impact (FONSI) was issued by DOE based on the Final Environmental Assessment (EA). DOE's proposed action consisted of providing Toxco, Incorporated (Toxco) with \$9,552,653 in financial assistance in a cost-sharing arrangement to facilitate construction and operation of the Next-Generation Lithium Ion (Li Ion) Battery Recycling Facility. The total cost of the proposed project is estimated at \$19,107,705.

The objective of Toxco's proposed project is to establish domestic recycling capacity for large format advanced Lithium-Ion Batteries (LIB) used in advanced Electric Drive Vehicles (EDV), including plug-in hybrid electric vehicles (PHEV) and hybrid electric vehicles (HEV). This objective could be accomplished by designing and building an advanced, innovative recycling facility to operate in conjunction with its existing hybrid and electric vehicle battery recycling facility in Lancaster, Ohio. Successful completion of this project would provide LIB quality cathode and anode materials plus purified electrolyte solvents and raw materials to the original equipment manufacturers and ensure the proper environmental management of the end of battery life.

The original scope of the proposed project included the construction of a 50,000 square foot (ft<sup>2</sup>) (4,600 square meter (m<sup>2</sup>)) facility, adjacent to Toxco's current lead acid, nickel metal hydride (NiMH), and nickel cadmium (NiCad) battery recycling plant in Lancaster, Ohio. However, the Recipient has proposed an expansion of the proposed facility to approximately

67,000 ft<sup>2</sup> (6,200 m<sup>2</sup>). An evaluation of the possible environmental effects of the proposed facility expansion is the subject of this Supplement Analysis.

## 2. NEPA Analysis to Date

DOE completed its environmental review for Toxco with the issuance of a Final EA (DOE/EA-1722) in April 2010, followed by the issuance of a FONSI on April 21, 2010. The EA 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 implementing regulations (10 CFR Part 1021).

The EA analyzed the potential environmental impacts of providing a cost-sharing arrangement with Toxco to facilitate the construction and operation of the 50,000 ft<sup>2</sup> Next-Generation Lithium Ion (Li Ion) Battery Recycling Facility. This proposed facility is adjacent to an existing 180,000 ft<sup>2</sup> battery recycling facility, all within Toxco's 36.8-acre industrial site.

DOE examined the potential impacts on the following resources and found none to be significant: air quality; geology and soils; water resources; terrestrial vegetation; wildlife; threatened and endangered species; socioeconomic resources; infrastructure/utilities; noise; human health and safety; and waste management. The following additional issues or resources were considered but dismissed from detailed analysis due to the lack of potential impacts: groundwater; wetlands/floodplains; land use; environmental justice and cultural resources.

As part of the original assessment, DOE conducted formal consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office, State Historic Preservation Office, and Native American Tribal contacts in Ohio. DOE received correspondence supporting a determination of no potential impacts to federally-listed threatened or endangered species or their habitats. Correspondence was also received from the Ohio Historic Preservation Office (OHPO) supporting a determination of no potential impacts to properties listed on or eligible for inclusion in the National Register of Historic Places. However, the correspondence received from the OHPO stated that further coordination with that office would be necessary if any changes to the proposed project occurred.

DOE contacted the OHPO on December 7, 2011 regarding the proposed change. OHPO requested a repeat consultation due to the project change, which was completed and submitted on January 6, 2012. DOE subsequently received correspondence supporting a determination of no potential impacts to historic properties.

## 3. Description of Proposed Project Changes

The initial proposal was for Toxco to construct and operate the 50,000 ft<sup>2</sup> Next-Generation Lithium Ion (Li Ion) Battery Recycling Facility. However, the Recipient has proposed an expansion of the facility to approximately 67,000 ft<sup>2</sup>. This change was proposed during the design phase of the project. The proposed increase in the size of the facility would not result in changes with the siting of the facility; only one wall would be moved outward, resulting in the proposed increase of approximately 17,000 ft<sup>2</sup> of space.

## 4. Analysis

- The EA analyzed potential impacts associated with the construction and operation of a 50,000 ft<sup>2</sup> lithium-ion battery recycling facility in Lancaster, Ohio. The analysis did not identify any significant adverse impacts to air quality; geology and soils; water resources; terrestrial vegetation; wildlife; threatened and endangered species; socioeconomic resources; infrastructure/utilities; noise; human health and safety; or waste management.
- The proposed modification would occur within the existing Toxco site footprint and would not significantly impact any of the resource areas evaluated in the EA. The proposed expansion is designed to meet all current state and local zoning restrictions. The expansion would not require new permitting or site facility reviews.
- The proposed minor expansion would result in only a minor change to the analysis of air quality 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, which extends the building footprint, would not encroach on any water bodies or wetlands.
- The proposed minor expansion would result in only minor changes to the analysis of socioeconomic resources; noise; or human health and safety impacts due to a slightly-increased duration of construction activities.
- The proposed minor expansion would result in no significant change to the analysis of infrastructure/utilities.
- The proposed minor expansion would result in a small minor change to the analysis of impacts to waste management. A small additional amount of construction debris may be generated, but would be managed as needed.
- The proposed minor expansion of the facility would not change the siting of the facility or impact the half-acre stand of trees on Toxco's existing 36.8-acre site. Therefore, no changes in impacts would result to geology and soils; terrestrial vegetation; wildlife; or threatened and endangered species.
- DOE contacted the OHPO regarding the proposed change, and received correspondence supporting a determination of no potential impacts to historic properties.

## 5. Findings

The change proposed by Toxco, which would expand the original design of the Next-Generation Lithium Ion (Li Ion) Battery Recycling Facility to approximately 67,000 ft<sup>2</sup>, would occur within the footprint of the existing Toxco site. This proposed expansion 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 change to the project falls within the scope of analyses documented in the EA completed in April 2010. DOE has further determined that the potential impacts that may be associated with Toxco's proposed project, as well as the proposed change to that project, have been adequately evaluated by the EA and FONSI issued in April 2010. These findings remain valid, and therefore, a supplement to the EA, or any other additional NEPA analysis, is not needed at this time.