

DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE: (Document Number TBD)

National Environmental Policy Act: Decontamination and Decommissioning of Building 140 at the NASA Glenn Research Center, Cleveland, Ohio.

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] 4321, et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] 1500–1508), and National Aeronautics and Space Administration’s (NASA) NEPA regulations (14 CFR 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the proposed decontamination and decommissioning of Building 140 at the NASA Glenn Research Center (GRC). This FONSI summarizes NASA’s consideration of environmental and other factors for equipment removal, decontamination, and decommissioning under the Proposed Action addressed in the *Environmental Assessment for the Decontamination and Decommissioning of Building 140 at GRC Lewis Field (Cyclotron EA)*, dated TBD.

DATE: TBD

ADDRESS: Copies of the *Cyclotron EA* may be viewed at the following locations: NASA Glenn Research Center’s website (<http://netpublic.grc.nasa.gov>), NASA’s NEPA website (<http://nasa.gov/agency/nepa>), the North Olmsted Library, the Fairview Park Library, and NASA Headquarters Library.

A limited number of copies are available upon request by contacting:

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SUPPLEMENTAL INFORMATION:

NASA has reviewed the *Cyclotron EA* prepared for the proposed decontamination and decommissioning of Building 140 at the NASA GRC and has concluded that the environmental assessment (EA) represents an accurate and adequate analysis of the scope and level of associated environmental impacts. NASA hereby incorporates the EA by reference in the FONSI.

NASA solicited public and agency review and comment on the environmental impacts of the Proposed Action through:

- 1) A Notice of Availability of the draft EA advertised in the Cleveland Plain Dealer, Sun Newspapers, and West Life Weekly publications
- 2) Publication of the draft EA on the NASA GRC website and NASA NEPA website
- 3) Appropriate consultations with local, state, and/or Federal agencies
- 4) Direct mailing of the draft EA to interested stakeholders

Comments received on the draft EA were taken into consideration in the final EA.

The EA is premised on implementing and completing the decontamination and decommissioning of Building 140, known as the Cyclotron Facility. The desired objectives include (1) decommissioning the Cyclotron Facility and amend GRC's U.S. Nuclear Regulatory Commission (NRC) license accordingly; (2) reduce the overall burden of surveillance, maintenance, and monitoring costs associated with the Cyclotron Facility; and (3) reduce NASA's surplus facilities inventory.

No Action Alternative: Under the No Action Alternative, Building 140 would remain in place and no decontamination or decommissioning would occur. This course of action would require that GRC amend its NRC license requesting that no decommissioning of the Cyclotron Facility be performed, contrary to NRC regulations. Long-term surveillance and maintenance would continue indefinitely and minimal services would be provided to the facility, as required. The facility would be secured and access restricted.

Cyclotron Removal with Decontamination, Decommissioning and Demolition (Proposed Action): Under the Proposed Action, the cyclotron machine and all ancillary equipment would be removed from Building 140 and all above- and below-grade structures would be demolished. Radiologically impacted debris would be disposed of as low-level radioactive waste and other waste would be disposed of in accordance with Resource, Conservation and Recovery Act regulations. A Final Status Survey would be prepared to support unrestricted release of the facility from GRC's radioactive license with the NRC. The property would be backfilled to its original grade and landscaped. The facility would be removed from NASA's surplus facilities inventory, no longer requiring resources to maintain.

The Proposed Action covered by the *Cyclotron EA* has been assessed to ensure that it does not result in any new or substantial environmental or safety concerns. Potential environmental impacts for all resource areas of the natural and human environment that could potentially be affected by the Proposed Action, including the following, were evaluated: land use, visual resources, geology and soils, air quality, noise, water resources, ecological resources, cultural resources, waste management, transportation, health and safety, utilities infrastructure, socioeconomics, and environmental justice. Potential adverse environmental impacts from implementation of the Proposed Action were determined to range from none to negligible for all resource areas, with the potential for beneficial impacts on some resources. A brief summary of impacts and applicable mitigation measures, by resource area, is provided below.

Land Use: No impacts would occur under the No Action or Proposed Action.

Visual Resources: No impacts would occur under the No Action Alternative. The Proposed Action would result in removal of above-grade structures and mound, and the site would be restored to grade; this would be perceived as an enhancement to visual resources at or near the project site.

Geology and Soils: No impacts would occur under the No Action Alternative. Import of fill materials would be required under the Proposed Action; however, the necessary quantities would be minimal. All excavated soil would be characterized for radioactive contamination and segregated for disposal as radioactive waste, if necessary. Best management practices would be implemented to mitigate impacts due to soil erosion and loss.

Air Quality: No impacts would occur under the No Action Alternative. Under the Proposed Action, potential air emissions are expected to be negligible. All decontamination and demolition of radioactively contaminated building components would be done under controlled circumstances, as necessary, to prevent any radioactive contamination from being dispersed into the air. Emissions from heavy construction equipment would be mitigated by maintaining the equipment to ensure that emissions control systems and other components were properly functioning. Fugitive dust emissions would be mitigated using standard techniques to control dust emissions. An environmental monitoring program would be established to ensure air emissions are kept to a minimum and would not negatively impact the environment.

Noise: No impacts would occur under the No Action Alternative. Under the Proposed Action, typical noise sources include heavy equipment (i.e., trucks, excavators, and cranes) and hand tools (i.e., drills and cutting saws), which would attenuate to below 60 A-weighted decibels (dBA) at the nearest GRC Lewis Field property boundary. Mitigation measures would be employed to avoid contributing to adverse cumulative noise impacts; examples include restricting activities to normal working hours on weekdays, maintaining adequate mufflers on heavy equipment, and using shielding when practical.

Water Resources: No impacts on wetlands, floodplains, or the coastal zone would occur under the No Action Alternative or the Proposed Action. Best management practices for erosion and sediment control and proper emergency response plans to quickly contain and clean up accidental spills from motorized equipment would be implemented to prevent potential adverse impacts on surface water. Long-term monitoring would also be established, as necessary, to ensure that groundwater and surface water resources in the vicinity of the project site are not adversely impacted.

Ecological Resources: No impacts on flora or fauna are anticipated under the No Action Alternative or the Proposed Action. The project site and surrounding area are in highly developed areas, and no protected species are known to be associated with the project site.

Cultural Resources: No impacts on cultural resources would occur under the No Action Alternative or the Proposed Action. The Cyclotron Facility lies within a district of GRC Lewis Field that is eligible for listing in the National Register of Historic Places; however, the Cyclotron Facility is a non-contributing element.

Waste Management: No impacts would occur under the No Action Alternative. Under the Proposed Action, there would be up to 530 cubic meters (690 cubic yards), 1,160 cubic meters (1,520 cubic yards), and 2,200 cubic meters (2,880 cubic yards) of low-level radioactive waste generated. Additionally, there would be generation of some hazardous building materials, such as asbestos-containing building materials, lead-based painted building components, light ballasts containing polychlorinated biphenyls, and mercury-containing devices. The disposal of radioactive and hazardous waste would be in accordance with applicable NRC, U.S. Environmental Protection Agency, and state regulations.

Transportation: No impacts would occur under the No Action Alternative. Under the Proposed Action, no latent cancer fatalities of crew members or members of the public due to radiation exposure are anticipated under either incident-free or accident scenarios. To the extent practicable, transportation routes would be selected to minimize the impacts of potential exposure to radiation during both incident-free transport and postulated accidents, as well as to minimize the potential for vehicular accidents. Measures that could be used to mitigate radiological impacts on individuals and populations along transportation routes include scheduling the transport of materials or wastes only during periods of light traffic volume. The packaging and transport of radioactive and other hazardous materials would be in compliance with applicable NRC, U.S. Department of Transportation, and state regulations.

Health and Safety: Under the No Action Alternative, radioactive contamination would remain in place. Under the Proposed Action, cumulative worker exposure would be approximately 0.937 person-rem. Most of the radiological exposures would be from removal of interference equipment and the cyclotron machine. Individual doses would be well below the regulatory limit of 5 rem per year, as well as NASA's more-conservative threshold of 0.5 rem per year. Mitigation measures to protect workers from physical hazards during decontamination or demolition would involve safety reviews of planned activities and the implementation of best management practice safety measures, including bracing and stabilizing buildings and excavations during demolition, wearing protective equipment, and conducting safety monitoring and inspections. These mitigation measures would comply with applicable Federal and state safety requirements.

Utilities Infrastructure: Under the No Action Alternative, there would be no incremental changes in consumption of utilities used to maintain Building 140 in its current state. Under the Proposed Action, there would be a beneficial impact, as Building 140 would no longer exist and utilities would be disconnected.

Socioeconomics and Environmental Justice: No impacts on employment would occur under the No Action Alternative. Under the Proposed Action, a small but negligible increase in employment would be anticipated for approximately three years. No high and adverse impacts on minority or low-income populations would occur under the No Action Alternative or the Proposed Action. There are two census tracts that are defined as both low-income and minority within the vicinity of GRC Lewis Field; however, potential impacts are projected to range from none to negligible for all resource areas.

Cumulative Impacts: In accordance with NEPA and to the extent reasonable and practical, the EA considers the overall cumulative impacts of the Proposed Action and other actions (both on and off GRC) that are related in terms of time or proximity. Onsite NASA actions for consideration included proposed rehabilitation and construction activities for certain facilities and capping of a landfill. Offsite actions considered included continued operations and improvements at Cleveland Hopkins International Airport, continued development in the City of Cleveland, and the potential to significantly contribute to climate change. NASA has determined that the potential contribution of impacts on all resource areas from implementing the Proposed Action would be considered negligible.

NASA has identified no other issues of potential environmental concern. Based on the *Cyclotron EA* and review of underlying reference documents, NASA has determined that the environmental impacts associated with the Proposed Action will not individually or cumulatively have a significant impact on the quality of the human environment. Therefore, an environmental impact statement is not required.

James M. Free
Director, NASA Glenn Research Center

Date