Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

Posted
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December 23, 2016
Preliminary Finding of No Significant Impact
Barberton – Norton Nash Heights Sanitary Sewers and Pump Station
Summit County
WPCLF #CS390134-0014

The attached Environmental Assessment (EA) is for a wastewater treatment project in your area which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the EA.

Any comments on our preliminary determination should be sent to me at the letterhead address. We will not act on this project for 30 calendar days from the date of this notice in order to receive and consider comments. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Barberton can then proceed with its application for the WPCLF loan.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Division of Environmental & Financial Assistance
Office of Financial Assistance

JR/DH

attachment

ENVIRONMENTAL ASSESSMENT

A. **Project Identification**

Name: Barberton – Norton Nash Heights Sanitary Sewers and Pump Station

Address: William B. Judge, Mayor
City of Barberton
576 West Park Avenue
Barberton, OH 44203

WPCLF #: CS390134-0014

B. **Proposed Project**

1. Summary

The City of Barberton in Summit County has requested $4,603,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) to construct sanitary sewers in the Nash Heights subdivision in the neighboring City of Norton and eliminate discharges from failing home sewage treatment systems to area drainage ditches and streams. Barberton will combine the WPCLF assistance with a 0% interest loan for $3,805,000 from the Ohio Public Works Commission to construct this project.

Sewer construction will occur adjacent to existing roads in the public right-of-way in mown lawn; a sanitary sewer pump station will be built adjacent to a road on land that is maintained lawn. The area of disturbance lacks significant habitat or other important environmental features.

2. Project Background

a. History and Existing Conditions

The City of Norton has a dispersed population and limited areas with sanitary sewers. Areas with sanitary sewers have been served by the Summit County Department of Environmental Services with sanitary sewers and package wastewater treatment plants (WWTP), or by City of Barberton sewers that drain to the Barberton sanitary sewer system for treatment at the Barberton WWTP. The unsewered Nash Heights subdivision is served by private home sewage treatment systems (HSTS; septic tanks), many of which inadequately treat sewage and drain to ditches. Sampling of surface water in storm drains in Nash Heights by the Summit County Health Department showed levels of fecal coliform bacteria significantly exceeding public health standards.

Based on the sampling results, the Board of Health of the Summit County Combined General Health District in resolution number 116-13 declared a Public Health Nuisance in the Nash Heights area due to poorly operating and antiquated sewage treatment systems, and requested assistance from the Ohio Environmental Protection Agency (EPA) to alleviate the nuisance. Ohio EPA sampling in 2013 confirmed the unsanitary conditions and documented violations of Ohio's general water quality criteria. In November 2013, the Director of Ohio EPA and the Mayor of Norton signed Director's Final Findings and Orders (Orders) establishing a three-phase schedule to construct sanitary sewers in Nash Heights East by June 1, 2015; a pump station and force mains by May 30, 2016; and sanitary sewers in Nash Heights West by May 30, 2017.

Norton requested and was granted a 90-day extension of the schedules for the first two phases and entered negotiations with the City of Barberton to transfer ownership of sanitary sewer assets to Barberton. No agreement was reached, and Norton failed to meet interim deadlines in the Orders. Ohio EPA sent Norton a Notice of Violation for failure to comply with the Orders, which led to a proposed schedule revision by Norton and new Orders requiring a construction start by November 28, 2016 and construction completion by November 28, 2017.

Barberton's Water Pollution Control Center (WPCC) dates to the 1960s, with upgrades as recent as 2012. The facility, with a 6 million gallons per day (mgd) design treatment capacity and average daily flows of 4 mgd, operates under a National Pollutant Discharge Elimination System (NPDES) permit modified in 2013. Treatment is by conventional mechanical technology with flow equalization, septage receiving, primary clarification, aeration, final clarification, trickling filters, and chlorine disinfection. The WPCC's current excess capacity is due to significant flow reductions with the loss of industry in the late 1900s. Sanitary sewage from much of Barberton and from portions of surrounding areas flows to the WPCC for treatment before discharge to the Tuscarawas River.

Summit County and Barberton in 2016 agreed to a transfer of Summit County's wastewater infrastructure in the City of Norton to the City of Barberton, and Norton and Barberton have negotiated an agreement to include in the Barberton Sewer District all parts of Norton not now with sanitary sewer service. Barberton is the primary Designated Management Agency (DMA) for management of sanitary wastewater for the City of Norton in the regional Areawide Water Quality Management Plan (WQMP); Norton is the secondary DMA. This project will include revision of the WQMP by the Northeast Ohio Four County Regional Planning and Development Organization (NEFCO) to eliminate Norton as the secondary DMA.

b. Population and Flow Projections

The project service area of the Nash Heights Subdivision and one adjacent cul-de-sac includes approximately 300 single family residences. Based on average sanitary sewer flows per residence, the projected design flow for the project area is 0.16 mgd with a new sewer pipe capacity of 0.65 mgd (standard 8" diameter pipe). The design flow is well within the available capacity of the Barberton WPCC.

Norton's population is slightly above 12,000 and has remained stable, with modest growth anticipated. Sanitary sewers to serve two additional areas of Norton are in the planning stages. Except for these few areas and the areas already with sanitary sewers, Norton's relatively dispersed population is not conducive to extending sanitary sewer service. Neighboring Barberton, like many small industrial cities, has struggled to maintain and redevelop its economy. The population (26,000) is generally stable, and regional planners expect no population growth for the indefinite future.

c. Water Quality

Ohio EPA's 2009 Tuscarawas River Total Maximum Daily Load (TMDL) Report identifies water quality problems in the Tuscarawas River and tributaries. Streams sampled by Ohio EPA in the vicinity of Nash Heights (tributaries to Hudson Run and to Lake Dorothy) showed significant E. coli numbers (as high as 2,400,000 units), documenting and confirming the identified public health nuisance. The larger Hudson Run mainstem is reported in the TMDL Report to be in partial attainment or non-attainment of its Aquatic Life Use designation (Modified Warmwater Habitat) due to habitat alteration and siltation.

The Tuscarawas River in the vicinity of and downstream of the Barberton WPCC is in partial attainment of its Warmwater Habitat Aquatic Life Use designation (Ohio Water Quality Standards) and non-attainment of the Recreation Use. Identified causes of impairment include organic enrichment, suspended solids, nutrients, and pathogens from the contributions of tributary Chippewa Creek, the Barberton WPCC, and the "Lime Lakes" (alkaline industrial waste lagoons) adjacent to the Barberton WPCC.

3. Discussion of Feasible Alternatives

With well-documented levels of E. coli bacteria in surface water downstream of the Nash Heights Subdivision exceeding water quality standards, and with Director's Final Findings and Orders requiring installation of sanitary sewers to eliminate the potential public health threat due to failing HSTS, doing nothing (the "no-action" alternative") is not feasible. Further violation of the Orders would likely lead to costly litigation and only delay the sewer project, which could lead to higher construction costs, and would leave the public at risk.

Norton evaluated two types of sewers for the Nash Heights project, conventional gravity sewers and vacuum sewers. Gravity sewers are most common and require no energy source to operate properly. Less common vacuum sewers are recommended in special circumstances, such as flat terrain where pipes could not be constructed with sufficient slope to adequately carry wastewater. Vacuum sewers rely on a continuous vacuum in the pipes, maintained by a vacuum pump station that constantly operates to pull wastewater through the pipes. Gravity sewers are set at a uniform slope between manholes, which requires deeper excavations in some areas and higher construction cost. Vacuum sewers are not confined to a uniform slope and are often more shallow than gravity sewers. Vacuum sewers have a higher operation and maintenance cost than gravity sewers. The vacuum station can send the wastewater downstream to a larger sewer. In the Nash Heights area, a pump station would be required with the gravity sewers to pump the wastewater to the nearest sanitary sewer manhole immediately east of Nash Heights. The vacuum pump station would similarly send the Nash Heights wastewater to that same sewer.

The engineer's estimated cost for construction of the Nash Heights gravity sewers is $7,200,000; the pump station estimated cost is $550,000. Total estimated cost for gravity sewer installation is $7,750,000.

The estimated cost for construction of the vacuum sewers is $5,850,000; the vacuum station estimated cost is $550,000. Total estimated cost for vacuum sewer installation is $6,400,000.

The estimated 20-year life cycle cost for operation and maintenance of the gravity sewer alternative is $1,218,000. The estimated 20-year life cycle cost of the vacuum sewer alternative is $2,620,000.

With the total construction and operation and maintenance costs roughly equivalent, Norton selected the gravity sewer alternative due to its higher demonstrated long-term reliability with less maintenance, compared to the vacuum sewer system.

4. Selected Alternative

This proposed project will install approximately 9,500 linear feet of 8" diameter conventional gravity polyvinyl chloride sewers with pre-cast concrete manholes and lateral stubs for each residence in the Nash Heights Subdivision in Norton; one sanitary sewer pump station with approximately 2,200 linear feet of 6" diameter force main to carry wastewater to the nearest gravity sewer manhole (on Greenwich Road); and one grinder pump station to serve 12 existing homes on Brookside Court, with approximately 800 linear feet of 2" diameter force main to carry wastewater to the nearest gravity sewer manhole (on Greenwich Road) (Figure 1). A grinder pump station is a small

sanitary sewage pump station receiving a limited flow and includes a grinding apparatus similar to a garbage disposal to produce a slurry readily carried by a small diameter pipe.

Upon completion of the sewer construction, each homeowner will install a service lateral (pipe connecting the household sanitary drain to the new sanitary sewer stub) and abandon and demolish the existing HSTS.

Ohio EPA has approved a Permit-to-Install for this project.

Rain gardens will be constructed at multiple locations throughout the project area for enhanced storm water management where existing storm drainage ditches adjacent to the streets are disturbed for construction of the sanitary sewers.

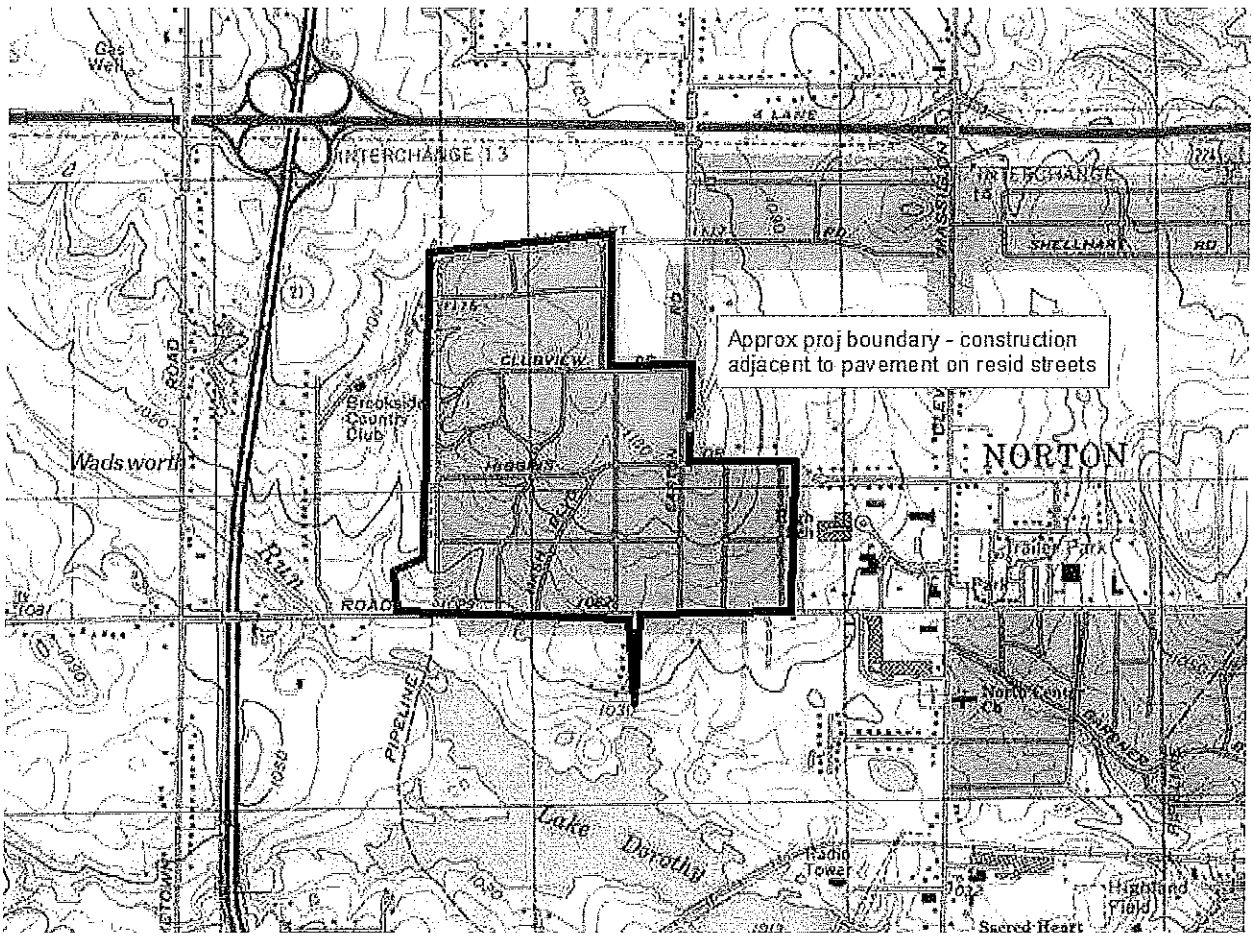

Figure 1 – General Project Location

5. Project Implementation

Barberton will combine approximately $4,603,000 from the WPCLF at the standard interest rate (2.20% for a 30-year loan; the rate is set monthly and may change for a later loan award) with approximately $3,805,000 at 0% from the Ohio Public Works Commission (OPWC) to finance this project. During the 30-year loan period, Barberton will save approximately $5,190,000 by using WPCLF and OPWC dollars at these rates, compared to the market rate of 3.50%.

City of Norton Amended Resolution 2-2016, the "resolution of necessity" required to authorize assessments under Chapter 27 of the Ohio Revised Code for the proposed sewer project, was enacted on February 8, 2016. It declared necessary the construction of gravity sanitary lines and appurtenances for the Nash Heights area, and authorized the City to assess a portion of the project costs up to $11,200 per benefited property (284 units). The maximum assessment receipts would total $3,180,000. Norton is responsible for funding the portion of the project not paid by the assessments. The amount, duration, and interest rate of the assessments will be set upon final determination of costs at project completion. The interest rate will be a blended rate that is calculated as a weighted average of the WPCLF and OPWC interest rates. The special assessments will be certified to the Summit County Fiscal Officer for collection, and those charges will be placed annually on the property tax bill.

Assuming the maximum assessment, $11,200, and estimated blended interest rate of 0.67% amortized over 30 years, the estimated annual cost for this project as part of the property tax bill would be approximately $673 per household.

The one-time cost for construction of the service lateral and septic tank abandonment is estimated at $3,000 - $4,000, borne by the property owner. Owners with moderate incomes who qualify can receive assistance through Summit County to pay part of these "on-lot" costs.

Barberton's sewer rate ordinance includes rates specific to properties in Norton. For sanitary sewer customers with private wells (such as the Nash Heights Subdivision) and metered water usage, the flat rate is $49.39 per month for a typical household of three persons. This rate is approximately $593 per year, which is less than 1.0% of the Norton median household income (MHI; $62,161) and is favorable compared to the Ohio average annual residential sewer bill ($626). Sewer bills less than 1.8% of MHI are generally considered affordable. By using the WPCLF low-interest financing and 0% OPWC funds for this project, Barberton has minimized the cost to and the economic impact on its new Norton customers.

Construction will start in early 2017 and the sanitary sewers will be operational in early 2018.

C. **Environmental Impacts of the Proposed Project**

This project could directly affect environmental features. Because the project is designed to provide sanitary sewer service to existing customers rather than provide additional capacity in the wastewater system for growth, the project is not expected to lead to new development or associated indirect or cumulative impacts that could alter or affect agriculture or land use.

All construction will occur in existing roads, adjacent public rights-of-way, or easements, or on private lawns that will be restored after construction is complete, areas generally lacking important environmental features. Upon restoration, the presence of the sewers will be unnoticeable, except for the pump station near Greenwich Road at Shelhart Drive. The project will have no significant adverse effect on local topography, and all construction will be distant from surface water features with no effect on floodplains or wetlands. Adherence to construction best management practices by contractors will minimize soil erosion and runoff that could adversely affect area surface water resources or aquatic habitats. No trench excavation will be deep enough to interfere with the drilled wells providing drinking water in the project area or have other impact on ground water resources.

Important terrestrial habitats will be unaffected by construction. The October 2016 U.S. Fish and Wildlife Service species list by county indicates what threatened/endangered plant and animal species "may be present" in the project area: Indiana bat (Endangered), northern long-eared bat (Threatened), northern monkshood (Threatened), and bald eagle (Special Concern). Minimal tree clearing of landscape specimens is anticipated for this project. Where unavoidable, trees will be cut after September 30 and before April 1 to minimize the potential for adverse effects to the listed bat species. No part of the project area includes shaded, damp, sandstone cliffs, the specific habitat for the northern monkshood, and no trees in the project disturbance area are large enough for bald eagle nests.

Summit County meets standards for four of the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead) and is out of compliance for particulate matter and ozone). Exhaust from motorized construction vehicles will be equivalent to that from vehicles regularly transiting the project area and will have no significant effect on local air quality. The contract requires use of water or other environmentally-benign dust suppressants as necessary to prevent fugitive dust. Both of these potential air quality impacts would be very localized and temporary.

Noise from motorized construction equipment will be audible in the immediate construction vicinity and similar to that from vehicles regularly traversing the greater project area. The contract requires effective mufflers on construction vehicles and limiting work hours to daylight hours. Sewer construction along and adjacent to roads

will affect traffic and will involve use of standard construction traffic control measures, such as signs, barricades, flaggers, and temporary lane closures. Besides standard traffic control measures, public safety will be ensured by minimizing spans of open trench and filling or covering trenches at the end of each work day. Except for the pump station, all of the proposed infrastructure will be underground. Upon construction completion and final restoration, visual aesthetics of the project area will be similar to pre-construction conditions. The presence of the proposed rain gardens and the absence of septic odors near drainage ditches will be positive changes to the landscape. For these reasons, this project will avoid significant adverse impacts to local noise levels, traffic, safety, and aesthetics.

Gravity sewers are designed to operate without external sources of energy. The pump station and grinder pump station, however, operate with electric motors and require connection to the local electrical grid. Sanitary sewage pump stations are common and operate as necessary depending on the flow of sewage (compared to vacuum pump stations that operate nearly continuously). High-efficiency pumps with variable frequency drive motors minimize the total electrical demand, and should create an insignificant additional load on the existing electrical energy supply.

The State Historic Preservation Office concurred with Ohio EPA's determination that this project will not cause a significant adverse effect to properties listed or eligible for listing in the National Register of Historic Places (cultural resources). In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify the State Historic Preservation Office of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will not resume until a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

D. **Public Participation**

This project has been highly publicized in various forms over several years, including significant debate by Norton City Council, legislation authorizing a uniform special assessment, establishment of the Assessment Equalization Board and its operation, two special election referendums, a failed referendum petition campaign, a July 2014 public meeting, coordination with Summit County, and ongoing local news coverage. Opposition to the proposal by affected residents based on cost is still evident, although Norton has established a uniform maximum assessment with the City responsible for the remaining costs and secured a very favorable financing package that will lower both the overall project cost and direct cost to Nash Heights residents.

Ohio EPA will make a copy of this document available to the public on its web page http://epa.ohio.gov/defa/ofa.aspx ("Documents Available for Review and Comment –

WPCLF Documents for Review and Comment").

The following agencies reviewed this project's planning information:

Northeast Ohio Four County Regional Planning and Development Organization
Ohio Environmental Protection Agency
State Historic Preservation Office
U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers, Huntington District

E. **Reasons for a Preliminary Finding of No Significant Impact**

Based on its review of this project's general plans and other information, Ohio EPA concludes that no significant short-term or long-term adverse direct environmental impacts will result from the project as related to the environmental features discussed in this Environmental Assessment. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts of construction will be temporary and mitigated.

Since it is intended to serve existing homes and not provide additional capacity for growth, this project, alone or in combination with other projects, is not expected to result in any significant indirect or cumulative short-term or long-term adverse environmental impacts.

Ohio EPA does not expect the economic impact of the project on the average user to be significant because Norton has limited the direct cost to affected residents, has developed a low-cost financing package with special assistance for on-lot costs for eligible property owners, and the resulting sewer rates are in the affordable range.

The project will eliminate a confirmed public health nuisance due to discharges of untreated sewage from failing HSTS in the Nash Heights area.

For more information, please contact:

Dan Halterman
Ohio EPA – DEFA-OFA
P.O. Box 1049
Columbus, OH 43216-1049
(614) 644-3658
daniel.halterman@epa.ohio.gov

PLEASE NOTE:
Norton is the secondary Designated Management Agency (DMA)

Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

January 18, 2017

Valerie Wax Carr
Administrative Officer
City of Norton
4060 Columbia Woods Dr.
Norton, OH 44203

RE: January 3, 2017 comment regarding the December 23, 2016 "Preliminary Finding of No Significant Impact, Barberton – Norton Nash Heights Sanitary Sewers and Pump Station"

Dear Ms Wax Carr:

Thank you for pointing out an error of fact on page 2 of the Environmental Assessment: "This project will include revision of the WQMP by the Northeast Ohio Four County Regional Planning and Development Organization (NEFCO) to eliminate Norton as the secondary DMA."

The amendment to the Clean Water Plan approved on December 14, 2016 by NEFCO deleted a reference to "Summit County Department of Environmental Services" and replaced it with "City of Barberton" and noted "there are no other changes to the other wastewater prescriptions." The DMA status of the City of Norton remains unchanged in the Clean Water Plan. It is our understanding that Norton has been and remains the secondary Designated Management Agency (DMA).

The error of fact on page 2 alters neither the other facts presented in the Environmental Assessment nor the draft Finding of No Significant Impact for the project.

If you need additional information, please contact Dan Halterman at 614-644-3658 or Daniel.halterman@epa.ohio.gov.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Division of Environmental and Financial Assistance
Ohio EPA

Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

January 23, 2017

The Honorable William B. Judge, Mayor
City of Barberton
576 West Park Avenue
Barberton, OH 44203

RE: **City of Barberton**
Norton Nash Heights Sanitary Sewers and Pump Station
WPCLF No: CS390134-0014
Finding of No Significant Impact

Dear Mayor Judge:

On December 23, 2016, the Ohio EPA issued a draft Finding of No Significant Impact for the referenced project for public review and comment. The thirty-day period for comments has passed and no adverse comments were received. Therefore, the conclusions in the draft Finding of No Significant Impact become the basis for this final Finding of No Significant Impact for the referenced project.

This final Finding of No Significant Impact may be revised or rescinded at a future date based upon the presentation of information which significantly alters earlier conclusions, or failure to employ all agreed upon impact mitigation.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Division of Environmental and Financial Assistance - OFA

c: OWDA
File

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