

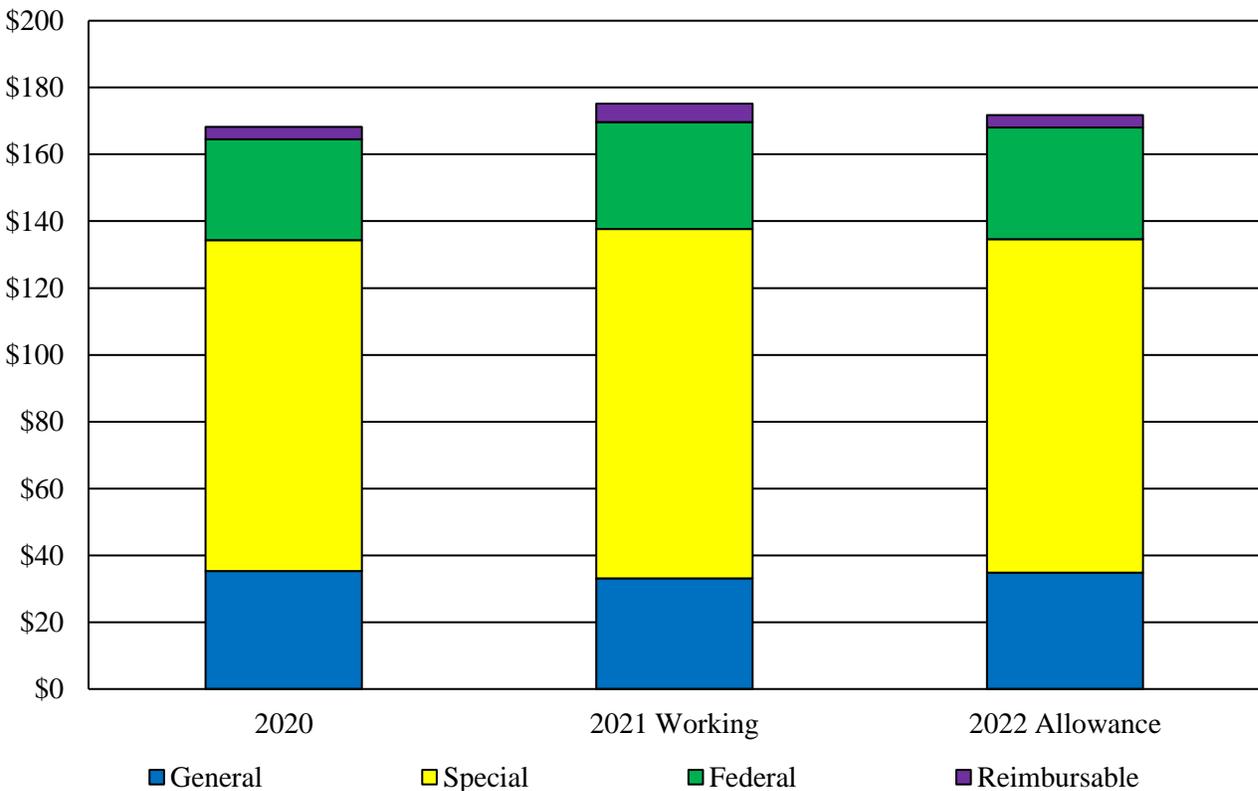
U00A
Department of the Environment

Executive Summary

The Maryland Department of the Environment (MDE) was created in 1987 to protect and restore the quality of the State’s land, air, and water resources and safeguard citizens from health risks associated with pollution. It is responsible for planning, monitoring, controlling, and regulating air, solid, and hazardous wastes; radiation, sewage sludge, sediment, and stormwater; toxicities, sewage treatment, and water supply facilities; and environmental disease control programs.

Operating Budget Summary

**Fiscal 2022 Budget Decreases \$3.5 Million, or 2.0%, to \$171.7 Million
(\$ in Millions)**



Note: Numbers may not sum due to rounding. The fiscal 2021 appropriation includes deficiencies, planned reversions, and general salary increases. The fiscal 2022 allowance includes contingent reductions and annualization of fiscal 2021 general salary increases.

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- The overall adjusted change in the MDE fiscal 2022 budget is a decrease of \$3.5 million, or 2.1%. The largest changes are a decrease of \$10.0 million for the Clean Water Commerce Act funding for the purchase of cost-effective nutrient and sediment reductions; an increase of \$4.2 million, which appears to be related to the restoration of funding after the July 1, 2020 Board of Public Works cost containment actions; and an increase of \$3.0 million for operations and maintenance grants for wastewater treatment plants upgraded to enhanced nutrient removal technology.

Key Observations

- ***Criteria Pollutants Trend Downward despite Hot Days:*** MDE has the objective of achieving attainment with the eight-hour ozone and PM2.5 standards in the Baltimore and Washington metropolitan areas and Cecil County. Achieving this objective will require reducing emissions of criteria pollutants from power plants. These criteria pollutants are ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. In calendar 2019, there were 59 days with temperatures equal to or greater than 90 degrees Fahrenheit, but there was not a corresponding spike in the number of exceedances of the eight-hour ozone standard. This reflects that the lower criteria pollutant loads from power plants are helping to meet the eight-hour ozone standard.
- ***Child Blood Lead Levels Continue to Decline despite More Testing:*** MDE has the objective to reduce the number of blood lead levels over 10 micrograms per deciliter found and the number of blood lead levels between 5 and 10 micrograms per deciliter by 10% annually. The number of children between the age of 0 and 72 months tested for elevated blood lead continues to rise, while the reported exceedances of the elevated blood lead standard of between 5 and 10 micrograms per deciliter – the most stringent standard for child blood lead levels – continues to fall. The calendar 2020 numbers will be released with the annual report in October 2021.
- ***Public Information Act (PIA) Responses Decline during the COVID-19 Pandemic, While Permit Processing Is Unaffected:*** MDE’s first goal is to provide excellent customer service and community outreach. Under this goal are two objectives: response to 80% of PIA requests within 30 days of receipt; and meet permit turnaround times for 90% of the permits processed. The percentage of PIA responses issued within 30 days decreased from 91% in fiscal 2019 to 76% in fiscal 2020, which reflects the difficulty MDE employees experienced transitioning from in-office access to records and databases to a teleworking environment during the COVID-19 pandemic. In contrast, the percentage of permits processed within the applicable standard time hardly changed from 93.5% in fiscal 2019 to 93.7% in fiscal 2020, though this may reflect, at least partially, the reduction in both the number of permit applications received and the number of permits issued, which both dropped substantially during the pandemic, presumably due to the grace period for permits.

- ***COVID-19 Pandemic Impact on Environmental Enforcement and Air/Water Quality Monitoring in Maryland:*** The federal government and MDE have both responded to the COVID-19 pandemic by making regulatory changes. MDE’s actions can be categorized under the categories of environmental enforcement, applications and permitting, water quality monitoring, air quality monitoring, and air pollution. In summary, MDE continued enforcement actions during the pandemic but exercised enforcement discretion; permit applications received and permits and licenses issued were down from the previous year; water quality monitoring and emergency response activities continued; and air quality monitoring reflected substantial decreases in traffic and vehicle miles traveled corresponding with dramatic improvements in air quality.
- ***Maryland Used Tire Cleanup and Recycling Fund Solvency Report Considers Benefits of Possible Fee Increase:*** Budget bill language in the fiscal 2021 operating budget restricted \$200,000 in general funds pending the submission by November 1, 2020, of the *Maryland Scrap Tire Annual Report* and a report on ways to make the Maryland Used Tire Cleanup and Recycling Fund solvent. The submitted annual report generally reflects a declining fund balance and fluctuating levels of scrap tire projects funded with recent expenditure reductions, allowing for a slightly higher closing balance. The solvency report outlines two fee scenarios for the Maryland Used Tire Cleanup and Recycling Fund: the current \$0.80 per tire scenario; and a \$1.00 per tire scenario. The \$1.00 per tire scenario allows for both greater expenditures and a higher closing fund balance.
- ***Maryland Clean Air Fund Reports Submitted Showing Title V Revenues Continuing to Decline:*** Budget bill language in the fiscal 2021 operating budget restricted funding in the Air and Radiation Administration as follows: \$100,000 in general funds in a fiscal 2020 deficiency pending the submission by May 1, 2020, of delinquent fiscal 2015 through 2019 Maryland Clean Air Fund annual reports; and \$100,000 in fiscal 2021 general funds pending the submission by November 1, 2020, of the fiscal 2020 Maryland Clean Air Fund annual report as well as a separate report on ways to make the Maryland Clean Air Fund solvent. The delinquent annual reports were submitted. The solvency report shows the continuing decline in Title V revenues from major stationary sources of pollution due to the closure of facilities and the shift from coal-fired power plants to power plants fired with natural gas. One reason for the Title V revenue decline is the revenue structure, which has a \$5,000 base and an emission-based fee that were last revised in calendar 2013.

Operating Budget Recommended Actions

1. Adopt committee narrative requesting that prior year actual personnel expenditures be reflected correctly.

Updates

- ***Enforcement and Inspection Position Strength Assessment and Vacant Position Filling:*** Budget bill language in the fiscal 2021 operating budget restricted funding pending the submission of quarterly reports from MDE and the Maryland Department of Agriculture on compliance and enforcement inspections and positions. The language then further restricted the funding for filling vacant compliance and enforcement positions. The submitted reports note that the COVID-19 pandemic has limited inspection activities in fiscal 2020 and 2021 but that MDE has brought online or is working on technological improvements that will help streamline operations. The submitted reports note that between fiscal 2011 and 2020, the number of inspectors for the three administrations has changed as follows: 1 fewer position for the Land and Materials Administration (from 66 to 65 positions); 5 additional positions for the Water and Science Administration (from 48 to 53 positions); and 9 fewer positions for the Air and Radiation Management Administration (from 48 to 39 positions). The number of vacancies has continued to remain high in recent years for the Land and Materials Administration.
- ***Status of Corrective Actions Related to the Most Recent Fiscal Compliance Audit:*** Budget bill language in the fiscal 2020 operating budget restricted \$25,000 in general funds until MDE submitted a report describing actions taken to address the two repeat audit findings in the most recent fiscal compliance audit issued by the Office of Legislative Audits. The report was required 45 days before the release of funds. The required report was submitted on June 29, 2020, and the funds were released. MDE noted that it has taken corrective actions to address both findings.

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Operating Budget Analysis

Program Description

The Maryland Department of the Environment (MDE) was created to protect and restore the quality of the State's land, air, and water resources and safeguard citizens from health risks associated with pollution. It is responsible for planning, monitoring, controlling, and regulating air, solid, and hazardous wastes; radiation, sewage sludge, sediment, and stormwater; toxicities, sewage treatment, and water supply facilities; and environmental disease control programs. The department is structured into six major administrative units.

- ***Office of the Secretary:*** This office provides direction and establishes State environmental policies to be implemented by the operating units.
- ***Operational Services Administration:*** This administration provides general administrative and fiscal services to the department.
- ***Water and Science Administration:*** This administration administers the State's water pollution control and drinking water protection activities, implements Total Maximum Daily Loads (TMDL) for pollutants in impaired waterways, regulates industrial/municipal wastewater and stormwater discharge, develops and promulgates water quality standards, provides technical support and analysis for TMDLs, monitors shellfish, develops environmental and public health risk assessments, implements nonpoint source pollution programs, and develops and issues fish advisories.
- ***Land and Materials Administration:*** This administration ensures that all types of hazardous and nonhazardous solid wastes are managed in a manner that protects public health and the environment. It regulates solid waste management facilities, scrap tire recycling facilities, above-ground and below-ground petroleum storage facilities, petroleum distribution, hazardous waste transportation, mining, and both concentrated animal feeding operations and Maryland animal feeding operations. In addition, this administration coordinates lead poisoning prevention efforts.
- ***Air and Radiation Administration:*** This administration ensures that air quality and radiation levels in Maryland sustain public health, safety, and the environment. It operates an air-monitoring network, licenses asbestos removal contractors, provides oversight of the Vehicle Emissions Inspection Program (VEIP), and monitors radiation use. Climate change initiatives are a relatively new component of its operations.
- ***Coordinating Offices:*** This office manages budget matters, the Water Quality and Drinking Water Revolving Loan funds and other water pollution control program capital projects, and Board of Public Works (BPW) activities; coordinates public information and outreach; provides

hazardous chemical and oil spill emergency response services; provides legal advice; and information technology (IT) services.

MDE's mission is to protect and restore the environment for the health and wellbeing of all Marylanders. MDE's vision is for healthy, vibrant, and sustainable communities and ecosystems in Maryland. MDE has five goals that are consistent with efforts to protect and preserve Maryland's natural resources. The goals are as follows.

- **Goal 1:** Provide excellent customer service and community outreach.
- **Goal 2:** Manage air quality and emissions for maximum protection of human health and the environment.
- **Goal 3:** Reduce Maryland citizens' exposure to hazards.
- **Goal 4:** Protect water resources and ensure safe and adequate supplies of drinking water.
- **Goal 5:** Reduce waste and promote sustainable materials management.

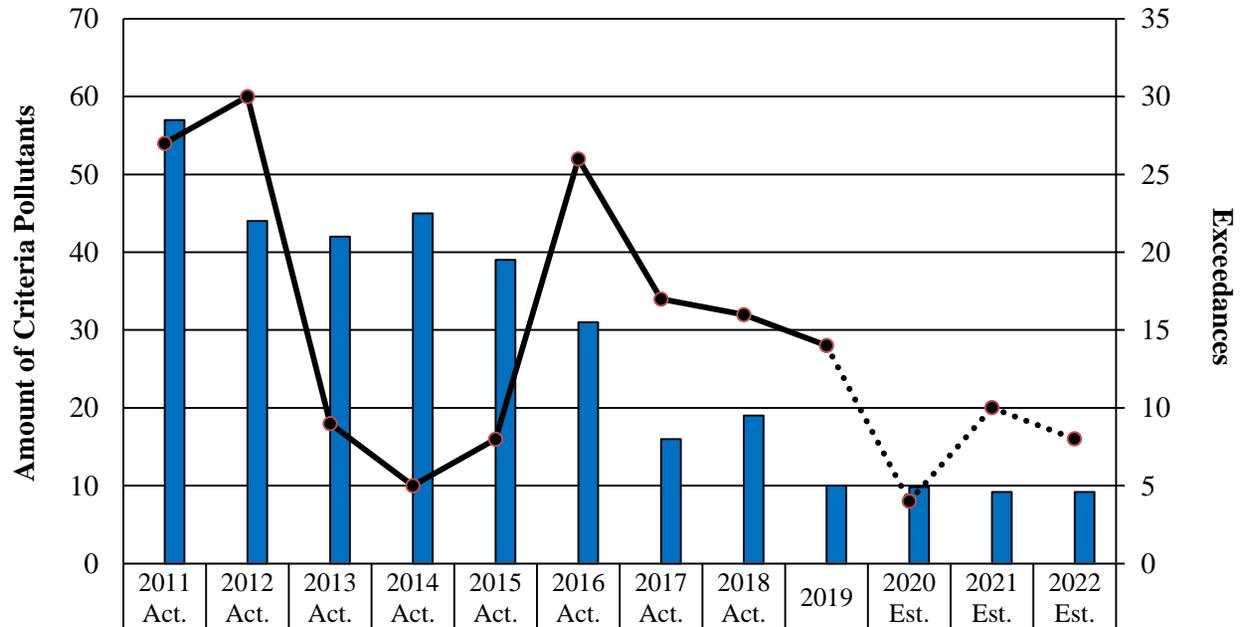
Performance Analysis: Managing for Results

The MDE Managing for Results measures show that (1) criteria pollutants are trending downward despite hot days; (2) child blood lead levels continue to decline despite more testing; and (3) Public Information Act (PIA) responses declined during the COVID-19 pandemic, while permit processing was unaffected.

1. Criteria Pollutants Trend Downward Despite Hot Days

MDE's second goal is to manage air quality and emissions for maximum protection of human health and the environment. Under this goal, MDE has the objective of achieving attainment with the eight-hour ozone and PM2.5 standards in the Baltimore and Washington metropolitan areas and Cecil County. Achieving this objective will require reducing emissions of criteria pollutants from power plants. These criteria pollutants are ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide (SO₂), and nitrogen dioxide (NO₂). As seen in **Exhibit 1**, reductions in criteria pollutants (in thousands of tons per year) generally tracks with fewer exceedances of the eight-hour ozone standard. The one exception is in calendar 2016, which appears to be due to the high number of days with temperatures equal to or greater than 90 degrees Fahrenheit. This is because higher temperatures help to produce ground level ozone. The reverse is true in calendar 2019, when there were 59 days with temperatures equal to or greater than 90 degrees Fahrenheit, but there was not a corresponding spike in the number of exceedances of the eight-hour ozone standard. This reflects that the lower criteria pollutant loads from power plants are helping to meet the eight-hour ozone standard.

**Exhibit 1
Air Quality Measures
Calendar 2011-2022 Est.**



Days Greater than or Equal to 90 Degrees for Baltimore Area, Maryland	40	45	27	14	26	48	31	39	59	46		
Criteria Pollutants (in Thousands of Tons Per Year) Emitted from Power Plants	57	44	42	45	39	31	16	19	10	10	9	9.2
Exceedances of the Eight-hour Ozone Standard	27	30	9	5	8	26	17	16	14	4	10	8

Source: Governor’s Fiscal 2022 Budget Books; Maryland Department of the Environment; National Weather Service

Maryland sought a judicial review of the U.S. Environmental Protection Agency’s (EPA) decision to deny Maryland’s petition for relief under Section 126 of the Clean Air Act on October 15, 2018. The petition asked EPA to impose additional controls on upwind emissions of nitrogen oxides that are a precursor to the ozone that cause Maryland to exceed the eight-hour ozone standard when the weather is warm. Maryland filed oral arguments that were heard on January 16, 2020, in the Washington, DC Circuit Court. The circuit court ruled on May 19, 2020, to deny Maryland’s overall petition to tighten controls on upwind emissions but required EPA to review the cost effectiveness of a particular type of emission control – selective noncatalytic controls – which involves injecting a substance into a power plant’s exhaust flue without a catalyst in order to convert nitrogen oxides into molecular nitrogen and water.

Maryland also petitioned the Ozone Transport Commission on May 30, 2019, under Section 184(c) of the federal Clean Air Act. The petition asks the commission to consider, among other control measures, the potential need for daily limits at coal-fired power plants in Pennsylvania in order to bring areas in the Ozone Transport Region into attainment with the ozone standard. The commission voted to proceed with the petition process, including analyzing recent power plant operations in Pennsylvania, and solicited public comment. On June 2, 2020, the Ozone Transport Commission approved a recommendation for additional control measures to be submitted to EPA with the requirement that Pennsylvania revise its State Implementation Plan to include additional control measures. Most recently, EPA issued a *Federal Register* notice of public hearing and supplemental hearing regarding the Ozone Transport Commission’s recommendation with a public comment period ending on March 8, 2021. This comment period was extended to April 7, 2021, by a subsequent notice in the *Federal Register* on February 19, 2021.

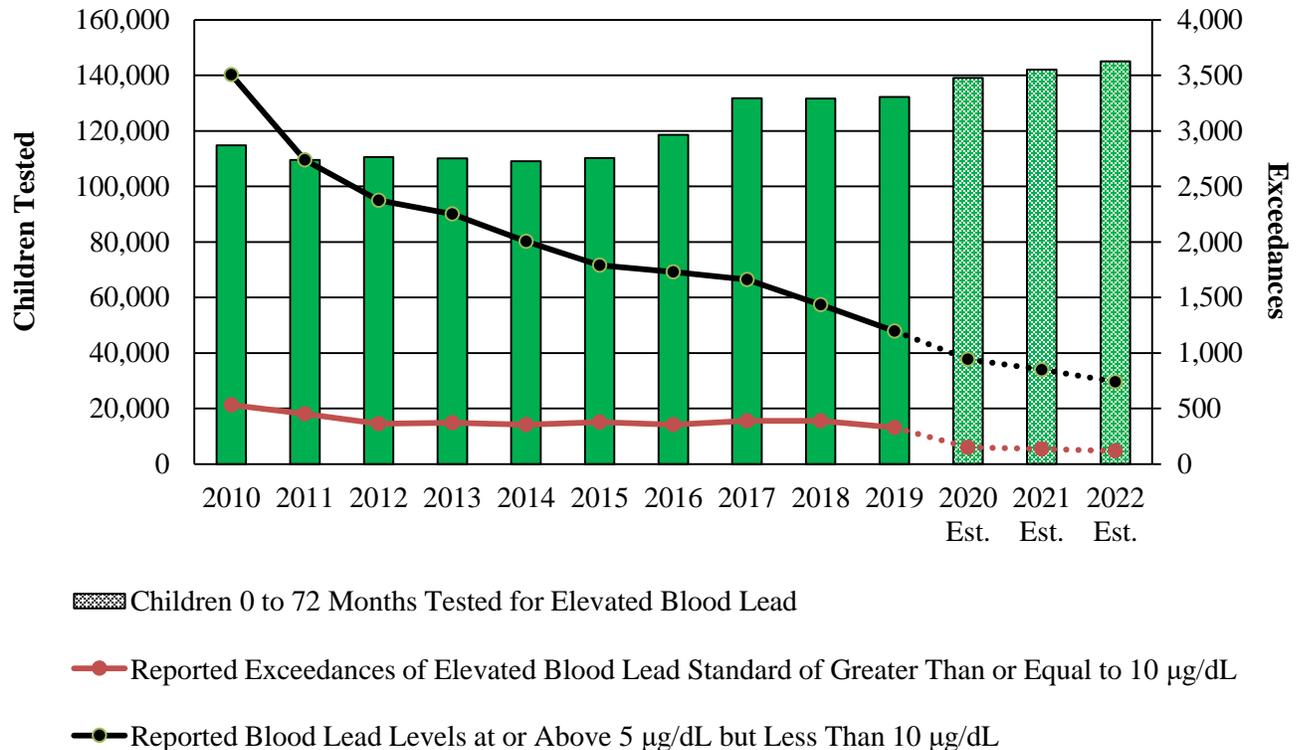
In terms of in-State sources, MDE has noted that in the past, it has taken action regarding both stationary and mobile emission sources. For stationary sources, it has imposed more stringent nitrogen oxide emission limits on both coal-fired electric generating units and municipal waste combustors. For mobile sources, Maryland has joined with other states to preserve national vehicle emissions standards and to protect Maryland’s ability to retain its vehicle emissions program in its current form. In addition, Maryland also continues to implement the following long-standing programs to address ozone: VEIP; the Maryland Healthy Air Act; and the Clean Cars Act. On December 21, 2020, Maryland joined seven other states in signing a statement of support for the new Transportation and Climate Initiative of the Northeast and Mid-Atlantic States but did not join Connecticut, Massachusetts, Rhode Island, and the District of Columbia in actually launching the Transportation and Climate Initiative Program. The program is an effort to reduce greenhouse gas pollution, and presumably other emissions, from motor vehicles in the region.

2. Child Blood Lead Levels Continue to Decline despite More Testing

MDE’s third goal is to reduce Maryland citizens’ exposure to hazards. Under this goal is the objective to reduce the number of blood lead levels over 10 micrograms per deciliter found and the number of blood lead levels between 5 and 10 micrograms per deciliter by 10% annually. **Exhibit 2** shows that the number of children between the age of 0 and 72 months tested for elevated blood lead continues to rise, while the reported exceedances of the elevated blood lead standard of between 5 and

10 micrograms per deciliter – the most stringent standard for child blood lead levels – continues to fall. The calendar 2020 numbers will be released with the annual report in October 2021.

Exhibit 2
Child Blood Lead Status
Calendar 2010-2022 Est.



µg/dL: micrograms of lead per deciliter of blood

Source: Governor’s Fiscal 2022 Budget Books; Maryland Department of the Environment

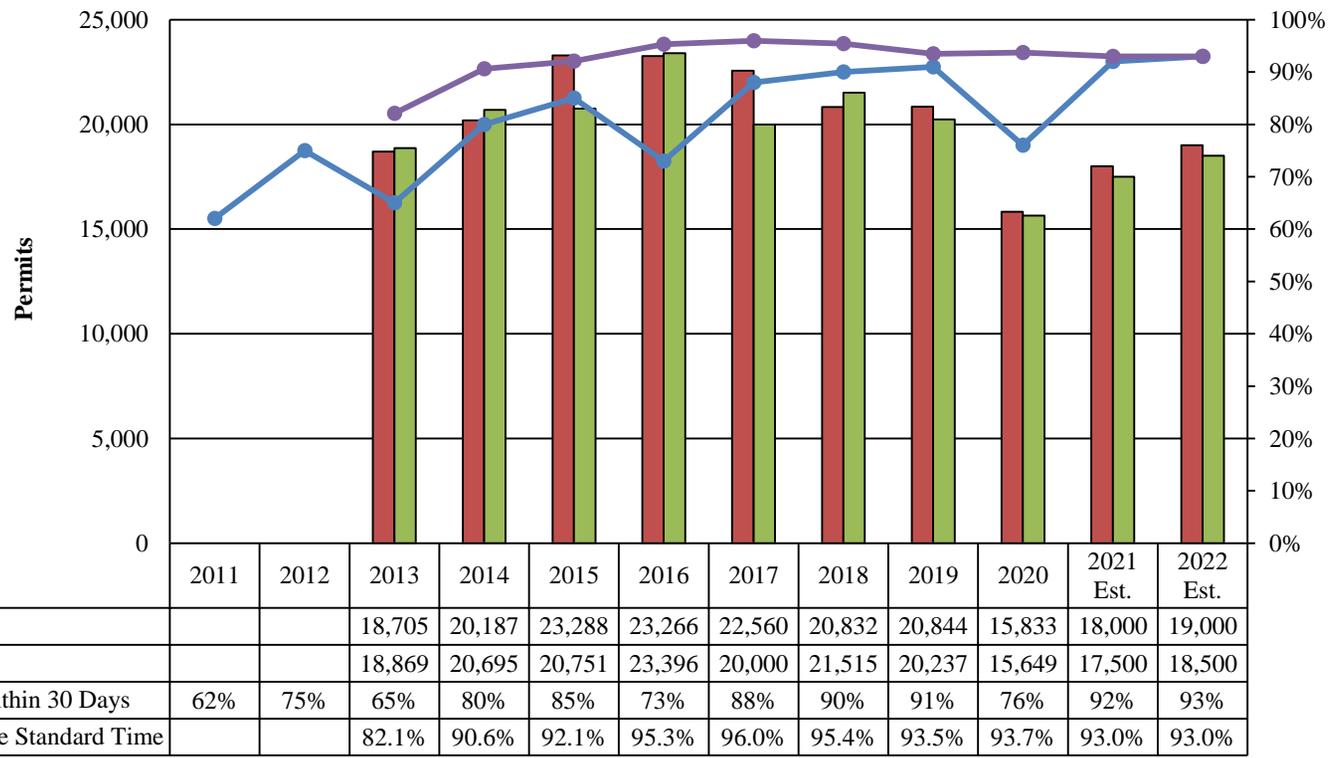
3. Public Information Act Responses Decline during the COVID-19 Pandemic While Permit Processing Is Unaffected

MDE’s first goal is to provide excellent customer service and community outreach. Under this goal are two objectives: respond to 80% of PIA requests within 30 days of receipt; and meet permit turnaround times for 90% of the permits processed. As shown in **Exhibit 3**, the percentage of PIA responses issued within 30 days decreased from 91% in fiscal 2019 to 76% in fiscal 2020, which reflects

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the difficulty MDE’s employees experienced transitioning from in-office access to records and databases to a teleworking environment during the COVID-19 pandemic. In contrast, the percentage of permits processed within the applicable standard time hardly changed from 93.5% in fiscal 2019 to 93.7% in fiscal 2020. Although, this may partially reflect the reduction in both the number of permit applications received and the number of permits issued, which both dropped substantially during the COVID-19 pandemic, presumably due to the grace period for permits.

**Exhibit 3
Public Information Act and Permit Data
Fiscal 2011-2022 Est.**



PIA: Public Information Act

Source: Governor’s Fiscal 2022 Budget Books

Fiscal 2020

MDE’s fiscal 2020 actual budget data incorrectly reflects the allocation of funding for personnel expenditures. The fringe benefit expenditures – health insurance, pension contributions, and turnover adjustments, among others – are almost entirely reflected as Social Security contributions, which makes it difficult to do historical data comparisons. **The Department of Legislative Services (DLS) recommends that committee narrative be adopted requesting that MDE reflect prior year actual personnel expenditures up to and including fiscal 2021 in the correct subobjects with the fiscal 2023 budget submission.**

Fiscal 2021

Cost Containment

At the July 1, 2020 BPW meeting, the board approved cost containment reductions in order to balance the fiscal 2021 budget as a result of the COVID-19 pandemic. The MDE share of this reduction totaled \$4,062,494.

Statewide reductions for Department of Information Technology (DoIT) enterprise services costs, IT position salaries, and excess balance from the State’s self-insured Unemployment Insurance fund totaled \$424,089. Agency specific reductions for MDE included the following:

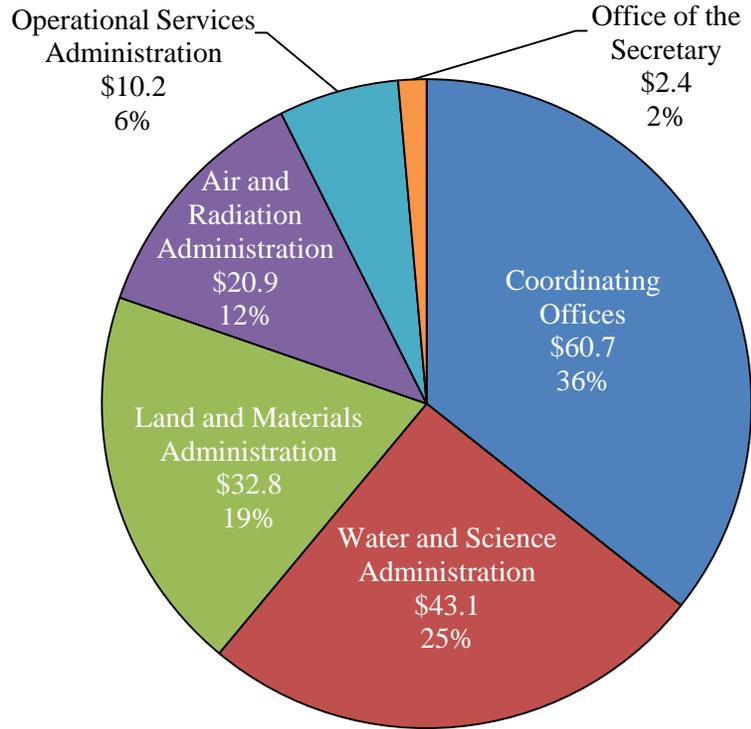
- ***Water and Science Administration:*** \$2,060,797 in general funds for vehicles, gas, and maintenance; equipment and supplies; deferring filling vacant positions until January 1, 2021; shifting support for positions to nongeneral funds; increased turnover; and using approximately \$750,000 of special funds and federal funds to defray general fund operating costs in the Wetlands, Wastewater, and Dam Safety programs, although a budget amendment has not been processed yet for this replacement funding;
- ***Coordinating Offices:*** \$567,461 in general funds for shifting support for positions to nongeneral funds and increasing turnover;
- ***Land and Materials Administration:*** \$288,600 in general funds for deferring filling vacant positions until January 1, 2021, and increased turnover;
- ***Office of the Secretary:*** \$130,956 in general funds for shifting a position to nongeneral funds and increased turnover;
- ***Operational Services Administration:*** \$53,227 in general funds for increased turnover; and
- ***Air and Radiation Administration:*** \$37,364 in general funds for increased turnover.

Fiscal 2022 Overview of Agency Spending

MDE is organized into six administrative units and is staffed by 880.0 regular positions and 75.00 contractual full-time equivalents (FTE) in the fiscal 2022 allowance. **Exhibit 4** reflects the \$171.1 million spending breakdown for the six units without the adjustment for the annualization of the fiscal 2021 2% cost-of-living adjustment (COLA) and the fiscal 2022 annual salary review (ASR) as follows.

- **Coordinating Offices (\$60.7 Million, 36%):** The primary funding is \$33.0 million for debt service on Bay Restoration Fund revenue bonds; \$11.3 million for grants, of which \$11.0 million is for operations and maintenance grants for wastewater treatment plants upgraded to enhanced nutrient removal technology; \$10.1 million for regular positions; and \$5.1 million for contracts, of which \$2.7 million is for DoIT services allocation and \$1.5 million is for agreements with local jurisdictions to administer septic system upgrade grants and regulations.
- **Water and Science Administration (\$43.1 Million, 25%):** The primary funding is \$33.6 million for regular positions; \$4.1 million for grants comprised of \$1.3 million in federal funding for local government nonpoint source pollution controls and implementation of the Chesapeake Bay Watershed Implementation Plan, \$0.6 million for addressing lead in school drinking water, and \$0.4 million for Safe Drinking Water Act funding for transient noncommunity water supplies; and \$3.1 million for contracts, including \$0.8 million for digital floodplain mapping.
- **Land and Materials Administration (\$32.8 Million, 19%):** The primary funding is \$24.0 million for regular positions; \$5.6 million for contracts of which \$1.4 million is for abandoned mine land reclamation projects, \$1.0 million for oil spill investigation and remediation activities, and \$0.8 million for Maryland Environmental Service (MES) scrap tire project development and stockpile cleanups; and \$1.1 million for grants of which \$0.5 million is for reimbursement of site rehabilitation costs of underground storage tanks.
- **Air and Radiation Administration (\$20.9 Million, 12%):** The primary funding is \$17.1 million for regular positions and \$2.1 million for contracts of which \$0.6 million is for dues to participate in the multistate Regional Greenhouse Gas Initiative.
- **Operational Services Administration (\$10.2 Million, 6%):** The primary funding is \$5.5 million for rent and \$4.0 million for regular positions.
- **Office of the Secretary (\$2.4 Million, 2%):** The primary funding is \$1.8 million for regular positions.

Exhibit 4
Overview of Agency Spending
Fiscal 2022 Allowance
(\$ in Millions)



Source: Department of Budget and Management

Proposed Budget Change

The MDE fiscal 2022 adjusted allowance decreases by \$3.5 million, or 2.0%, relative to the fiscal 2021 adjusted working appropriation, as shown in **Exhibit 5**. The changes by fund reflect an increase of \$1.7 million in general funds, a decrease of \$4.7 million in special funds, an increase of \$1.3 million in federal funds, and a decrease of \$1.8 million in reimbursable funds. The general fund increase primarily reflects regular position expenditures. The special fund decrease primarily reflects the end of the \$10.0 million for the Clean Water Commerce Act grants, which is offset partially by an increase of \$3.0 million for the operations and maintenance grants for wastewater treatment plants upgraded to enhanced nutrient removal technology. The federal fund increase is for regular position expenditures. The reimbursable fund decrease is due to a reduction in the one-time funding from the Maryland Department of Health (MDH) for the Sewer Sentinel Initiative from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and for regular position expenditures.

Exhibit 5
Proposed Budget
Department of the Environment
(\$ in Thousands)

How Much It Grows:	General Fund	Special Fund	Federal Fund	Reimb. Fund	Total
Fiscal 2020 Actual	\$35,344	\$98,951	\$30,237	\$3,705	\$168,236
Fiscal 2021 Working Appropriation	33,103	104,582	32,018	5,467	175,170
Fiscal 2022 Allowance	<u>34,806</u>	<u>99,856</u>	<u>33,359</u>	<u>3,691</u>	<u>171,711</u>
Fiscal 2021-2022 Amount Change	\$1,702	-\$4,726	\$1,341	-\$1,776	-\$3,459
Fiscal 2021-2022 Percent Change	5.1%	-4.5%	4.2%	-32.5%	-2.0%
Where It Goes:					<u>Change</u>
Personnel Expenses					
Cost containment modifications.....					\$4,174
Turnover adjustments.....					807
Fiscal 2021 2% cost-of-living allowance and fiscal 2022 annualization.....					800
Unemployment compensation.....					171
Fiscal 2022 annual salary review for fiscal series.....					162
Employee and retiree health insurance					-156
Regular positions decrease by 3.....					-196
Pension contributions.....					-226
Regular earnings					-458
Other fringe benefit adjustments.....					-73
Other Changes					
<i>Environmental Policy</i>					
Operations and maintenance grants for upgraded wastewater treatment plants					3,000
Maryland Environmental Service digital floodplain mapping and database maintenance					99
MDH agreement for laboratory certification and analysis of drinking water samples					80
Maryland Geological Survey work on ambient groundwater quality in shallow aquifers.....					75
Department of Natural Resources work on improving stream/wetland restoration.....					63
Independent laboratory testing for dust and lead paint					-56
Integrated Water Planning Program reduction in contracts					-68
Land Restoration Program contracts, including carbon filtration units for drinking wells.....					-100
Sewer Sentinel Initiative with MDH.....					-1,000
Clean Water Commerce Act final funding for nutrient and sediment reduction					-10,000

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Where It Goes:	<u>Change</u>
<i>Routine Operations</i>	
Rent increases primarily at Montgomery Park headquarters	199
Mining Program increase for supplies and materials	124
Department of Information Technology services allocation.....	103
Installment purchase payments across the agency	-68
Communications expenditures decrease	-76
Vehicle costs decrease primarily due to one-time purchases in Land Management Administration	-153
Contractual full-time equivalents decrease by a net of 6	-197
Administrative hearings costs decrease	-209
Other	-279
Total	-\$3,459

MDH: Maryland Department of Health

Note: Numbers may not sum due to rounding. The fiscal 2021 appropriation includes deficiencies, planned reversions, and general salary increases. The fiscal 2022 allowance includes contingent reductions and annualization of fiscal 2021 general salary increases.

Personnel

Overall, there is an increase of \$5,003,737 in MDE’s personnel expenses for fiscal 2022. The largest change is \$4,174,050 for cost containment modifications to reflect the return of funding after the fiscal 2021 cost containment actions. For instance, the combination of the special fund budget amendment not being processed yet to backfill the fiscal 2021 cost containment reductions and the return of general funds in the fiscal 2022 allowance both increase the difference between the fiscal 2021 working appropriation and the fiscal 2022 allowance. The \$4,174,050 also includes \$1 million in general funds budgeted for the Lead Poisoning Prevention Program due to declining fee revenue and fewer penalties being paid from lead-contaminated buildings and homes. Of note, the decline in Lead Poisoning Prevention Fund revenue is not reflected in the special fund summary information provided by the Department of Budget and Management (DBM), which increases from \$3.9 million in fiscal 2020, to \$5.1 million in fiscal 2021, and to \$5.3 million in fiscal 2022.

The other personnel increases include \$806,833 for turnover adjustments, \$800,285 for the net annualization of the fiscal 2021 2% COLA, and \$171,360 for unemployment compensation. The turnover adjustments reflect the reduction of turnover from 7.93% to 7.00%, which in turn partially reflects the fiscal 2021 cost containment actions that have not been backfilled yet and the reduction of turnover for the 10 new positions budgeted in the fiscal 2021 allowance – turnover is typically budgeted at a higher rate for new positions to reflect the time that it takes to fill them. There is also an increase of \$161,707 for the ASR funding for the fiscal series. The ASR funding will be allocated by budget amendment from DBM. MDE’s share of the funding is \$24,339 in general funds, \$72,806 in special funds, and \$64,562 in federal funds.

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In terms of personnel reductions, there are decreases of \$458,440 for regular earnings, \$226,367 for pension contributions, \$196,440 for 3.0 abolished long-term vacant regular positions, and \$155,958 for employee and retiree health insurance.

Other Changes

Overall, the nonpersonnel portion of the MDE fiscal 2022 adjusted allowance decreases by \$8,462,515. The areas of change may be broadly categorized as environmental policy and routine operations.

Environmental Policy

There is one large increase under the environmental policy category for fiscal 2022. This is the increase of \$3,000,000 for operations and maintenance grant funding for wastewater treatment plants upgraded to enhanced nutrient removal technology. This reflects an increase from \$8,000,000 to \$11,000,000. This is funding from the Bay Restoration Fund; up to 10% of the annual revenue generated from wastewater treatment plant users may be used for operations and maintenance costs.

Other increases include a net increase of \$98,850 in federal funds for MES activities in the Water and Science Administration – Sediment, Stormwater and Dam Safety program, comprised of an increase of \$110,850 for statewide support of digital floodplain mapping, which is offset partially by a decrease of \$12,000 for database maintenance. Funding for laboratory certification and analysis of drinking water samples as part of the Safe Drinking Water Act increases by \$80,000 in federal funds as part of an MDH agreement. There is also an increase of \$75,000 in federal funds for ongoing Maryland Geological Survey work on ambient groundwater quality in shallow aquifers. Finally, there is an increase of \$62,500, comprised of an increase of \$100,000 in federal funds and a decrease of \$37,500 in general funds, for an agreement with the Department of Natural Resources (DNR) for development of guidance, maps, and tools related to improving stream and wetland restoration in the Water and Science Administration – Wetlands and Waterways program.

In terms of reductions, the largest is a decrease of \$10,000,000 for the Clean Water Commerce Act. The Clean Water Commerce Act provided for final fiscal 2021 funding of \$10,000,000 in special funds from the Bay Restoration Fund. The funding provided for cost-effective nutrient and sediment reductions and was required to be budgeted by Chapters 366 and 367 of 2017. Another large decrease is for the Sewer Sentinel Initiative.

The Sewer Sentinel Initiative reflects \$1,000,000 in one-time reimbursable funds in fiscal 2021. This funding came from MDH as part of the CARES Act funding and is being used to take periodic samples of wastewater at up to 50 congregate housing facilities – such as nursing homes, subsidized housing, and correctional facilities. This sampling is being conducted in order to determine whether the COVID-19 virus is present – before the onset of symptoms and from any asymptomatic carriers present – and to arrive at a quantitative estimate of the virus present in wastewater. The intent is to identify increased concentrations that may indicate an outbreak before other benchmarks like clinical testing and hospitalization rates.

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Other decreases include a reduction of \$100,000 for Land and Materials Administration – Land Restoration Program funding for carbon filtration units for drinking wells and various contracts. There is also a net decrease of \$68,000 for Integrated Water Planning Program contracts comprised of a decrease of \$183,000 in federal funds, which is offset partially by an increase of \$115,000 in special funds. Finally, there is a reduction of \$56,000 for independent laboratory services testing for dust and lead paint in the Land and Materials Administration – Lead Poisoning Prevention Program based on recent expenditure history.

Routine Operations

The largest increase under the routine operations category is \$199,386 for rent. This is primarily due to an increase of \$179,526 at the Montgomery Park headquarters, comprised of increases of \$202,091 in special funds and \$1,905 in reimbursable funds, which are offset partially by a decrease of \$24,470 in general funds. The rent increases because there is an inflationary factor in the lease agreement negotiated by the Department of General Services.

Other increases include an additional \$123,720 (comprised of an increase of \$156,892 in general funds and a decrease of \$33,173 in special funds) in the Land and Materials Administration – Mining Program for doser supplies such as limestone for addressing acid mine drainage due to more dosers going online and thus needing more supplies. There is also an increase for the DoIT services allocation, which increases by \$103,440 in the Coordinating Offices, comprised of an increase of \$98,547 in general funds and \$5,312 in special funds, which are offset partially by a decrease of \$419 in federal funds.

In terms of decreases, the largest is a decrease of \$208,783 for administrative hearing costs in the Office of the Secretary, comprised of \$104,392 in general funds and \$104,391 in special funds. Another decrease is \$196,916 for contractual FTEs, which decrease by 6.0 in the fiscal 2022 allowance.

Funding for vehicles decreases by a net of \$152,665. This primarily reflects a decrease of \$267,884 due to the one-time purchase of nine replacement vehicles in fiscal 2021 in the Land Management Administration. This reduction is offset partially by an increase of \$66,554 for maintenance repair costs and \$43,521 for gas and oil, among other increases, across the agency. Gas, oil, and maintenance costs were reduced as part of the July 1, 2020 BPW cost containment actions in order to reflect the lack of State vehicle use during the COVID-19 pandemic, so these costs are budgeted to increase in fiscal 2022 as in-person work resumes. There are also across the agency reductions of \$75,855 for communications expenditures and \$67,727 for installment purchase payments.

Personnel Data

	<u>FY 20</u> <u>Actual</u>	<u>FY 21</u> <u>Working</u>	<u>FY 22</u> <u>Allowance</u>	<u>FY 21-22</u> <u>Change</u>
Regular Positions	893.00	883.00	880.00	-3.00
Contractual FTEs	<u>61.42</u>	<u>81.00</u>	<u>75.00</u>	<u>-6.00</u>
Total Personnel	954.42	964.00	955.00	-9.00

Vacancy Data: Regular Positions

Turnover and Necessary Vacancies, Excluding New Positions	61.60	7.00%
Positions and Percentage Vacant as of 12/31/20	119.00	13.48%
Vacancies Above Turnover	57.40	

- MDE’s position count decreases by 3.0 between the fiscal 2021 working appropriation and the fiscal 2022 allowance because 3.0 long-term vacant positions are abolished. The 3.0 abolished regular positions are as follows: an administrative officer I in the Water and Science Administration – Compliance program; an administrator I in the Air and Radiation Administration – Air Quality Planning program; and an administrator I in the Coordinating Offices – Office of Legislative and Intergovernmental Affairs.
- As of December 31, 2020, MDE had 119 vacant positions of which 52 positions have been vacant for more than a year. MDE notes the following status for those positions that have been vacant for more than a year: 4 are filled; 7 either are being reviewed for contractual conversion or the contractual conversion has already taken place; 1 is in the selection made phase; 4 are being interviewed for; 16 are in recruitment; 8 are being requested for recruitment; 9 are either being reclassified for recruitment, studied for recruitment, or are part of a reorganization; and 3 have been abolished in the fiscal 2022 allowance. MDE notes that it had a number of vacant positions in the recruitment process before DBM instituted a hiring freeze in April 2020. MDE recently received approval from DBM to recruit a number of positions agencywide.
- MDE contractual FTEs decrease by a net of 6.0 in the fiscal 2022 allowance. There is a net decrease of 4.0 FTEs in the Air and Radiation Administration, 2.0 FTEs in the Water and Science Administration, and 2.0 FTEs in the Land Management Administration, which are offset partially by an increase of 2.0 FTEs in Coordinating Offices. These changes primarily reflect FTEs that are no longer needed or will be converted to a regular position using a vacant position.
- The MDE turnover rate decreased from 7.93% in the fiscal 2021 working appropriation to 7.00% in the fiscal 2022 allowance. Therefore, MDE must hold open about 62 positions throughout fiscal 2022. MDE had 119 positions vacant, or 13.48%, as of December 31, 2020.

Issues

1. COVID-19 Pandemic Impact on Environmental Enforcement and Air/Water Quality Monitoring in Maryland

The federal government and MDE have both responded to the COVID-19 pandemic by making regulatory changes. MDE's actions can be categorized under the categories of environmental enforcement, applications and permitting, water quality monitoring, air quality monitoring, and air pollution.

Federal Action

On March 26, 2020, EPA announced a temporary enforcement discretion policy in response to the pandemic. Under the policy, regulated facilities were expected to comply with regulatory requirements where reasonably practicable and return to compliance as quickly as possible. To be eligible for enforcement discretion, facilities were required to document any decisions made to prevent or mitigate noncompliance and demonstrate how noncompliance was caused by the COVID-19 pandemic. EPA applied the policy retroactively beginning on March 13, 2020; it expired on August 31, 2020. The policy allowed authorized states or tribes to take a different approach under their own authorities.

On June 4, 2020, former President Donald J. Trump issued an executive order entitled, *Accelerating the Nation's Economic Recovery from the COVID-19 Emergency by Expediting Infrastructure Investments and Other Activities*. The order advised agencies to take all reasonable measures to speed infrastructure investments and other actions while also providing appropriate protection for public health and safety, natural resources, and the environment, as required by law. To accomplish this acceleration, the order directed the heads of agencies to use statutory exemptions, categorical exclusions, completed analyses, and concise and focused analyses on actions related to the National Environmental Protection Act (NEPA) and emergency procedures on actions related to NEPA, the Endangered Species Act, and various permitting provisions for U.S. Army Corps of Engineers projects.

State Action

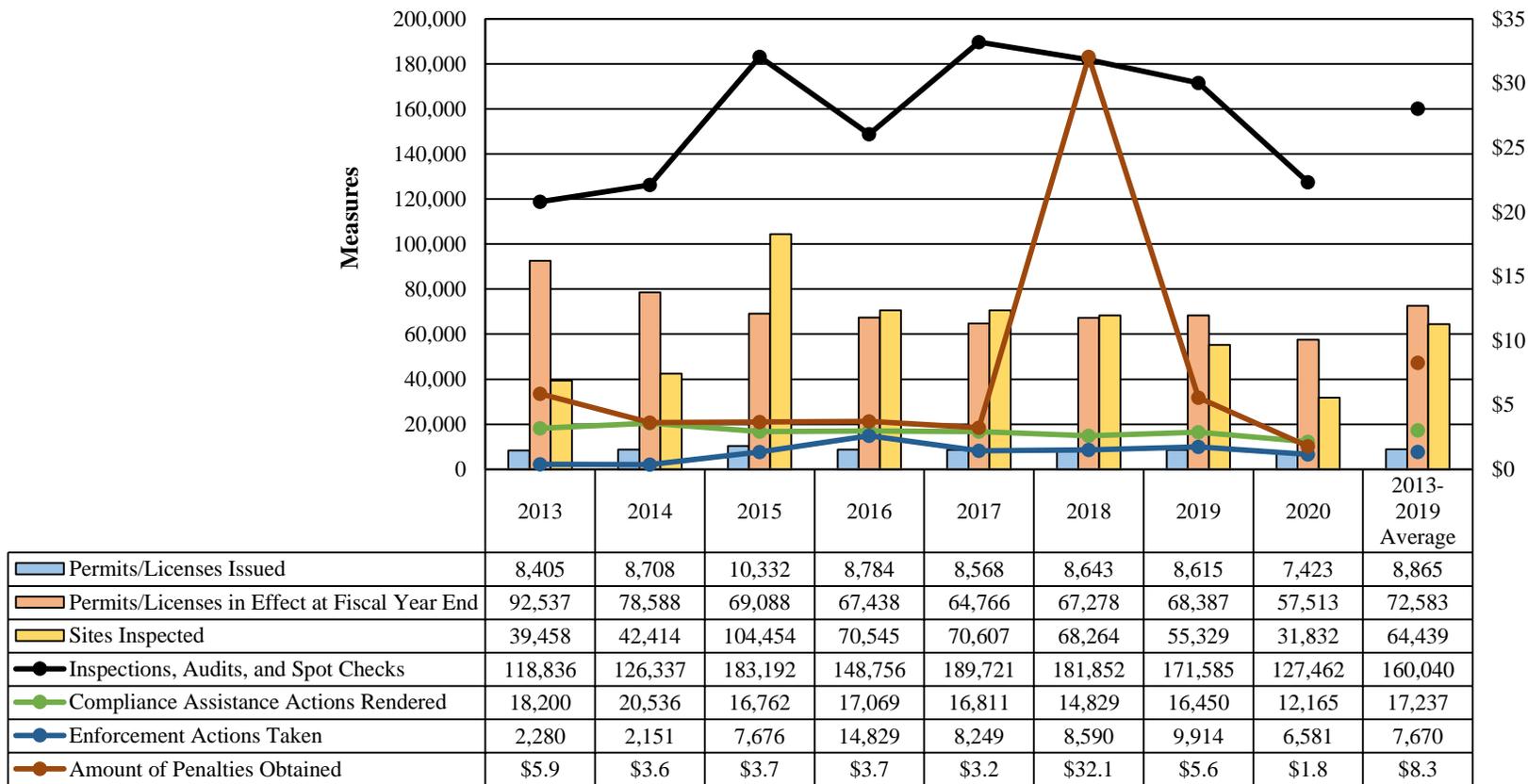
Environmental Enforcement

In response to Governor Lawrence J. Hogan, Jr.'s proclamation declaring a state of emergency on March 5, 2020, MDE released a statement regarding its administrative role amid the coronavirus pandemic. MDE stated that discretionary enforcement may be necessary but would be conducted on a limited, case-by-case basis. Additionally, MDE stated its expectation that regulated entities make every effort to comply with environmental obligations and responsibilities, including monitoring and reporting requirements.

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MDE did not provide guidance on COVID-19-related leniency and, accordingly, the number of Maryland entities seeking delays or waivers has been relatively low. Given that the State policy on enforcement during the pandemic has been more stringent than the federal enforcement discretion policy, and federal entities have continued to apply for State permits despite the federal policy and executive order, it appears that the impacts of the federal policy and executive order on the State are not likely to be significant. However, any potential impacts that changes in other states' enforcement and monitoring activities will have on the State's water or air quality are not yet fully known. The scope of the pandemic's impact on environmental compliance and enforcement will be more fully understood as additional information becomes available. For instance, as shown in **Exhibit 6**, the data in MDE's annual enforcement report for fiscal 2020 indicates that all enforcement and compliance measures decreased in fiscal 2020 relative to both fiscal 2019 and the average for the fiscal 2013 through 2019 time period.

Exhibit 6
Environmental Enforcement and Compliance Measures
Fiscal 2013-2020
(\$ in Millions)



Note: The penalties obtained in fiscal 2018 primarily reflect the \$29 million received from Volkswagen AG and its affiliates, Audi AG, and Porsche AG to settle a lawsuit related to auto manufacturers using “defeat devices” to meet diesel vehicle emission standards.

Source: Maryland Department of the Environment

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MDE has continued pursuing enforcement actions during the pandemic. In some cases, permit noncompliance has been referred to compliance staff for enforcement, potentially resulting in fines, additional inspections, or orders to take corrective actions to mitigate any impacts.

From March 2020 to September 2020, MDE received approximately 68 requests for enforcement discretion. The majority of requests were for flexibility on the timing of submitting monitoring reports due to the closure of facilities and a reduction in staffing. A total of 63% of the requests submitted to MDE were for extensions of time to submit reports, 16% for digital reporting, and 6% for a change of operating hours. A total of 72% of the requests have been granted, 16% denied, and 12% are pending. MDE denied requests from the Washington Suburban Sanitary Commission, Baltimore City, and Baltimore County for relief from their obligations under consent decrees to reduce sewage overflows.

Over the course of the pandemic, MDE's processing of significant enforcement actions (actions brought to a resolution with a financial penalty of \$10,000 or more) has decreased. Between calendar 2016 and 2019, for the January through March quarter, MDE resolved an average of 6.5 significant enforcement actions compared with 2 significant enforcement actions being resolved for that same quarter in 2020. Similarly, between 2016 and 2019, for the April through June quarter, MDE resolved an average of 7.5 significant enforcement actions but resolved only 3 significant enforcement actions for the same quarter in 2020.

MDE also exercised discretion in administering or adapting various deadlines and requirements.

- In collaboration with EPA and the Maryland Department of Transportation (MDOT), MDE repurposed several VEIP stations for COVID-19 tests.
- Citing persisting public health concerns, MDE issued a public notice on September 18, 2020, altering the rental registration renewal requirement for certain properties affected by the presence of lead paint; instead, MDE retained the due date of December 31, 2020, regardless of whether a state of emergency or a catastrophic health emergency are in effect.
- MDE extended the deadline by which schools and food service businesses must discontinue the sale or provision of food or beverages in expanded polystyrene (EPS) food service products from July 1, 2020, to October 1, 2020. The extension does not apply to the sale of EPS food service products, which took effect July 1, 2020. As a result, food service businesses and schools were allowed to continue using existing inventories of EPS food service products until October 1, 2020, but were not able to purchase additional EPS food service products after July 1, 2020. This limited action by the State in response to COVID-19 does not affect or alter the effective date of a county or municipal law limiting the use of EPS products.

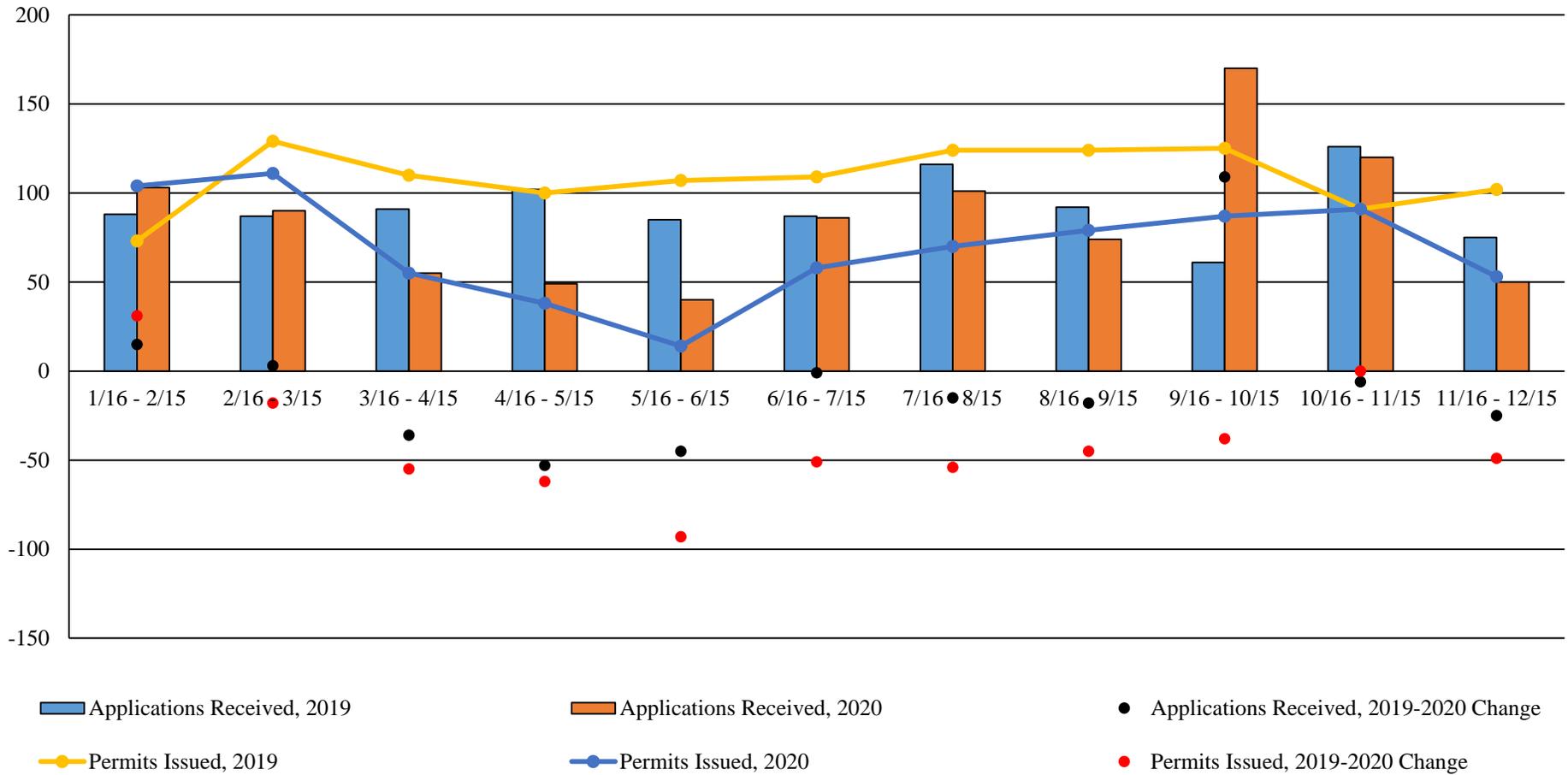
Applications and Permitting

During spring and summer 2020, there was a sharp decrease in the number of applications MDE received as well as the number of permits and licenses MDE issued when compared with 2019.

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Coinciding with the state of emergency, beginning in mid-March 2020, applications received and permits and licenses issued were down to about half of 2019 levels. As shown in **Exhibit 7**, between May 16, 2020, and June 15, 2020, (the period with the lowest totals in each category), only 40 applications were received, and 14 permits and licenses were issued, compared with 85 applications received and 107 permits and licenses issued during the same period in 2019. While applications received during the June 16, 2020, through July 15, 2020 reporting period were at a level consistent with 2019 numbers, the number of permits and licenses issued during that reporting period remained relatively low: 55 compared to 109 during the same period in 2019. In addition, there was a substantial increase in the applications received during the September 16, 2020, through October 15, 2020 reporting period. This consistent imbalance between the number of applications received and permits and licenses issued could lead to a backlog of applications.

Exhibit 7
Permit Applications Received and Issued
Calendar 2019-2020



Source: Maryland Department of the Environment

Water Quality Monitoring

Throughout the pandemic, MDE has maintained its field presence at facilities that MDE considers are the most critical in terms of public health and the environment by continuing with inspections, testing, and enforcement of these facilities. This includes monitoring for contaminants at water treatment plants, maintaining safe conditions at dams, and managing capacity issues at incinerators and landfills.

MDE emergency response and oil control team members continued to respond to spills and leaks. Maryland Dam Safety staff continued to make in-person inspections for emergencies or issues involving a critical facility and have begun virtual inspections of dam construction and dams that are generally in good repair.

Air Quality Monitoring

For over 30 years, MDE and the University of Maryland, College Park (UMCP) have worked together on conducting research related to air quality and climate change. In response to the pandemic, MDE and UMCP, with assistance from MDOT and DNR, collaborated to produce a two-part analysis. Part one was released in April 2020, and part two was released in May 2020. The analysis used traffic, satellite, air quality/greenhouse gas (GHG), and other data to analyze how reduced traffic and other changes linked to social distancing during the COVID-19 pandemic affected pollutants that contribute to poor air quality and climate change. The analysis is still in the early stages and, therefore, does not provide definite conclusions but does provide unprecedented data related to traffic, emissions, and air quality.

Part 1 of the analysis showed significantly reduced traffic in the early weeks of the declared emergency. Traffic counts show two clear phases associated with Maryland policies on mandatory telework and shelter-in-place. Light duty vehicle traffic (cars and passenger trucks) dropped dramatically, by at least 50%. In particular, car traffic in March was dramatically down, with only about half as many light-duty vehicles on I-95. Over that same time period, truck traffic had an initial, minor increase for a week. Truck numbers dropped through April but by a smaller percentage.

In part 2 of the analysis, traffic continued to be down, but both car and truck traffic began to slowly increase around the middle of April. Light duty vehicle traffic remained down by approximately 40% but steadily increased back toward levels seen before social distancing measures were implemented. The most recent data indicated traffic only 32% below baseline levels. By May, truck traffic appeared to have returned to normal levels. Heavy duty diesel vehicles experienced a maximum 8% decline during the lowest week in April. However, since March 14, 2020, truck traffic in general has only been down 2% in aggregate and has been at levels similar to the baseline prior to COVID-19-related response activities.

Data on vehicle miles traveled (VMT) showed a dramatic reduction in VMT in the 50% to 80% range. According to the study, these preliminary results provide a suggestion of what the air quality and climate change benefit could be expected if half of the light duty vehicle fleet was replaced by electric vehicles.

Air Pollution

Carbon dioxide (CO₂) is the most prevalent GHG linked to climate change. Preliminary data from the MDE/UMCP analysis suggests that emissions of both CO and CO₂ from Baltimore and Washington appear to have fallen roughly 30% due to travel and other restrictions implemented to fight COVID-19. Levels of CO₂ in the air, measured from tall towers and by UMCP aircraft flying around Baltimore, are also lower than expected. These reductions are clearly linked to reduced vehicle traffic and likely linked to changes in industry and energy generation. Satellite measurements of NO₂ continue to show significant reductions, a good indicator for combustion-related emissions.

Levels of air pollutants like ozone and fine particles (PM_{2.5}) were also low for a time but appear to have been driven more by the historical downward trend due to regulatory programs than COVID-19-related activities. The analysis shows emissions from power plants and other energy generation sources are also down. Emissions of nitrogen oxides and SO₂, key emissions linked to ozone and PM_{2.5} air pollution, are down. Emissions of CO₂ from energy generation were also low for a time. Similar to current levels of ozone and fine particles, these low emissions in the energy sector appear to be more driven by historical downward trends due to regulatory programs than COVID-19-related activities.

2. Maryland Used Tire Cleanup and Recycling Fund Solvency Report Considers Benefits of Possible Fee Increase

Budget bill language in the fiscal 2021 operating budget restricted \$200,000 in general funds pending the submission by November 1, 2020, of the *Maryland Scrap Tire Annual Report* and a report on ways to make the Maryland Used Tire Cleanup and Recycling Fund solvent. Section 9-275(c) of the Environment Article specifies that an annual status report is due on or before November 1 of each year. MDE has not consistently met this requirement. In addition, the Maryland Used Tire Cleanup and Recycling Fund has exhibited a declining balance.

Maryland Scrap Tire Annual Report

The submitted report, when taken into context with prior year reports, generally reflects a declining fund balance for the Maryland Used Tire Cleanup and Recycling Fund and fluctuating levels of scrap tire projects funded. However, a number of expenditure category reductions in fiscal 2020 allowed the fund to close with a slightly higher balance. As shown in **Exhibit 8**, revenues have fluctuated over the fiscal 2015 to 2020 time period, with an average of \$3.7 million per year, while expenditures have averaged \$4.7 million – primarily due to expenditures for the Scrap Tire Program, the Land and Materials Administration, and stockpile cleanups.

Exhibit 8
Maryland Used Tire Cleanup and Recycling Fund
Fiscal 2015-2020

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Difference</u> <u>2015-2020</u>	<u>Average</u> <u>2015-2020</u>
Opening Fund Balance	\$4,934,999	\$6,345,979	\$4,265,842	\$3,737,235	\$3,208,690	\$903,128	-\$4,031,871	\$3,899,312
Add Open Prior Year Encumbrances	1,866,537	556,082	2,077,364	343,441	83,069	87,193	-1,779,344	835,614
Adjusted Opening Fund Balance	\$6,801,537	\$6,902,060	\$6,343,206	\$4,080,676	\$3,291,759	\$990,321	-\$5,811,216	\$4,734,926
Revenues								
Gross Used Tire Fees Revenues After Comptroller Adjustment	\$3,725,910	\$3,904,971	\$3,574,454	\$3,679,670	\$3,996,950	\$3,295,881	-\$430,029	\$3,696,306
Cost Recovery	0	0	176,410	0	0	128	128	29,423
Total Revenue	\$3,725,910	\$3,904,971	\$3,750,863	\$3,679,670	\$3,996,950	\$3,296,009	-\$429,901	\$3,725,729
Expenditures								
Scrap Tire Program Expenses	\$509,682	\$717,163	\$2,264,529	\$2,571,129	\$2,517,398	\$1,245,089	\$735,407	\$1,637,498
Land and Materials Administration Expenses	1,675,123	1,167,374	692,055	996,788	1,676,576	999,009	-676,113	1,201,154
Department Indirect Costs	477,530	610,052	845,028	627,945	780,263	439,398	-38,132	630,036
Stockpile Cleanups	110,419	1,896,877	2,108,309	223,144	1,229,550	566,525	456,106	1,022,471
MES Projects and Administration	-300,000	72,359	103,471	49,581	94,602	42,608	342,608	10,437
Prior Year Encumbrance Payments	1,152,632	0	0	0	0	0	-1,152,632	192,105
Total Expenditures	\$3,625,386	\$4,463,826	\$6,013,393	\$4,468,587	\$6,298,388	\$3,292,628	-\$332,758	\$4,693,701
Total Open Encumbrances	\$556,082	\$2,077,364	\$343,441	\$83,069	\$87,193	\$44,585	-\$511,497	\$531,956
Closing Fund Balance	\$6,345,979	\$4,265,842	\$3,737,235	\$3,208,690	\$903,128	\$949,117	-\$5,396,862	\$3,234,998

MES: Maryland Environmental Service

Note: The fiscal 2015 \$300,000 negative expenditure for MES Projects and Administration reflects the return of project funds advanced to MES but not fully expended. Scrap tire penalties are deposited into the Maryland Clean Water Fund. The penalty revenues were \$7,250 in fiscal 2017, \$30,253 in fiscal 2018, \$1,715 in fiscal 2019, and \$30,038 in fiscal 2020.

Source: Maryland Department of the Environment

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Between fiscal 2019 and 2020, the revenues decreased by \$0.7 million, but this was more than offset by expenditure decreases of \$3.0 million, which included \$1.3 million for the Scrap Tire Program, \$0.7 million for Land and Materials Administration administrative expenses, \$0.7 million for stockpile cleanups, and \$0.3 million for indirect costs. While no new scrap tire projects were initiated during fiscal 2020, and all of the cleanups completed in fiscal 2020 were conducted by the responsible party without using the fund, there was activity for three projects: \$629,927 in spending from the fund for the Garner/Brandywine project; credits to the fund of \$59,747 for the Scrap Tire Drop-Off Event; and \$3,655 for the Boehm/Crownsville project. Of note, there is insufficient funding going forward for the agricultural scrap tire recycling, which was popular in fiscal 2019.

Solvency Report

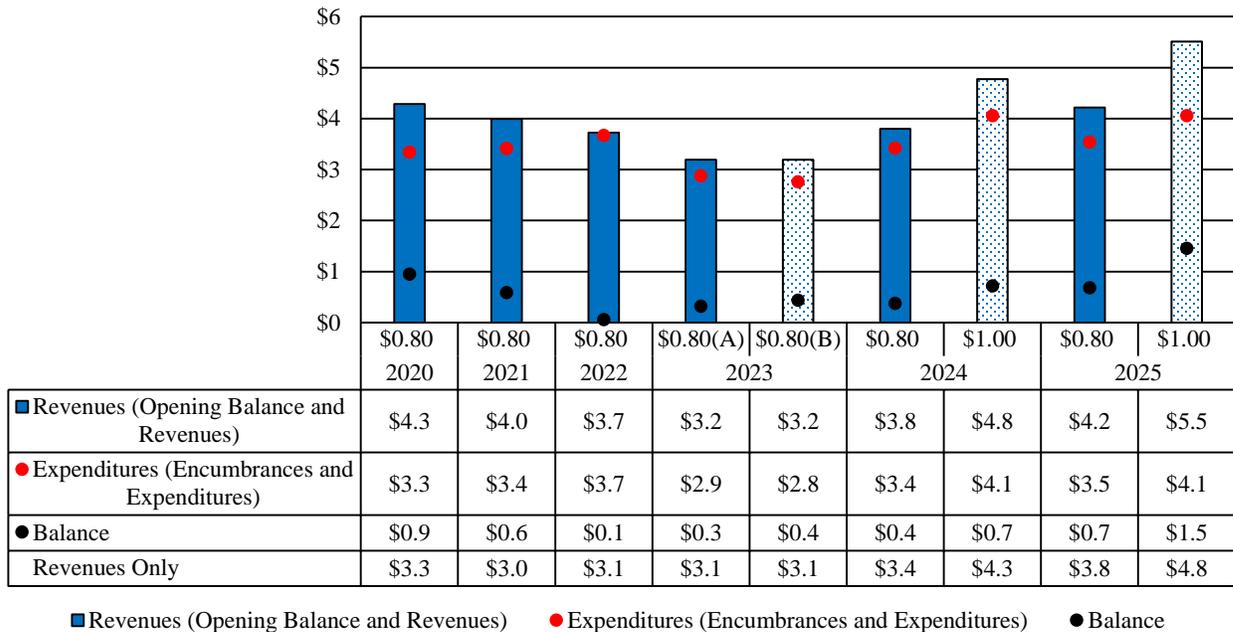
The solvency report was required to include the following:

- an analysis of the appropriate level at which the recycling fee per tire should be set and expenditures should be prioritized in order to address all of the funding needs;
- a description of what is included in each of the expenditure categories for each fiscal year from fiscal 2012 to 2021 and explanations for changes between fiscal years;
- the impact of the fiscal 2012 Water Quality Revolving Loan Fund loan for the Garner/Brandywine stockpile cleanup on the sustainability of the Maryland Used Tire Cleanup and Recycling Fund; and
- a five-year funding plan for fiscal 2021 through 2025 for the known and estimated stockpile cleanup projects as well as the other expenditure categories based on the revenue and expenditure analysis.

The submitted report outlines two fee scenarios for the Maryland Used Tire Cleanup and Recycling Fund: the current \$0.80 per tire scenario; and a \$1.00 per tire scenario that starts with a reduced spending plan in fiscal 2023 and then the increased fee starting in fiscal 2024 and continuing into fiscal 2025. Under both scenarios, the fiscal 2012 Water Quality Revolving Loan Fund loan for the Garner/Brandywine stockpile cleanup is fully repaid in fiscal 2022.

As shown in **Exhibit 9**, the two scenarios are identical through fiscal 2022, with revenues roughly equaling expenditures and the balance of the fund decreasing to \$53,609. In fiscal 2023, MDE reflects a reduced spending plan for the scenario that will become the \$1.00 per tire scenario; this is relative to the \$0.80 per tire scenario. As a result, the fund balances under the two scenarios begin to diverge. In both fiscal 2024 and 2025, MDE reflects the increase in the tire fee to \$1.00 per tire, which allows for both greater expenditures and a higher closing fund balance. Therefore, in order to continue scrap tire cleanups and the overall work of the fund, either expenditures need to be reduced – perhaps from Scrap Tire Program expenses, Land and Materials Administration expenses, or indirect costs – or the \$0.80 per tire fee needs to be increased to bring in more revenue.

Exhibit 9
Maryland Used Tire Cleanup and Recycling Fund \$0.80 and \$1.00 Fee Scenarios
Fiscal 2020-2025
(\$ in Millions)



Source: Maryland Department of the Environment

3. Maryland Clean Air Fund Reports Submitted Showing Title V Revenues Continuing to Decline

Budget bill language in the fiscal 2021 operating budget restricted funding in the Air and Radiation Administration as follows: \$100,000 in general funds in a fiscal 2020 deficiency pending the submission by May 1, 2020, of delinquent fiscal 2015 through 2019 Maryland Clean Air Fund annual reports; and \$100,000 in fiscal 2021 general funds pending the submission by November 1, 2020, of the fiscal 2020 Maryland Clean Air Fund annual report and a separate report on ways to make the Maryland Clean Air Fund solvent.

Section 2-107(3) of the Environment Article requires the submission of an annual Maryland Clean Air Fund report. The report is required to include an accounting of all financial receipts and expenditures to and from the fund and any relevant information regarding the federal approval process, the effectiveness of the permitting program, and any other issues related to the operation of the permitting program.

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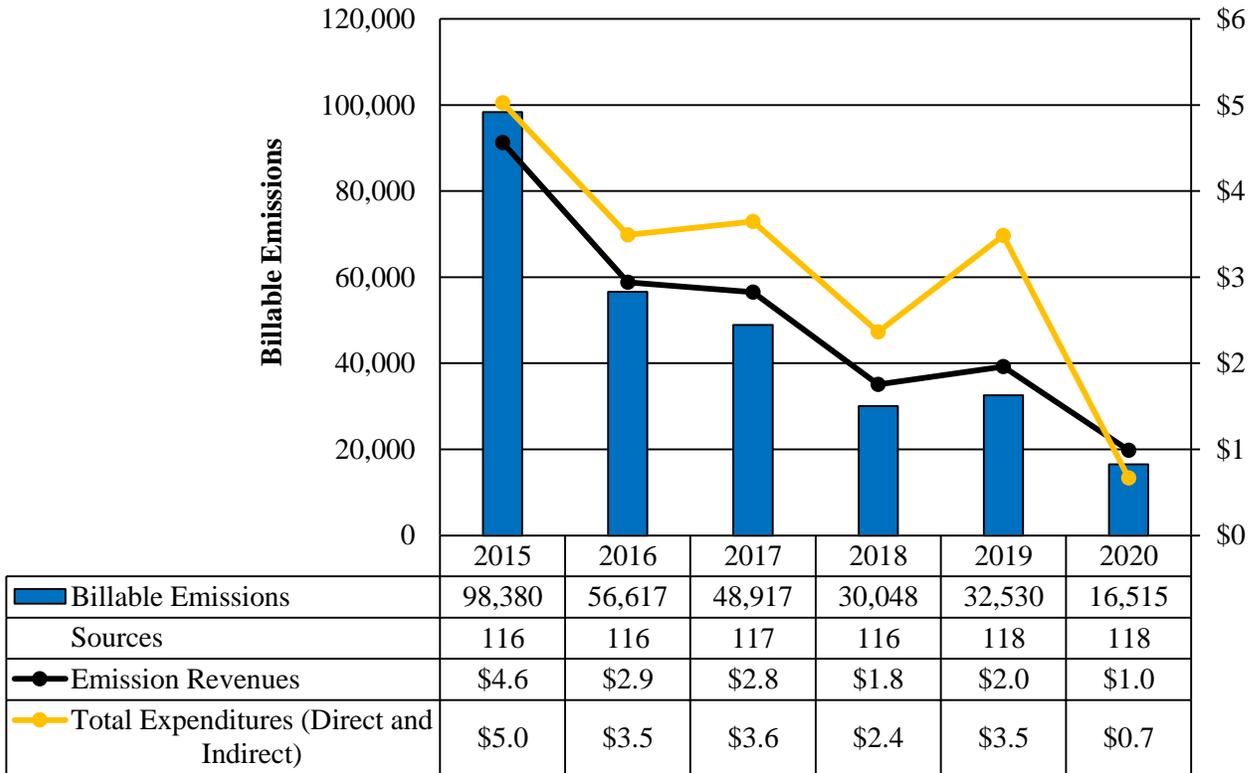
The combined fiscal 2015 through 2019 Maryland Clean Air Fund report was submitted on April 30, 2020, and the funds were released. The report on ways to make the Maryland Clean Air Fund solvent was required to include the following:

- a fiscal year summary of the amount of emissions that were billed to all Title V sources;
- the total amount of revenue received against those billable emissions;
- the direct and indirect operating expenses charged to the Title V operating permits, including a breakdown of one-time and ongoing costs for fiscal 2015 through 2020;
- the fiscal 2020 revenue structure for the Title V operating permits; and
- recommendations to address the long-term solvency of the Maryland Clean Air Fund.

There are two components to the Maryland Clean Air Fund: the Clean Air Act Title V permits; and all of the other funding sources, including non-Title V permits, construction permits, asbestos licenses, asbestos training fees, penalties, and Strategic Energy Investment Fund (SEIF) money from the Maryland Energy Administration. As shown in **Exhibit 10**, there has been a decrease in Air and Radiation Administration revenues to the Maryland Clean Air Fund from Clean Air Act Title V emissions-based permits – the major stationary sources of air pollution – as a result of the closure of various compliance entities such as the Verso Inc. paper plant in Luke, which closed in June 2019. Interestingly, the overall number of compliance entities has not changed, but the mix of entities has. For instance, the transition of coal-fired plants to power plants fired with natural gas continues with closures of the Wagner Unit #2 in June 2020 and all three coal units at Dickerson in July 2020. In addition, the coal-fired units at Chalk Point are scheduled to be shut down by June 2021. As a result, there are fewer emissions supporting Title V revenues. Another factor affecting the Maryland Clean Air Fund’s health is the excess of spending over available revenues for fiscal 2015 through 2019.

One reason for the Title V revenue decline is the revenue structure. There is a \$5,000 base fee for all Title V sources and an emissions-based fee for each ton of billable emissions, which was \$62.01 in calendar 2020 and is indexed to the Consumer Price Index. MDE acknowledges that the fee structure needs to be revamped but does not want to initiate this process until sometime in calendar 2022 or 2023 in the interest of waiting for energy use, and thus emissions numbers, to stabilize after the COVID-19 pandemic and other shifts in the energy sector. However, there is a cost to the General Fund of waiting as the Title V revenue decline has been supplanted in MDE’s budget with \$750,000 in general funds in fiscal 2020, \$1,750,000 in general funds in fiscal 2021, and \$1,750,000 in general funds in fiscal 2022 in order to support air quality monitoring, permitting, and compliance. Of note, Virginia charges \$39,686 for a Title V permit, \$17,008 for permit renewal, and \$4,535 for permit modification. **DLS recommends that MDE comment on possible modifications to the Title V revenue structure in order to ameliorate the decline of the emissions-based revenues and a timeline for implementing the new revenue structure.**

Exhibit 10
Title V Air Permit Data
Fiscal 2015-2020
(\$ in Millions)



Source: Maryland Department of the Environment

Operating Budget Recommended Actions

1. Adopt the following narrative:

Budgeting of Prior Year Actual Personnel Expenditures: The Maryland Department of the Environment’s (MDE) fiscal 2020 actual budget data incorrectly reflects the allocation of funding for personnel expenditures. The fringe benefit expenditures – health insurance, pension contributions, and turnover adjustments, among others – are almost entirely reflected as Social Security contributions, which makes it difficult to do historical data comparisons. The budget committees request that MDE reflect prior year actual personnel expenditures up to and including fiscal 2021 in the correct statewide subobjects with the fiscal 2023 budget submission.

Information Request	Author	Due Date
Budgeting of prior year actual personnel expenditures	MDE	Fiscal 2023 budget submission

Updates

1. Enforcement and Inspection Position Strength Assessment and Vacant Position Filling

Budget bill language in the fiscal 2021 operating budget restricted funding pending the submission of quarterly reports from MDE and the Maryland Department of Agriculture on compliance and enforcement inspections and positions. The language then further restricted the funding for filling vacant compliance and enforcement positions.

The submitted reports note that the COVID-19 pandemic has limited inspection activities in fiscal 2020 and 2021 but that MDE has brought online or is working on technological improvements that will help streamline operations. For instance, the Environmental Permit Tracking System, discussed in **Appendix 2**, went live on November 30, 2020, and will improve the process of inspections, compliance monitoring, and enforcement workflows. In addition, MDE is working on a replacement for the Lead Poisoning Prevention Program’s databases with a new integrated system, discussed in **Appendix 3**. Finally, MDE’s Air Compliance Program has used smartphone technology to conduct remote inspections – using videos, photos, and live streaming – and has increased the receipt of electronic report submissions.

MDE conducted more than 127,000 inspections, audits, and spot checks across major programmatic areas in fiscal 2020, which is down from the 171,000 in fiscal 2019. Between fiscal 2011 and 2020, the number of inspectors for the three administrations has changed as follows: 1 fewer position for the Land and Materials Administration (from 66 to 65 positions); 5 additional positions for the Water and Science Administration (from 48 to 53 positions); and 9 fewer positions for the Air and Radiation Management Administration (from 48 to 39 positions). The number of vacancies has continued to remain high in recent years for the Land and Materials Administration.

2. Status of Corrective Actions Related to the Most Recent Fiscal Compliance Audit

The fiscal 2020 Budget Bill restricted \$25,000 in general fund appropriation in MDE’s budget in the Office of the Secretary pending the submission of a report to the budget committees on repeat audit findings. The report was to include a listing of each repeat audit finding in the most recent fiscal compliance audit issued by the Office of Legislative Audits (OLA) along with a description of the corrective actions taken to address each repeat finding. The budget committees were to have 45 days to review and comment to allow funds to be released prior to the end of fiscal 2020. The required report was submitted on June 29, 2020, and the funds were released.

MDE’s May 14, 2018 audit covered the period beginning July 30, 2013, and ending December 19, 2016. The audit included seven findings of which two were repeat findings. The two repeat findings are as follows.

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- ***Finding 2 – Lead Poisoning Prevention Program:*** MDE did not establish a sufficient process to ensure that owners of affected lead paint properties had required inspection certificates. OLA identified 10,832 registered rental units without inspection certificates that MDE had not investigated.
- ***Finding 3 – Erosion and Sediment Control Plan Inspections:*** Inspections of certain construction sites were not performed as required by State regulations, and MDE lacked a formal plan for inspecting all sites. Only 1,033 of 5,942 sites were inspected during fiscal 2016.

MDE noted that it has taken corrective actions to address both findings. For Finding 2, these actions include resolving 72% of the 10,832 properties identified by OLA as needing inspection certificates and continuing to review the remaining properties. In addition, MDE instituted a new verification protocol in July 2019, which includes adding fields to renewal documents in order to request the inspection certificate number and inspection date information for each unit. Other corrective actions include sending a letter to housing authorities and creating a comprehensive list of all Maryland counties/municipalities that have local rental registration/licensure requirements in order to determine compliance with registration and certification requirements.

In terms of Finding 3, MDE noted that the regulations requiring inspections on average of every two weeks were revised in May 2017. The new regulations do not specify the timing and frequency of inspections and assert that non-State entities have enforcement authority if they have been delegated responsibility for the inspections. Accordingly, MDE has delegated enforcement authority to 13 counties, Baltimore City, 8 municipalities, the State Highway Administration, and the Washington Suburban Sanitary Commission.

Appendix 1
2020 Joint Chairmen’s Report Responses from Agency

The 2020 *Joint Chairmen’s Report* (JCR) requested that the Maryland Department of the Environment (MDE) prepare four reports. Electronic copies of the full JCR responses can be found on the Department of Legislative Services Library website.

- ***Maryland Used Tire Cleanup and Recycling Fund Annual and Solvency Reports:*** Budget bill language in the fiscal 2021 operating budget restricted funding pending the submission of the *Maryland Scrap Tire Annual Report* and a report on ways to make the Maryland Used Tire Cleanup and Recycling Fund solvent. The reports were required in light of the requirement in Section 9-275(c) of the Environment Article that an annual status report is due on or before November 1 of each year, which has not been consistently met. In addition, the Maryland Used Tire Cleanup and Recycling Fund is exhibiting a declining fund balance. Further discussion of this data can be found in Issue 2 of this analysis.
- ***Maryland Clean Air Fund Annual and Solvency Reports:*** Budget bill language in the fiscal 2021 operating budget restricted fiscal 2021 funding pending the submission of both the fiscal 2020 Maryland Clean Air Fund annual report and a report on ways to make the Maryland Clean Air Fund solvent. This restriction was made in light of the \$750,000 general fund deficiency appropriation in the fiscal 2021 operating budget bill for the Air and Radiation Administration due to declining Clean Air Act Title V operating permits, which reflected ongoing revenue concerns. Further discussion of this data can be found in Issue 3 of this analysis.
- ***Maryland Clean Air Fund Annual Reports:*** Budget bill language in the fiscal 2021 operating budget restricted fiscal 2020 deficiency funding pending the submission of delinquent Maryland Clean Air Fund annual reports. MDE had not submitted the fiscal 2015 through 2019 Maryland Clean Air Fund annual reports required by Section 2-107(3) of the Environment Article. Further discussion of this data can be found in Issue 3 of this analysis.
- ***Enforcement and Inspection Position Strength Assessment and Vacant Position Filling:*** Budget bill language in the fiscal 2021 operating budget appropriation restricted funding in the Maryland Department of Agriculture and MDE until the submission of quarterly reports on compliance and enforcement inspections and positions and then further restricted funding for filling vacant compliance and enforcement positions. Further discussion of this data can be found in Update 1 of this analysis.

Appendix 2
Environmental Permit Tracking System
Major Information Technology Project
Maryland Department of the Environment

New/Ongoing: Ongoing								
Start Date: February 2013					Est. Completion Date: November 2020 (October 2022 for additional functionality)			
Implementation Strategy: Agile								
(\$ in Millions)	Prior Year	2021	2022	2023	2024	2025	Remainder	Total
GF	\$3.287	\$0.528	\$0.025	\$0.000	\$0.000	\$0.000	\$0.000	\$3.840
Total	\$3.287	\$0.528	\$0.025	\$0.000	\$0.000	\$0.000	\$0.000	\$3.840

* **Note:** The overall project cost has not decreased from \$3.9 million to \$3.84 million, but the number reflected in the Governor’s Budget Highlights is used for the exhibit above, since an updated cost schedule has not been provided.

- **Project Summary:** The Environmental Permit Tracking System Modernization project is intended to modernize how the Maryland Department of the Environment (MDE) captures permit data by transferring the existing system from a legacy PowerBuilder user interface to .Net technologies. The project also supports the Web Revamp Project by making ePermitting and eCommerce available to citizens and businesses.
- **Need:** The project will reduce the level of effort required to enter data in the MDE centralized permit tracking system and ensure that the technologies that support the mission are cost effective and sustainable.
- **Observations and Milestones:** MDE notes that the project went live on November 30, 2020, which appears to be ahead of the schedule as of last year to complete in April 2021. MDE further notes that there are two remaining option years on the project to accommodate additional functionality with a completion date of October 2022.
- **Changes:** MDE notes that the project has completed, but it is unclear whether this reflects a reduction in the current project scope and the shifting of additional work to the next October 2022 completion date. The cost estimate remains \$3,907,500 and not the \$3,839,663 shown in the Governor’s Budget Highlights. MDE is not sure why the lower number is shown.
- **Concerns:** The only concern is that additional project functionality and costs may be shifted to fiscal 2023.

Appendix 3
Lead Rental Certification and Accreditation
Major Information Technology Project
Maryland Department of the Environment

New/Ongoing: Ongoing								
Start Date: October 2019					Est. Completion Date: October 2021			
Implementation Strategy: Agile								
(\$ in Millions)	Prior Year	2021	2022	2023	2024	2025	Remainder	Total
GF	\$1.416	\$0.000	\$0.025	\$0.266	\$0.291	\$0.000	\$0.000	\$1.998
SF	1.391	0.000	0.000	0.291	0.291	0.000	0.000	1.973
Total	\$2.808	\$0.000	\$0.025	\$0.556	\$0.581	\$0.000	\$0.000	\$3.970

* **Note:** The overall project cost has not increased from \$2.8 million to \$3.97 million, but the number reflected in the Governor’s Budget Highlights is used for the exhibit above, since an updated cost schedule has not been provided.

- **Project Summary:** The Lead Rental Certification and Accreditation project is intended to replace legacy applications and databases in order to create an integrated system capable of the following: accrediting individuals, contractors, and inspectors; certification of lead rental properties; opening and tracking enforcement actions against violating parties; and coordinating internal and compliance reporting. By using .NET technologies and a backend database, the Maryland Department of the Environment (MDE) plans to reduce dependencies on outside vendors and instead use in-house resources to help maintain and support the new system.
- **Need:** The project will provide for a new online tracking system with fee payment and thus reduce the need for data entry and the volume of paperwork sent to MDE. In addition, the project addresses audit findings concerning the tracking of accreditation and certification of lead rental units and will link the new certificate database to the registration database in order to compare certificates to registrations.
- **Observations and Milestones:** MDE notes that the expectation is for the system to go live by October 2021 with base functionality. MDE further notes that there are two option years on the project to accommodate additional functionality with a completion date of October 2023 or fiscal 2024. MDE currently is working with a contractor to develop the new database system. The framework for the module – the first of four modules – has been completed and, within this module, MDE is working on program increment 6 – accreditation user acceptance testing, enforcement design, and integration with third party applications.
- **Changes:** The project cost has not increased from \$2,807,600 to \$3,970,400, as shown in the Governor’s Budget Highlights. MDE is not sure why increased costs are shown.
- **Concerns:** One of the original project risks was the need to draft memoranda of understanding for data interfaces with systems maintained by other agencies. MDE notes that all of the necessary

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data interfaces with other State agencies are already in place and will continue. Therefore, this is no longer a project risk. Similar to the Environmental Permit Tracking System, this project appears to reflect an ongoing schedule of improvements that are not necessarily reflected in the current cost. Therefore, the overall project cost may end up being higher than the current estimate.

**Appendix 4
Object/Fund Difference Report
Department of the Environment**

<u>Object/Fund</u>	<u>FY 20 Actual</u>	<u>FY 21 Working Appropriation</u>	<u>FY 22 Allowance</u>	<u>FY 21 - FY 22 Amount Change</u>	<u>Percent Change</u>
Positions					
01 Regular	893.00	883.00	880.00	-3.00	-0.3%
02 Contractual	61.42	81.00	75.00	-6.00	-7.4%
Total Positions	954.42	964.00	955.00	-9.00	-0.9%
Objects					
01 Salaries and Wages	\$ 86,331,582	\$ 86,635,362	\$ 90,677,107	\$ 4,041,745	4.7%
02 Technical and Spec. Fees	2,793,552	3,813,427	3,616,511	-196,916	-5.2%
03 Communication	669,229	699,154	623,299	-75,855	-10.8%
04 Travel	182,746	101,372	73,336	-28,036	-27.7%
06 Fuel and Utilities	338,139	370,197	364,587	-5,610	-1.5%
07 Motor Vehicles	703,424	942,654	789,989	-152,665	-16.2%
08 Contractual Services	17,296,198	17,409,079	16,492,837	-916,242	-5.3%
09 Supplies and Materials	946,853	959,427	964,149	4,722	0.5%
10 Equipment – Replacement	822,435	741,905	673,709	-68,196	-9.2%
11 Equipment – Additional	43,672	47,586	25,000	-22,586	-47.5%
12 Grants, Subsidies, and Contributions	20,580,437	23,815,747	16,669,656	-7,146,091	-30.0%
13 Fixed Charges	5,701,064	5,921,781	6,066,741	144,960	2.4%
14 Land and Structures	31,826,551	33,000,000	33,000,000	0	0%
Total Objects	\$ 168,235,882	\$ 174,457,691	\$ 170,036,921	-\$ 4,420,770	-2.5%
Funds					
01 General Fund	\$ 35,343,633	\$ 32,896,667	\$ 34,355,896	\$ 1,459,229	4.4%
03 Special Fund	98,950,621	104,263,368	99,153,243	-5,110,125	-4.9%
05 Federal Fund	30,236,730	31,831,016	32,901,923	1,070,907	3.4%
09 Reimbursable Fund	3,704,898	5,466,640	3,625,859	-1,840,781	-33.7%
Total Funds	\$ 168,235,882	\$ 174,457,691	\$ 170,036,921	-\$ 4,420,770	-2.5%

Note: The fiscal 2021 appropriation does not include deficiencies, targeted revenues, or across-the-board reductions. The fiscal 2022 allowance does not include contingent reductions or cost-of-living adjustments.

**Appendix 5
Fiscal Summary
Department of the Environment**

<u>Program/Unit</u>	<u>FY 20 Actual</u>	<u>FY 21 Wrk Approp</u>	<u>FY 22 Allowance</u>	<u>Change</u>	<u>FY 21 - FY 22 % Change</u>
01 Office Of The Secretary	\$ 2,293,784	\$ 2,631,902	\$ 2,390,063	-\$ 241,839	-9.2%
02 Administrative and Employee Services Admin.	9,957,620	10,078,184	10,173,721	95,537	0.9%
04 Water and Science Administration	41,911,131	40,208,759	43,114,488	2,905,729	7.2%
06 Land and Materials Administration	29,630,370	32,501,525	32,770,204	268,679	0.8%
07 Air and Radiation Administration	19,177,750	20,577,234	20,931,242	354,008	1.7%
10 Coordinating Offices	65,265,227	68,460,087	60,657,203	-7,802,884	-11.4%
Total Expenditures	\$ 168,235,882	\$ 174,457,691	\$ 170,036,921	-\$ 4,420,770	-2.5%
General Fund	\$ 35,343,633	\$ 32,896,667	\$ 34,355,896	\$ 1,459,229	4.4%
Special Fund	98,950,621	104,263,368	99,153,243	-5,110,125	-4.9%
Federal Fund	30,236,730	31,831,016	32,901,923	1,070,907	3.4%
Total Appropriations	\$ 164,530,984	\$ 168,991,051	\$ 166,411,062	-\$ 2,579,989	-1.5%
Reimbursable Fund	\$ 3,704,898	\$ 5,466,640	\$ 3,625,859	-\$ 1,840,781	-33.7%
Total Funds	\$ 168,235,882	\$ 174,457,691	\$ 170,036,921	-\$ 4,420,770	-2.5%

Note: The fiscal 2021 appropriation does not include deficiencies, targeted revenues, or across-the-board reductions. The fiscal 2022 allowance does not include contingent reductions or cost-of-living adjustments.