Report Number: ICRR0024197

## 1. Project Data

| | |
|---|---|
| **Project ID**<br>P122139 | **Project Name**<br>INDUSTRIAL WASTE MGT |
| **Country**<br>Montenegro | **Practice Area(Lead)**<br>Environment, Natural Resources & the Blue Economy |

| L/C/TF Number(s) | Closing Date (Original) | Total Project Cost (USD) |
|---|---|---|
| IBRD-84280 | 30-Jun-2019 | 47,741,596.14 |
| **Bank Approval Date** | **Closing Date (Actual)** | |
| 19-Sep-2014 | 31-Oct-2023 | |

| | IBRD/IDA (USD) | Grants (USD) |
|---|---|---|
| Original Commitment | 68,900,000.00 | 0.00 |
| Revised Commitment | 61,596,600.00 | 0.00 |
| Actual | 47,741,596.14 | 0.00 |

| Prepared by | Reviewed by | ICR Review Coordinator | Group |
|---|---|---|---|
| Katharina Ferl | Avjeet Singh | Avjeet Singh | IEGSD (Unit 4) |

## 2. Project Objectives and Components

### a. Objectives

According to the Project Appraisal Document (PAD) (p. 4) and the Financing Agreement of October 10, 2014 (p. 5) the objective of the project was “to reduce contamination of Montenegro’s natural resources and public health risks of exposure to this contamination from selected industrial waste disposal sites”.

### b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

**Did the Board approve the revised objectives/key associated outcome targets?**
Yes

**Date of Board Approval**
16-Nov-2018

**c. Will a split evaluation be undertaken?**
Yes

**d. Components**
The project included four components:

**Component 1: Remediation of Selected Legacy Industrial Waste Disposal Sites (appraisal estimate Euro 47.47 million, actual Euro 40.47 million):** This component was to finance the detailed design, construction, and supervision for the remediation of the four industrial waste disposal sites to allow the sites to be fully stabilized and stop posing significant impacts on natural resources and the environment with limited requirements for aftercare monitoring and maintenance. These four sites included:

i. Mine tailings disposal facility Gradac: The disposal facility contained tailings (inert residues) from former zinc-lead ore flotation processing. The selected remediation option comprised of in-situ slope stabilization and full encapsulation with reshaping, top cover and re-vegetation. Water management was based on prevention of infiltration into the tailings body and diversion of run-off water.
ii. Coal ash disposal facility Pljevlja: The facility was responsible for the disposal of ash from the lignite fired power plant in Pljevlja. The selected solution for closure and remediation of the ash disposal facility in Pljevlja included reshaping, drainage, encapsulation with re-vegetation and investments in water management.
iii. Ship blasting waste and site contamination at Bijela shipyard: The site had an estimated volume of 60,000 tons of contaminated blasting grid stored in bags. Remediation was to consist of the removal of the contaminated blasting grit (hazardous waste) and the volumes of excavated contaminated soil from the site to meet redevelopment standards.
iv. Red-mud basins and solid waste disposal site at KAP: The solid waste disposal site contained both hazardous and nonhazardous waste. Remediation was to consist of draining basin water after treatment, reshaping, covering, and stabilizing the impoundment slopes.

When the project was restructured in November 2018, the following changes were made under component 1: i) reduce remediation scope in Pljevlja to: i) only partially close the Maljevac site; ii) expand the capacity of the site with a newly constructed cell for continued coal ash disposal (which was financed by Montenegro's National Power Company – EPCG); and iii) cancel the plan for developing the Sumane site; 2) reduce the scope from the remediation of two KPA sites to only preparing remediation design and safeguard documents.

**Component 2: Future Industrial Waste Management (appraisal estimate Euro 0.9 million, actual Euro 0.28 million):** This component was to finance the following activities:

i) developing and implementing a national industrial hazardous and non-hazardous waste register;

ii) providing training, workshops, information and awareness campaigns to raise awareness of waste generators regarding separation of waste streams, interim storage requirements in line with EU legislation, and reporting obligations; and

iii) planning and national permitting process for the realization of infrastructure for management and disposal of future industrial hazardous waste from waste generators in the Borrower's territory.

**Component 3: Project Management (appraisal estimate Euro 0.9 million, actual Euro 1.09 million):** This component was to finance activities related to project management and capacity building at the Environmental Protection Agency (EPA) including establishing a Project Management Unit (PMU), project monitoring and evaluation.

## e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project cost:** The project was estimated to cost Euro 49.27 million. The actual cost was Euro 41.66 million. When including the refinancing PPA the actual cost was Euro 42.57 million.

**Financing:** The project was financed by an IBRD loan in the amount of Euro 44.7 million of which Euro 42.03 million were disbursed. However, even though the amount of Euro 366,852 EUR was disbursed, the amount was not spent and was returned to the World Bank.

**Borrower Contribution:** According to the World Bank Team (September 12, 2024) the planned financing by the government was, the then estimated VAT amount of Euro 8.38 million. Eventually, the project activities were exempted from VAT, therefore this government funding (co-financing) was not needed.

**Dates:** The project was restructured six times:

- On November 16, 2018, the project was restructured to: i) revise component 1 to modify the remediation design for the Pljevlja site, and limit activities for the KAP site to remediation preparations only (taking out financing of remediation works); ii) cancel funds in the amount of Euro 12,925,000 from Component 1, reflecting savings from cancellation of remediation investments at the KAP site; iii) extend the closing date by 12 months to June 30, 2020 to allow for the completion of activities which had been delayed due to unresolved issues at the KAP site; iii) revise the Results Framework to reflect the reduction in targets of all PDO indicators.
- On June 30, 2020, the project was restructured to extend the project's closing date from June 30, 2020, by 12 months to June 30, 2021, to allow for the completion of project activities that had been delayed due to delays in project implementation and additional delays from COVID-19 measures.
- On June 23, 2021, the project was restructured to extend the project's closing date from June 30, 2021, to June 30, 2022, to allow for the completion of project activities that had been delayed due to delays in project implementation and additional delays from COVID-19 measures.
- On June 28, 2022, the project was restructured to extend the project's closing date by nine months from June 30, 2022, to March 31, 2023, to allow for the completion of exporting of remaining waste materials from the Bijela site.
- On May 30, 2023, the project was restructured to extend the project's closing date from March 31, 2023, to four months to July 31, 2023, to allow for the completion of project activities.

- On July 31, 2023, the project was restructured to extend the project's closing date by three months from July 31, 2023, to October 31, 2023, to allow for allow completion of remaining activities to minimize environmental risks for Montenegro from the contaminated materials at the Bijela site that are managed under the project.

## 3. Relevance of Objectives

### Rationale

**Country and sector context.** At the time of project appraisal, Montenegro had made important progress towards meeting its goal of joining the European Union (EU). Montenegro had created a legal and institutional framework to improve solid waste management towards EU Accession in the Environmental chapter. However, despite progress made, the capacity of industrial and hazardous waste management remained weak and relevant practices did not meet the EU and international standards. Due to poor environmental protection measures, heavy industry disposal sites were highly contaminated containing materials such as coal ash, lead, and other heavy metals as well as hazardous risk. This contamination posed a serious risk to the environment and to the public health of local communities. To make the situation worse, some of these contaminated sites were at risk for earthquakes and flooding.

To address these issues, the government, with the support of the World Bank, aimed to remediate five industrial legacy sites that were a significant environmental and public health threat. The sites were selected based on their size, proximity to valuable natural resources, and association with heavy industries. These sites were to include: i) the mine tailing disposal site in Gradac; ii) the coal ash facility in Pljevlja; iii) the Bijela shipyard; iv) the red-mud basins and the solid waste disposal area on the aluminum plant KAP site; and v) the industrial waste disposal area in Niksic.

**Alignment with the Government Strategy.** The objective of the project supported the government's National Strategy for Sustainable Development to 2030 (NSD 2030) which states the need to mitigate and eliminate the effects of environmental pollution on the population's health by specifically mentioning the existing pollution hotspots in Pljevja and Niksic. In addition, the National Waste Management Plan (2023-2028) aims to develop a national plan for hazardous waste management to address historical pollution hotspots. Furthermore, the project supported Montenegro in its ongoing negotiations with the European Union (EU), which require the country to implement and enforce policies to meet EU standards on industrial pollution control and risk management.

**Alignment with the World Bank Strategy.** The objective of the project was in line with the most recent Country Partnership Framework (FY16-21) and its objective 2c "enhance environmental sustainability".

The two different aspects of the objective of the project were pitched at the intermediate results and outcome level since a reduction in the health risks was a result of the reduction in contamination. The objective addressed a critical development problem.

### Rating

High

## 4. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

To reduce contamination of Montenegro's natural resources and public health risks of exposure to this contamination from selected industrial waste disposal sites.

#### Rationale

**Theory of change:** The project's theory of change stated that project inputs/activities such as remediating and cleaning up mine tailing disposal facility Gradac, coal ash disposal facility Pljevlja, ship blasting waste, site contamination at Bijela shipyard, and red-mud basins and solid waste disposal site at KAP were to result in several outputs. Also, inputs/activities such as providing training, conducting awareness campaigns on separation of waste stream, and interim storage requirement, supporting the planning and national permitting process for future industrial hazardous waste management and disposal infrastructure as well as developing and implementing national industrial hazardous and non-hazardous waste register were to result in several outputs. These outputs were to include contaminated land being managed or dump sites being closed under the project, hazardous waste being removed from the industrial waste disposal site, arrangements for ongoing and future waste disposal being in place and in line with national and EU legislation, as well as a national industrial hazardous and non-hazardous waste register being developed. These outputs were to result in the outcome of reducing contamination of Montenegro's natural resources and public health risks of exposure to this contamination from selected industrial waste disposal sites.

The theory of change was sound and logical.

**Outputs (under original targets):**

- 12.5 hectares of industrial dump site at Gradac were closed, achieving the original target of 12.50 hectares.
- 10 hectares of industrial dump site at Pljevlja were closed, not achieving the original target of 53.50 hectares.
- 75 percent of waste was removed from the Bijela shipyard site, not achieving the target of 100 percent. 33,000 tons of less contaminated soil remained at the project site. The soil is planned to stay in Bijela for three years and potentially be used as the leveling layer on the solid waste disposal facility at the KAP location.
- Design, safeguards, and works bidding documents were completed for KAP sites, achieving the target of those documents being completed.
- A national registration system for industrial and hazardous waste management was installed and 80 percent of the waste flow is being recorded, achieving the target of installing a system and recording 80 percent of waste flow.

- One industry (EPCG power plant) complied with national legislation for solid waste management in terms of ongoing ash disposal, not achieving the original target of three sites.

**Outcomes:**

- 24 hectares of contaminated land was managed, not achieving the original target of 110 hectares.
- Nine pollution paths (through air, soil and groundwater and run-off water) were managed, not achieving the original target of 12 pollution paths. As a result of the remediation work, contaminated soils were encapsulated with waterproof barriers and drainage systems were installed at the Gradac and Plijevla sites to prevent contaminants from spreading to surrounding areas through air, soil, groundwater and run-off water.

The project was not able to manage contaminated land and pollution paths as originally planned before the project restructuring in 2018, resulting in an efficacy rating of Negligible.

### Rating
Negligible

## OBJECTIVE 1 REVISION 1
### Revised Objective
The objective of the project was not revised.

### Revised Rationale
When the project was restructured, the objective was not revised but the scope of the project was reduced. The theory of change remained the same.

**Outputs (under revised targets):**

- 10 hectares of industrial dump site at Pljevlja were closed, achieving the revised target of 10 hectares.
- 75 percent of waste was removed from the Bijela shipyard site, not achieving the target of 100 percent. 33,000 tons of less contaminated soil remained at the project site. The soil is planned to stay in Bijela for three years and potentially be used as the leveling layer on the solid waste disposal facility at the KAP location.
- Design, safeguards, and works bidding documents were completed for KAP sites, achieving the target of those documents being completed.
- A national registration system for industrial and hazardous waste management was installed and 80 percent of the waste flow is being recorded, achieving the target of installing a system and recording 80 percent of waste flow.
- One industry (EPCG power plant) was in compliance with national legislation for solid waste management in terms of ongoing ash disposal, achieving the revised target of one site.

**Outcomes:**

- 24 hectares of contaminated land was managed, achieving the revised target of 24 hectares.

- Nine pollution paths (through air, soil and groundwater and run-off water) were managed, achieving the revised target of nine pollution paths.

The project was able to manage contaminated land and pollution paths to reduce the contamination of public resources. Even though the health benefits as a result of these outcomes were obvious, the project did not provide any evidence to substantiate these results. The efficacy rating after the project restructuring was Substantial.

### Revised Rating
Substantial

## OVERALL EFFICACY
### Rationale
Before the restructuring, the project was not able to manage contaminated land and pollution paths. After the project restructuring, was able to do so and achieve the planned targets. However, the project did not provide any evidence to substantiate the project's outcomes in terms of public health.

### Overall Efficacy Rating
Negligible

### Primary Reason
Low achievement

## OVERALL EFFICACY REVISION 1
### Overall Efficacy Revision 1 Rationale
The project was able to manage contaminated land and pollution paths to reduce the contamination of public resources. Therefore, the achievement under the revised objective was Substantial.

### Overall Efficacy Revision 1 Rating
Substantial

## 5. Efficiency
**Economic efficiency:**

According to the PAD (para. 44) a cost-effectiveness analysis was conducted for component 1 (Remediation of selected legacy industrial waste disposal sites) in which at least three different design options for remediation were developed for each of the sites. Options were compared based on cost estimations and the basic technical, environmental, social and legal properties of each option for all sites, with pros and cons of each

option elaborated. For each of the sites, the most cost-effective option allowing for remediation of the site thereby cutting the exposure path of the pollutants to the environment was chosen and further developed. The PAD did not provide any further details. Furthermore, a financial analysis was conducted to determine a gate fee for the disposal of hazardous waste that ranged between €45 and €100. The result was in line with the tariffs applicable in other countries in Europe.

The ICR (para. 41) conducted an economic analysis at ex-ante, restructuring and ex-post for the mass to be collected, treated, and disposed as well as the area contaminated to be cleaned up or sustainably contained at the end of the project. The results showed substantial differences between the appraisal vs. restructured costs (due to the export disruption and more contaminated soil than the estimated volume as well as the cost increase in safe ash disposal) and to a lesser extent between restructuring and actual costs.

The ICR used the actual disbursement cost and target indicators of components 1 to carry out the benefit-cost analysis over a 20-year time period. Applying a discount rate of 6 percent, the ICR estimated a Net Present Value (NPV) of US$8.8 million, an Economic Rate of Return (ERR) of 15 percent, and a present value benefit-cost ratio of 1.3, indicating that the project was a worthwhile investment.

**Operational efficiency:**

The project experienced several implementation delays requiring six extensions of the closing date, totaling four years and four months. Implementation  delays were a result of the following: i) delays in staffing PMU; ii) limited capacity in key implementing agencies especially related to procurement and M&E ; iii) complex institutional arrangements; iv) government's decision to require loan repayments from third parties related to the remediation sites; v) difficulties in obtaining export permits; vi) KAP bankruptcy and change in ownership; and vii) unfavorable weather conditions to carry out remediation works as well as the COVID-19 pandemic.

Overall, the project’s efficiency is rated Modest.

### Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

| | Rate Available? | Point value (%) | *Coverage/Scope (%) |
|---|---|---|---|
| Appraisal | | 0 | 0<br>☐ Not Applicable |
| ICR Estimate | ✓ | 15.00 | 100.00<br>☐ Not Applicable |

* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

**Original scope:** Relevance of the objective was High given its alignment with the World Bank's most recent Country Partnership Framework (FY16-21). Efficacy was Negligible and Efficiency was Modest, resulting in an overall outcome level of Unsatisfactory.

**Revised scope:** Relevance of the objective was High given its alignment with the World Bank's most recent Country Partnership Framework (FY16-21). Efficacy was Substantial and Efficiency was Modest, resulting in an overall outcome level of Moderately Satisfactory.

| | Original Targets | Revised Targets |
|---|---|---|
| **Relevance** | High | High |
| **Efficacy** | Negligible | Substantial |
| **Efficiency** | Modest | Modest |
| **Outcome rating** | U | MS |
| **Numerical value of outcome rating** | 2 | 4 |
| **Disbursement (US$m)** | 5.43 | 42.31 |
| **Share of disbursement** | 11.4% | 88.6% |
| **Weighted value of the outcome rating** | .228 | 3.544 |
| **Final Outcome rating** | MS 3.78 | |

### a. Outcome Rating

Moderately Satisfactory

## 7. Risk to Development Outcome

According to the ICR (para. 80) the project's development outcomes are potentially subject to two risks. First, the need for a permanent solution for temporarily stored contaminated soil at Bijela. And second, residual hazardous substances in vicinity of the Gradac landfill that were spread over years of operations in the past but had not been part of remediation activities under the project. Monitoring environmental conditions in the surrounding area will be needed to adequately assess the risk of contamination. Also, according to the ICR (para. 38), while the government requested the World Bank to support a follow-up project to conduct remediation activities of the solid waste disposal site at KAP, it is not clear what will happen to the red-mud basin cleanup, which is under private ownership.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

According to the PAD (para. 31) the project was built on lessons learned from similar project. The key lesson included the importance of comprehensive site investigations and the thorough understanding of

(environmental) baseline conditions. As a result, the project conducted, during project preparation, comprehensive site investigations, feasibility studies, and an environmental impact assessment.

The World Bank team identified relevant risks and rated the following High: i) stakeholder risk (some of the sites selected for remediation, contracts related to the privatization and/or asset transfer of these sites contained unclear or difficult to enforce arrangements for addressing impacts and liabilities from historical industrial waste disposal; ii) social, and environmental risks since Dam stability was a potential issue for the red-mud basins of KAP, the tailing pond in Gradac and the ash and slag disposal facility of the lignite power plant in Pljevlja; and iii) delivery monitoring and sustainability risks since no current arrangements were in place for monitoring and maintenance of the identified industrial priority waste sites to be remediated. Mitigation measures included to decide to only start remediation once entities comply with national legislation, conducting an Environmental and Social Impact Assessment and Environmental Management Plan as well as the government assuming all responsibility for site aftercare (environmental monitoring and site maintenance) upon completion of the remediation works. The World Bank team also identified the risk of insufficient capacity at the Environmental Protection Agency (EPA). However, mitigation measures were not adequate, and the project experienced significant delays due to weak implementing capacity, especially in procurement. Furthermore, the World Bank team did not identify the risk of the government requiring loan repayments from third parties related to the remediation which resulted delays during the first three years of project implementation. Also, the World Bank did not identify the risk of the bankruptcy of the Bijela shipyard in 2015, resulting in implementation delays.

Overall project preparation was lengthy and took over four years since extensive site investigations for five priority contaminated sites were conducted. There was also limited implementation readiness with respect to the PMU staffing. Key technical positions in the project management, such as environmental and waste management specialist and civil engineer, M&E Specialist were not filled for more than three years, and contributed to a significant delay in the initial phase of the project implementation. The Results Framework had several shortcomings (see section 9a for more details).

### Quality-at-Entry Rating
Moderately Unsatisfactory

## b. Quality of supervision
According to the ICR (para. 76) the World Bank team conducted regular supervision missions, at least on a bi-annual basis, throughout project implementation (total of 21 supervision missions) and provided continuous support to project implementation. For example, the World Bank team conducted extensive training to address capacity issues at the PMU/TSU and other stakeholders. The project benefited from being led by one Task Team Leader (TTL) with several different Co-TTLs throughout its implementation.

The ICR (para. 76) stated that Implementation Support Reviews and Aide Memoires were well documented and sufficiently candid. The World Bank team restructured the project six times with the first restructuring only taking place four years into project implementation despite only less than 10 percent of financing being disbursed. Also, only the first restructuring was more substantive while the other restructurings only extending the project's closing date. However, the project would have benefitted from revising the Results Framework to allow for a better monitoring of implementation progress towards the objective. Also, the project would have benefitted from more realistic extensions of the project's closing date since the project

was already three to four years behind schedule when the closing date was extended by 12 months during the first project restructuring.

### Quality of Supervision Rating
Moderately Satisfactory

### Overall Bank Performance Rating
Moderately Satisfactory

## 9. M&E Design, Implementation, & Utilization

### a. M&E Design
According to the PAD (para. 39) the PMU at EPA was responsible for the project's M&E activities. There was no existing structured or reliable monitoring system for industrial waste management in Montenegro and a reporting, recording, and reporting system within EPA was to be developed under component 2 of the project.

The project's objective was clearly specified and the theory of change and how activities and outputs were to lead to the intended outcomes was sound. The intermediate outcome indicators were specific, measurable, relevant, achievable, and time-bound. However, the Results Framework had several shortcomings. First, PDO indicator 1 ("contaminated land managed or dump sites closed under the project") was similar to three intermediate outcome indicators and only included one additional information, the smallest area of remediated land in the Bijela state. Second, PDO indicator 2 ("{reduction of pollution exposure paths by remediation measures") was linked to both project outcomes and required expert verification for completion of remediation work and removed exposure paths between the source of pollution and receptors posing health risks to communities. However, the definition was ambiguous and would have benefitted from including in its methodology the national or EU legislation that defined the acceptable level of pollution. And third, PDO indicator 3 ("number of industries related to the priority industrial waste disposal site with arrangements for ongoing and future waste disposal in compliance with national legislation for solid waste management") was formulated on the output level and did not directly measure project outcomes

### b. M&E Implementation
According to the ICR (para. 61) the project's M&E experienced several challenges. First, the PMU lacked sufficient capacity to conduct the project's M&E activities. Even though the project planned to have a dedicated M&E specialist, there was no M&E specialist at the PMU during the entire project duration. In addition, during project appraisal it was planned that the project would develop a monitoring program to continuously collect and assess a series of data on groundwater, soil, dust, and run-off water throughout implementation. However, while the contractor reported environmental data to verify the situation, the PMU never systematically managed the data to assess trend of environmental conditions due to lacking capacity. However, data of indicators included in the Results Framework were reported and updated in

Implementation Status and Results Reports (ISRs) after each site remediation but not always included in all the 16 Aide Memoires.

Second, the ICR (para. 62) stated that there were several reporting inconsistencies in the ISRs as in reporting inconsistent values of PDO indicators 1 and 2 questioning the reliability of M&E data.

When the project was restructured in November 2018, the Results Framework was modified to reflect the project's reduction in scope. However, the definition of indicators was not modified to better reflect project activities.

According to the World Bank team (September 12, 2024) the project's M&E functions and processing are likely to be used to the extent of any incident being reported from the sites remediated under the project. Furthermore, Pljevlja and Bijela are sites under active management with maintenance/environmental control/reporting/permitting requirements and the Gradac site is under control of the Montenegro Forestry Agency.

### c. M&E Utilization

As stated in the section above, M&E data were not collected and assessed systematically. However, M&E data were used to inform the project restructuring in November 2018.

### M&E Quality Rating

Modest

## 10. Other Issues

### a. Safeguards

The project was classified as category B and triggered the World Bank's safeguard policies OP/BP4.01 (Environmental Assessment), OP/BP 4.12 (Involuntary Resettlement), OP/BP 4.37 (Safety of Dams) and OP/BP 7.50 (Projects on International Waterways).

According to the ICR (para. 66) during project preparation, Environmental and Social Impact Assessments (ESIAs) and Environmental Management Plans (EMPs) for all project sites were prepared. Furthermore, during project implementation site-specific ESIAs/EMPs were updated, and all project sites were regularly assessed for their compliance allowing for issues being identified and addressed appropriately. Compliance reports were submitted to the World Bank, although sometimes with some delay. According to the ICR (para. 67) ESMPs in the Gradac and Pljevlja sites were implemented satisfactorily. The Bijela site experienced some issues related to temporary storage of grit and soil without proper cover, oil spilling, and other minor issues.

These issues were only addressed once the World Bank requested immediate action. At closure, the project's compliance was rated Moderately Satisfactory.

The project implemented a Resettlement Action plan due to a potential resettlement that could be caused by a new Sumane ash disposal site in the Pljevlja sites. As of June 2024, a total of 67 resettlement cases, 64 cases were paid and closed with three cases still being open in legal proceedings. At closure, the project's compliance was rated Moderately Satisfactory.

To address OP/BP 4.37 (Safety of Dams) which was triggered due to the location of the three industrial waste disposal sites (Gradac, Pljevlja, and KAP) the project conducted preliminary dam/slope stability and risk assessments and included identified measures into the remediation design of these sites. The ICR (para. 69) stated that compliance reports were submitted with delays and the plan for emergency preparedness measures was not developed in the early stage of implementation as planned. At closure, the project's compliance was rated Satisfactory.

OP/BP 7.50 (International Waterways) was triggered due to the project's activities related to remediating the lead and zinc-containing tailing pond in Gradac and the risk of a potential leakage od alkaline water from the KAP red-mud basin to local groundwater and to the Moraca and Cijevna Rivers. In terms of the KAP red-mud basin, the government sent a notification letter to the Government of Albania without any response. For other project activities (with the potential to pollute international waterways), an exception for notification was granted under OP/BP 7.50 (paragraph 7). At closure, the project's compliance was rated Satisfactory.

When the project closed, the project's overall safeguard compliance was rated Moderately Satisfactory.

## b. Fiduciary Compliance

**Financial Management:**

The Technical Service Unit (TSU) within the MoF was responsible for the project's procurement and financial management (FM). The TSU was already experienced in implementing World Bank projects. According to the ICR (para. 73) regular FM reviews showed that the TSU had adequate staff capacity and FM system. Also, the quarterly interim unaudited financial statements were submitted to the Bank in a timely manner and of adequate quality. In March 2022, the project's FM rating was downgraded to Moderately Satisfactory due to delays in submitting the external audits. While the World Bank requested for the external audits for 2019 and 2020 to be submitted by June 2021, the audits for 2019-2021 were submitted in June 2022. In addition, the audit for 2022 was also only received in February 2024. According to the World Bank team (September 12, 2024) all external audits were unqualified.

**Procurement:**

According to the ICR (para. 72) the project's procurement generally complied with the World Bank's procurement requirements. However, while all procurement activities were supposed to be recorded in the procurement program STEP, not all activities were logged. Furthermore, while the TSU was responsible for the project's procurement activities, there was a need for close coordination with the PMU, which did not have sufficient capacity to manage large civil works resulting in procurement delays. Also, the project experienced additional procurement related delays due to initial prolonged vacancies of civil engineer and environmental specialist positions, as well as the PSC's over-involvement in procurement activities that went beyond its intended function. In addition, a post-review assessment showed that the project

experienced procurement related delays in evaluation proposals/expressions, and lack of advertisement of contract awards.

Overall, the project's procurement performance was rated Moderately Satisfactory at closing.

### c. Unintended impacts (Positive or Negative)

NA

### d. Other

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## 11. Ratings

| Ratings | ICR | IEG | Reason for Disagreements/Comment |
|---|---|---|---|
| Outcome | Moderately Satisfactory | Moderately Satisfactory | |
| Bank Performance | Moderately Satisfactory | Moderately Satisfactory | |
| Quality of M&E | Modest | Modest | |
| Quality of ICR | --- | Substantial | |

## 12. Lessons

The ICR (p.32-33) provided several useful lessons learned, which were adapted by IEG:

- **Ensuring sufficient institutional capacity and ownership during project preparation through, for example, a phased approach might benefit project implementation.** In this project, EPA was a relatively new agency with limited capacity, which resulted in implementation delays. Considering this, the project could have benefitted from a phased approach, starting with smaller and fewer project sites, and scaling up to more sites once EPA built capacity to lead a more complex project implementation.
- **Defining clear implementing arrangements including financial responsibility between the project site and the government during project preparation is critical for a smooth implementation.** This project experienced implementation delays during the initial project phase partially due to the government not deciding to lift the loan repayment requirements by a third party.
- **Designing an adaptable and robust Results Framework with a clear methodology and implementation structure is key for measuring the progress towards achieving the project's objective, especially in legacy pollution clean-up projects that are subject to high level of uncertainty.** In this project, the target for the Bijela site was measured in

percentage rather than in tons, despite discovering more contaminated soil than anticipated, not sufficiently demonstrating the positive outputs of project activities.

## 13. Assessment Recommended?

No

## 14. Comments on Quality of ICR

The ICR provided an adequate overview of project preparation and implementation. Also, the ICR included useful lessons learned that can be applied for future World Bank projects in this area. Furthermore, the ICR conducted an adequate economic analysis, was internally consistent, sufficiently candid about implementation challenges as well as outcome driven. The ICR would have benefitted from being more concise. Overall, the quality of the ICR is rated Substantial.

**a.** **Quality of ICR Rating**
Substantial