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PERFORMANCE AUDIT REPORT

OF THE AUDITOR-GENERAL ON
REGULATING RECLAMATION ACTIVITIES
AT SMALL-SCALE MINING SITES

This report has been prepared in compliance with Article 187(2) of the 1992 constitution of Ghana and Section 13(e) of the Audit Service Act, 2000 (Act 584) for submission to Parliament in accordance with Section 20 of the Act.

**Johnson Akuamoah Asiedu
Acting Auditor-General
Ghana Audit Service
10 June, 2021**

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TRANSMITTAL LETTER

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10 June 2021

Dear Rt. Hon. Speaker,

PERFORMANCE AUDIT REPORT OF THE AUDITOR-GENERAL ON REGULATING RECLAMATION ACTIVITIES AT SMALL-SCALE MINING SITES

I have the honour, in accordance with Article 187(2) of the 1992 Constitution of Ghana, Sections 13(e) and 16 of the Audit Service Act, 2000 (Act 584), to submit to you a performance audit report on regulating reclamation activities at small-scale mining sites.

2. Small-scale mining (SSM) contributes significantly to the economic and social development of the country. Despite its importance, the extraction methods used by miners, such as the removal of vegetation cover and excavation of pits degrade the environment and pollute water resources. Ghana mining laws required mined areas to be reclaimed through the backfilling of pits and re-establishment of the vegetation cover.

3. I commissioned the audit to ascertain whether Minerals Commission (MC) and Environmental Protection Agency (EPA) have ensured that small-scale miners reclaimed mined lands to return them to their maximum beneficial value.

4. We carried out the audit between July and December 2020. We visited six mining districts of MC and four area offices of EPA to review documents of licensed SSM concessions and interviewed officials of MC and EPA. We also inspected SSM concessions. We noted that EPA did not administer posting of reclamation bonds as required by Regulation 23 of the Environmental Assessment Regulations, 1999 and failed to collect an amount of GH¢524,300.00 from 12 concessioners.

5. The Inspectorate Division of Minerals Commission did not enforce the submission of operating plans by applicants before issuing them with operating permits. We also noted that monitoring carried out by MC and EPA did not ensure that small scale miners complied with reclamation conditions neither did they verify nor certify reclaimed small-scale mining sites.

6. I have made recommendations to EPA to open an escrow account and enforce posting of reclamation bonds by applicants of small-scale mining concessions. My recommendation to MC should be to enforce the submission of operating plans by small scale mining companies.

7. I have also recommended to EPA and MC to put measures in place to ensure that their monitoring and reporting lead to reclamation of degraded small-scale mining sites in the country. MC and EPA should also implement procedures to ensure that the reclamation works undertaken by small scale miners are verified and certified.

8. I trust that this report will meet the satisfaction of Parliament.

Yours faithfully,



**JOHNSON AKUAMOAH ASIEDU
ACTING AUDITOR-GENERAL**

**THE RT. HON. SPEAKER
OFFICE OF PARLIAMENT
PARLIAMENT HOUSE
ACCRA**

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Executive Summary

9. Small-scale mining (SSM) for gold and diamonds contributes significantly to the economic and social development of the country. Despite its importance, the extraction methods used by miners, such as the removal of vegetation cover and excavation of pits degrade the environment. Per the mining laws of Ghana mined areas are to be reclaimed through the backfilling of pits and re-establishment of the vegetation cover and so on.

10. In Ghana, Minerals Commission (MC) and Environmental Protection Agency (EPA) are responsible for ensuring that areas degraded by SSM operations are returned to their maximum beneficial use. However, there have been numerous public outcries criticizing the way MC and EPA regulate reclamation activities carried out by small-scale miners.

What we did

11. The Auditor-General commissioned the audit to ascertain whether the MC and the EPA had ensured that small-scale miners reclaimed mined lands as required by Regulation 23 of the Environmental Assessment Regulations, 1999. The audit was carried out from July to December 2020. We reviewed documents, interviewed and inspected mining sites to gather data on reclamation regulatory activities of MC and EPA in the SSM sector from January 2016 to December 2020.

What we found and our recommendations

i. The EPA did not administer the posting of reclamation bonds

12. Regulation 23 of the Environmental Assessment Regulations, 1999, requires EPA to ensure that prospective small-scale miners post reclamation bonds in the form of cash into an escrow account based on approved reclamation plan before permits are issued. We noted that 12 SSM of our sample had not posted bond amounts totalling GH¢524,300.00 but were allowed to operate.

13. We recommended that:

- a) per Section 18(1b) of Audit Service Act, 2000 (Act 584) the amounts of approved reclamation cost that EPA did not collect should be surcharged on the officials involved; and

- b) EPA should take the necessary steps to standardize liability estimates for SSMs and to insist on the posting of the approved reclamation cost as bonds before issuing prospective small-scale miners with Environmental Permit.
- c) EPA should take steps to open the escrow account to enable proponents deposit their reclamation bonds.

The MC did not enforce the submission of operating plans

14. The Inspectorate Division of MC issued SSM companies with Operating Permits without enforcing the submission of operating plans. An operating plan is to indicate among other things, how a proponent intent to reclaim the mined areas and the method to be used thereof.

15. We recommended that:

- the MC should ensure that the Inspectorate Division insists on the submission of operating plans by proponents for assessment of reclamation procedures before the issuance of SSM Operating Permit.

The MC and the EPA did not properly monitor and report on reclamation

16. MC and EPA are to monitor and report to ensure that SSM comply with reclamation conditions in their licenses and permits. We found that While EPA gave minimal attention to monitoring, both organisations did not take action to ensure reclamation of mined sites.

17. We recommended that:

- EPA and MC should put measures in place to ensure that monitoring undertaken by the Area/District Offices lead to reclamation of SSM sites; and
- both organisations should modify their reporting format to capture the extent of reclamation on concessions to aid decision making.

The MC and EPA neither verified nor certified reclaimed SSM sites

18. MC and EPA have not implemented procedures to ensure that reclamation works undertaken by small-scale miners were verified and certified.

19. We recommended that:

- MC should either empower the District Officers to verify and certify reclaimed mined sites or make Inspectors of Mines available at the District Offices to verify and certify reclaimed mine sites as and when necessary and
- EPA should develop and implement an agreement similar to the Reclamation Security Agreement (RSA) for SSM to form the basis of systematic procedures that will lead to verification and certification of reclaimed SSM sites.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

20. Reclamation of a mined site is to restore the mined area to its original state or close to its original state so the land can be put to other productive uses. Tetteh, E.N. (2010)¹ considers reclamation as a desirable and necessary remedy to return mined areas to acceptable environmental condition whether for resumption of the former use or for a new use. According to Asiedu, J. B. (2013)², its basic objective is to re-establish vegetation cover, stabilise the soil and water conditions at the site and restore the ecosystem.

21. Small-Scale Mining (SSM)³ for gold and diamonds has been a major economic activity in the country for centuries and has grown in size and significance. According to the Minerals Commission (MC), SSM accounted for one-third of total gold production and 100 percent of diamonds mined in the country in 2019. Its contribution to employment makes it one of the nation's most important livelihood activities, employing an estimated one million people and supporting approximately 4.5 million more⁴.

1.2 Reasons for the audit

22. Despite the significant role SSM plays in the economy of Ghana, the extraction techniques used by the miners expose the immediate and associated environments to degradation. According to the Journal of Studies in Social Sciences, 2013⁵, SSM operations require excavation and construction of pits to remove gold bearing ore, construction of make-shift accommodation and ancillary facilities such as toilet and refuse dump and management of tailings⁶

¹ Asiedu, J.B (2013) Technical Report on Reclamation of Small-Scale Surface Mined Lands in Ghana: A Landscape Perspective
American Journal of Environmental Protection-January 2013

² ² Asiedu, J.B (2013) Technical Report on Reclamation of Small-Scale Surface Mined Lands in Ghana: A Landscape Perspective
American Journal of Environmental Protection-January 2013

³ a mining concession of at most 25 acres, to be carried out by Ghanaians

⁴ Artisanal and small-scale gold mining in Ghana Evidence to inform an 'action dialogue'
Country Report August 2016, James McQuilken and Gavin Hilson

⁵ ISSN 2201-4624 Volume 5, Number 1, 2013, 12-30; *Small Scale Gold Mining and Environmental Degradation, in Ghana: Issues of Mining Policy Implementation and Challenges*

⁶ waste rock or other material that overlies an ore or mineral body and is displaced during mining without being processed

and chemicals used for extraction of gold. In the process, the vegetation cover is removed, and other layers of soil from the topsoil, through to the gold bearing ore are scooped out. The Journal estimated an average size of the pits as ranging between 400 and 4000 square feet with depths of six to 30 feet, depending on the location of the gold bearing ore from the earth surface.

23. The removal of vegetation cover during SSM operations renders viable agricultural lands incapable of supporting growth of plants. It also exposes the soil to erosion, while uncovered trenches serve as breeding grounds for mosquitos that cause malaria and serve as death traps for humans and animals. Improper management of tailings from the mines contaminate nearby water bodies. In addition, improper clean-up of the chemicals used result in acid rock drainage⁷, while failure to remove makeshift accommodation and other facilities may not support other viable use of the land.

24. EPA is mandated by the Environmental Protection Agency Act, 1994 (Act 490) to oversee, coordinate and regulate all issues regarding the environment. The Minerals Commission Act, 1993 (Act 450) and the Minerals and Mining Act, 2006 (Act 703) also mandates the Minerals Commission to regulate and manage the Utilisation of Mineral resource, coordinate and implement policies relating to mining.

25. Both Minerals Commission (MC) and the Environmental Protection Agency (EPA) are required by the Mineral and Mining Regulations, 2012 (L.I. 2182) and the Environmental Assessment Regulations, 1999 (L.I. 1652) to ensure that all areas degraded by SSM operations are returned to their maximum beneficial value.

26. There have been public concerns raised about how SSM sites have not been reclaimed and posing danger to lives and livelihoods. For example, the Daily Graphic of March 2, 2010, reported the death of two brothers who fell into abandoned mine pits covered with water. According to the report, the incident further compelled farmers in the vicinity to abandon their farms and farmlands as they felt unsafe.

27. A 2014 Ghana Web article entitled “Challenges of Small-Scale Gold Mining in Ghana”⁸ explained how small-scale miners had rendered many acres of land across the country desolate and degraded, leaving behind trenches and holes

⁷Acid rock drainage (ARD) or acid mine drainage refers to the acidic water that is created when sulphide minerals are exposed to air and water and, through a natural chemical reaction, produce sulphuric acid. ARD has the potential to introduce acidity and dissolved metals into water, which can be harmful to fish and aquatic life.

⁸GhanaWeb, 17 May 2014, accessed August 13, 2020.

that have become death traps. Also myjoyonline.com⁹ reported that 17 people lost their lives in abandoned mined pits in Amansie West District of the Ashanti Region within eight months of 2014. On February 2, 2020, pulse.com.gh¹⁰ reported that two ‘illegal miners’ died in abandoned mining pit when a loose compact of sand caved in and trapped them.

28. In line with Section 13e of the Audit Service Act, 2000 (Act 584), the Auditor-General commissioned this audit of regulating of reclamation activities at SSM sites by the MC and EPA.

Purpose and Scope

Purpose

29. To ascertain whether MC and EPA have ensured that small-scale miners reclaimed mined lands to returned them to their maximum beneficial value as required under their licence’s agreement and Regulation 23 of the Environmental Assessment Regulations, 1999.

Scope

30. The audit focused on the following aspects of reclamation:

- administration of reclamation bonds
- receipt and assessment of operating plans
- compliance monitoring; and
- verification and certification.

31. We considered aspects of reclamation in the context of registered SSM companies/groups involved in alluvial mining¹¹. According to MC and EPA the notable processes of reclamation such as backfilling, levelling and revegetation takes place at areas where alluvial mining is profound.

⁹ <https://www.myjoyonline.com/news/2014/january-25th/abandoned-galamsey-pits-kill-17-people-in-amansie-west-district-within-8-months>.

¹⁰ <https://www.pulse.com.gh/news/local/two-illegal-miners-die-in-abandoned-pit/4c9113> Accessed on August 12, 2020.

¹¹ Mining in clay, silt, sand, gravel or similar materials deposited by running water

32. The audit covered a period from January 2016 to December 2020 and was carried out from July to December 2020.

33. The audit was carried out at the Mining Department and the Regional and Area Offices of EPA as well as the SSM Department, Inspectorate Division and District offices of MC.

1.4 Audit Objectives, Questions, Criteria and sources

34. The objectives for the audit were to determine whether:

- EPA had developed and implemented procedures that ensured that small-scale miners posted reclamation bonds.
- MC ensured that SSM companies/groups submitted operating plans of reclamation procedures for assessment and approval before issuing them with operating permits.
- EPA and MC monitored and appropriately reported to ensure that miners complied with reclamation conditions in their licenses and permits and
- EPA and MC verified and certified reclamation works carried out by small-scale miners.

35. The audit questions, criteria and source(s) are presented in Table 1.

Table 1: Audit questions, criteria and sources

Audit Questions	Audit Criteria	Source(s)
What procedures did EPA develop and implement to ensure that small-scale miners posted reclamation bonds?	EPA is required to ensure that small-miners post reclamation bonds.	Regulation 23 of the EARs, 1999
How did MC ensure that SSM companies/groups submitted operating plans for assessment of reclamation procedures before issuing them with operating permits?	MC is required to receive operating plans from applicants and assess them before issuance of OP	Regulation 472(2c) of the M&MRs, 2012 (LI 2182)
How did EPA and MC carry out compliance monitoring and reported on them to ensure that miners complied with reclamation conditions in licences and permits?	EPA and MC are required to monitor to ensure compliance with reclamation conditions and report on them.	Section 90(3b) of the Minerals and Mining Act, 2006 (Act 703); Regulations 12(d) & 477; Sections 11(3) of the EPA Act, 1994 (Act 490) and Operational Procedures of EPA
How did EPA and MC implement procedures in place to verify and certify reclamation works carried out by small-scale miners?	EPA and MC are required to verify and certify reclamation works carried by miners at the end of their operations.	Regulation 480(2) of the Minerals and Mining (Health Safety & Technical) Regulations, 2012 (LI 2182). Regulation 23 of the EARs, 1999; & Section 6 of EPA's Reclamation Security Agreement (Generic)

1.5 Methods and implementation

36. We visited six¹² mining districts of the MC where alluvial mining was profound and four¹³ Offices of the EPA that oversee activities within the mining districts.

37. We selected 41 out of 918 licensed SSM concessions based on information we had on the extent of reclamation undertaken. The names, locations and districts of the selected concessions is attached as Appendix A. We also considered concessions (i) whose mineral licenses had expired about five months prior to the commencement of this audit, (ii) those that had been issued with SSM Operating Permit by MC and (iii) those that had been inspected by EPA for renewal of Environmental Permits.

¹² Akim Oda, Assin Fosu, Obuasi, Konongo, Bibiani, Asankragua

¹³ Akim Oda, Konongo, Obuasi, Sefwi Wiaso

1.6 Methods of data collection

38. The reviewed documents, interviewed and inspected mining sites to collect data for the audit:

a. Document review

39. We reviewed the documents attached as Appendix B. We did so to understand the requirement and procedure of reclamation, the regulatory requirements; mechanisms in place to ensure adherence; and how the MC and EPA structured themselves to enforce Compliance.

b. Interview

40. We interviewed 17 officials of MC and EPA (the list and roles of the officers is attached as Appendix C) as well as 15 concession owners, the District Mining Association (Bibiani) and 10 inhabitants living on or farming around the concessions we visited. We interviewed the officers to corroborate information we had gathered in our review of documents. We also gained understanding of the operational procedures and the challenges associated with the administration of reclamation bonds, verification and certification of reclaimed sites, compliance monitoring, reporting and assessment of operating plans. We interviewed the concessioners and the District Mining Association to confirm aspects of our observations on posting of bonds. We also understood the level of compliance monitoring, verification and certification carried out by MC and EPA officials. The team interacted with the members of the various mining communities for information on the impact of mining sites, which have not been reclaimed, on their activities.

c. Physical inspection

41. We inspected 22 out of the 41 sampled SSM concessions based on available reports on the extent of reclamation, verification of sites for renewal of environmental permits and concessions whose licenses and permits had expired. We inspected the concessions to verify the level of reclamation carried out by the miners. The concessions that we inspected have been highlighted in Appendix A.

CHAPTER TWO

DESCRIPTION OF THE AUDIT AREA

2.1 Historical Background

42. Small Scale Mining Law, 1989 (P.N.D.C.L. 218) was passed to legalise the activities of SSMs and public policies were formulated to support the implementation of the law. At the time, the focus was more on promoting and regularizing SSM in the country without provisions to address associated environmental issues such as reclaiming the degraded mined areas to ensure public safety.

43. Currently there are multiple laws governing the SSM industry which have integrated the regulation of environmental issues such as reclamation of the mined sites. Key among these laws are the Minerals and Mining Act, 2006 (Act 703), Minerals and Mining (Health, Safety and Technical) Regulations, 2012 (L.I. 2182) the Environmental Protection Agency Act, 1996 (Act 490) and Environmental Assessment Regulations, 1999 (L.I. 1652). Minerals Commission (MC) and Environmental Protection Agency (EPA) are mandated by these laws to ensure, among other things, the reclamation of SSM sites.

2.2 Reclamation of alluvia SSM sites

44. In alluvial mining, concurrent reclamation is recommended, that is where non-mineral bearing materials taken from a current pit are used to back fill that of a previous one in the course of operations. The rationale is that by the time a miner ends operations on a concession, there will be few areas left to be backfilled.

45. Operators are expected to compact and level the grounds after backfilling and plant trees or crops and nurture them. In addition, refuse dumps and makeshift structures on site are to be removed if they are not needed by the adjoining communities. As part of the process, water in pits where the mineral bearing materials were washed is to be treated and discharged.

2.3 Mandate, Mission, Vision and Functions of EPA and MC

46. The mandate, mission, vision and functions of EPA and MC are as follows:

EPA's mandate, mission, vision and functions

Mandate

47. EPA is mandated by Environmental Protection Agency Act, 1994 (Act 490) to oversee, coordinate and regulate all issues regarding the environment. The Environmental Assessment Regulations, 1999 (L.I. 1652) supports the implementation of the Act.

Mission

48. The mission of EPA is to co-manage, protect and enhance the country's environment, in particular, as well as seek common solutions to global environmental problems.

Vision

49. EPA vision statement as stated are:

- A country in which all sections of the community value the environment and strive to attain environmentally sustainable development, with sound and efficient resource management, considering social and equity issues.
- An Agency dedicated to continuously improving and conserving the country's environment.

Functions

50. The functions of EPA regarding reclamation are to:

- assess and approve the plan and cost of reclamation.
- administer reclamation bonds.
- monitor and enforce reclamation.
- verify and certify reclamation activities carried out by miners.

MC's mandate, mission, vision and functions

Mandate

51. MC is mandated by the Minerals Commission Act, 1993 (Act 450) and the Minerals and Mining Act, 2006 (Act 703) to regulate and manage the utilisation of the mineral resources of Ghana and to coordinate and implement policies relating to mining. It is also to ensure compliance with Ghana's Mining and Mineral Laws and Regulations through effective monitoring.

Mission

52. The mission of MC is to foster the efficient and effective regulation and management of the utilisation of Ghana's mineral resources.

Vision

53. MC's vision is to make Ghana the leading destination of mining sector investment in Africa through creating a congenial atmosphere in which all stakeholders work as partners in a safe environment to achieve one common goal, sustainable development through mining.

Functions

54. The functions of MC regarding reclamation are to:

- Receive, assess and approve plans for reclamation.
- Monitor and enforce reclamation activities.
- Verify and issue reclamation certificate.

2.4 Organisational structure

55. The organisational structures of MC and EPA are attached as Appendix D.

2.5 Funding

MC

56. The MC funds its activities with Internally Generated Funds (IGF). The MC does not have a separate budget line for reclamation of SSM sites. They charge it on the funding for the SSM Department. The amounts budgeted, the allocations and expenditure from the IGF for SSM Department from January 2016 to June 2020 are presented in Table 2.

Table 2: The budget, allocations and expenditure from IGF for the SSM Department from January 2016 to June 2020

Year	IGF		
	Budget (GH¢)	Allocations (GH¢)	Expenditure (GH¢)
2016	0	0	0
2017	380,700.00	284,850.00	284,850.00
2018	422,400.00	182,300.00	182,300.00
2019	734,200.00	255,450.00	255,450.00
2020	765,300.00	80,840.00	80,840.00
TOTAL	2,302,600.00	803,440.00	803,440.00

Source: Assistant Manager, Finance (MC) – August 2020

57. From Table 2, the SSM Department spent all the GH¢803,440.00 of its budget that was allocated for the period.

EPA

58. The EPA does not have a separate budget line for SSM activities. They charge the processing of SSM Environmental Permits on the funding for its Mining Department and Operations Department, whilst that of monitoring and verification is charged on the funding for Monitoring and Verification of the Agency. The budgets and allocations of both departments and the Agency's expenditure on Monitoring and Verification are presented in Table 3.

Table 3: The budgets and allocations for the Mining and Operations Depts.; and the Agency's expenditure on Monitoring and Evaluation 2016 to 2020

Year	Budget (GH¢)		Allocations (GH¢)		Monitoring and Verification Expenditure of EPA (GH¢)
	Mining Dept.	Operations Dept.	Mining Dept.	Operations Dept.	
2016	*	*	*	*	13,663,662.00
2017	1,261,422.00	1,000,000.00	500,000.00	800,000.00	11,723,273.00
2018	1,256,422.00	1,000,000.00	500,000.00	800,000.00	13,397,260.00
2019	1,699,834.00	1,290,000.00	500,000.00	800,000.00	16,021,277.00
2020	980,000.00	1,290,000.00	700,000.00	779,056.00	13,117,598.00
Total	5,197,678.00	4,580,000.00	2,200,000.00	3,179,056.00	67,923,070.00

Source: Deputy Director, Internal Audit (EPA) – April 2021 *Figures were not made available to us.

2.6 Key Players

59. The key players for the audit and their responsibilities are as indicated in Table 4.

Table 4: The key players for the audit

Key Players		Responsibility
EPA	Mining Department	Permitting of SSM activities and administration of small-scale mining bonds
	Area / Regional Offices	Monitoring and reporting on SSM activities in their jurisdiction as well as facilitating verification and certification of reclaimed mines sites
MC	Small-Scale Mining Department	Overseeing the activities of the District Offices
	Inspectorate Division	Receiving and assessing operating plans; and issuance of Operating Permits. Verifying and certifying reclaimed mined sites

	District Offices	Monitoring and reporting on small-scale mining activities in their jurisdictions
Small-Scale Mining Companies/Groups		Carrying out reclamation activities

2.7 Stakeholders

- Ministry of Lands and Natural Resources
- Ministry of Environment, Science, Technology and Innovation
- Ghana National Association of Small-Scale Miners
- District Small-Scale Miners Associations
- Members of mining communities

60. Find their roles attached as Appendix E.

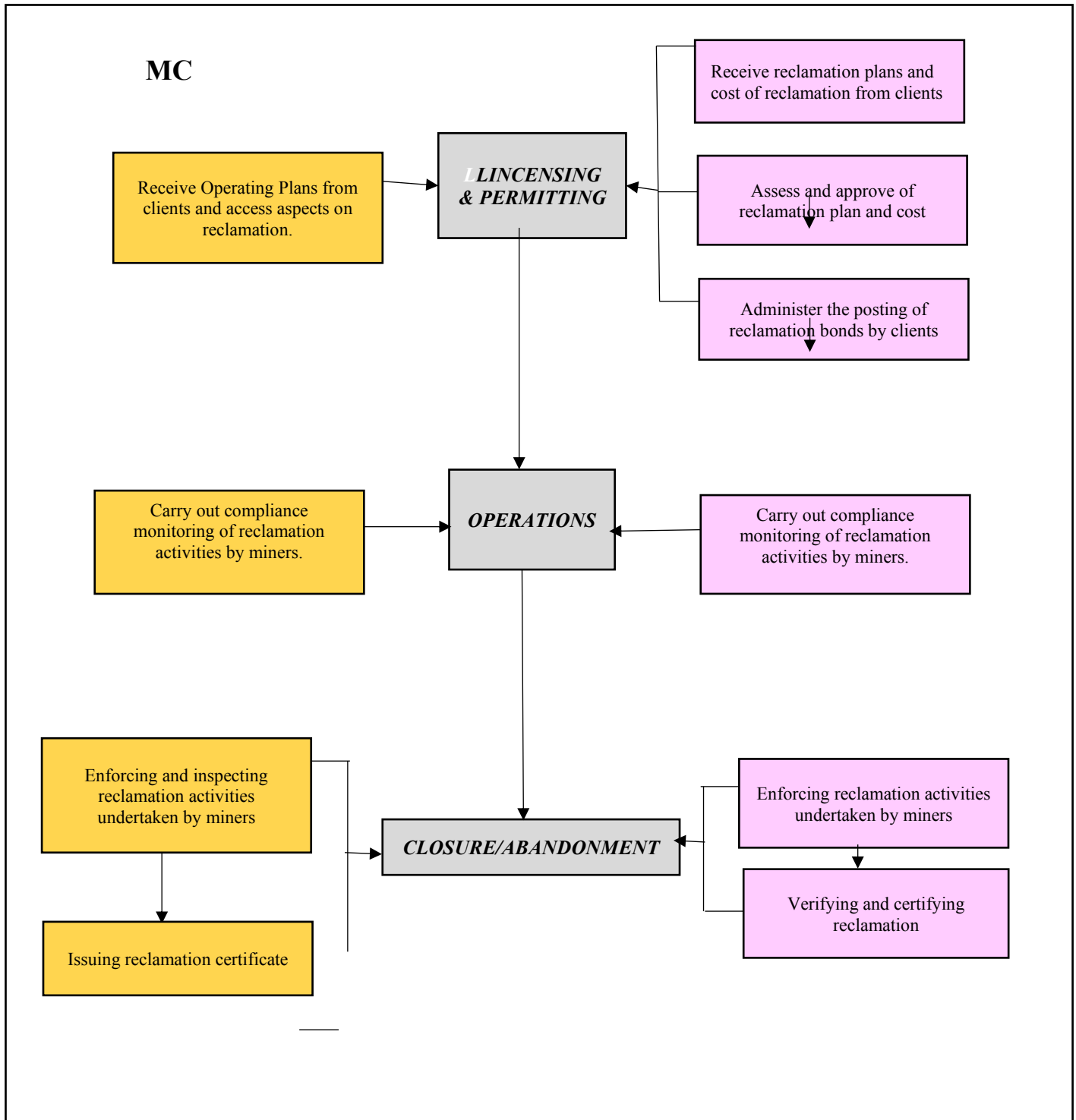
2.8 Limitation to the audit

61. From April 2017 to December 2018, the government placed a ban on SSM activities. During the period, activities in the sector was put on hold. This affected our scope (2016 to 2020) as some of the data on the areas that we examined during the ban period were not available.

2.9 System Description

62. The system description for ensuring reclamation of SSM sites is presented in Figure 1, showing how EPA and MC structure their functions to reclaim mining sites under the various stages of mining. The detail is attached as Appendix F.

Figure 1: System description for ensuring reclamation of SSM sites



CHAPTER THREE

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

3.1 Introduction

63. This section presents the findings, conclusions and recommendations of the audit and are detailed under the following headings:

- a) EPA did not administer the posting of reclamation bonds.
- b) MC did not enforce the submission of operating plans.
- c) MC and EPA did not properly monitor and report on reclamation.
- d) MC and EPA neither verified nor certified reclaimed SSM sites.

3.2 EPA did not administer the posting of reclamation bonds.

64. Regulation 23 of the Environmental Assessment Regulations, 1999 requires EPA to ensure that prospective small-scale miners post reclamation bond in the form of cash into an escrow account based on approved reclamation plans. In the proponent's reclamation plans, they are to explain the level of degradation their operations are likely to cause and provide an estimate on the cost of restoring the degradation. EPA is supposed to assess and approve the proposed reclamation plan and ensure that proponents post the cost of restoration as reclamation bond. The bond is to serve as security against default on reclamation or rehabilitation of disturbed land arising out of the mining operations.

65. We assessed files of fifteen¹⁴ out of 41 SSM companies/ groups, that EPA had issued with Environmental Permits and observed that 12* of the fifteen companies submitted reclamation plans with cost of reclamation. EPA had assessed and approved a total of GH¢524,300.00 (details in Appendix G) as cost of reclamation from the 12 companies. We found that, there was no information to indicate that EPA made the proponents post the approved cost of restoration as reclamation bonds into any escrow account. The Deputy Executive Director (Technical) and the Acting Director of the Mining Department at EPA said no

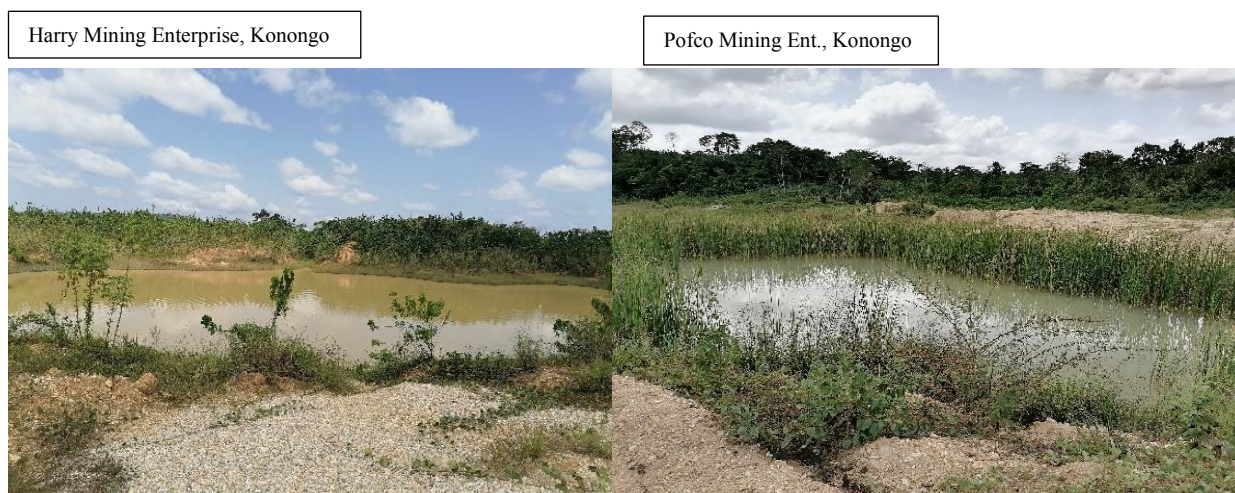
¹⁴ 59 Street Mining Services*, Agona Mining Co. Ltd*, Blue Blue Enterprise, BNV Ventures*, Cecemas Mining Ent. 2, Cecemas Mining Ent., Isadrate Mining*, King Addo Mining Group*, Onyame Aseda Mining*, Westline Mining Group*, Beaver Mining*, Pofco Mining Ent*, Harry Mining Ent*, Positive Touch Ent*. and Soft Hands Ent.*

small-scale miner had ever posted reclamation bonds since the inception of the Environmental Assessment Regulations (EAR) in 1999.

66. We also found through interviews with EPA officials that the Agency had not exercised its mandate to ensure SSM companies post reclamation bonds partly because the Agency had not developed any standardized criteria for liability estimation. Secondly, our assessments also revealed that EPA had not opened the escrow account for SSM into which the approved cost of reclamation should be deposited by the small-scale miners. We noted that although EPA approved the 12 companies as detailed in paragraph 46, it did so, not based on any standard criteria, but accepted wholly the proposals of the applicants. For instance, since the inception of EAR in 1999, the Agency had not been able to develop standardized amount as benchmark for the cost of reclaiming an acre of degraded land to enable it to validate the reclamation proposals submitted by proponents.

67. EPA's failure to make 12 companies post the reclamation bond, denied them the amount of GH¢524,300.00 which is to be used to reclaim the mined areas in the instance where the proponents failed to do so. We found during our visits to two of the 12 companies whose cost of reclamation was approved by EPA that the operators were no longer working on their concessions and had left mining site without reclaiming them. See Picture 1.

Picture 1: Uncovered mining pits filled with water at abandoned mining sites at



Source: Field inspection by Audit Team, November 2020

68. We observed from the list of permitted SSM companies/groups that the environmental permits of the two operators that we visited had expired in 2018 and had not been renewed. As we noted, the Agency has no guarantee for reclamation bond during the default period.

Conclusion

69. EPA had not administered the posting of reclamation bonds by small-scale miners since the inception of the Environmental Assessment Regulations over 20 years ago. EPA had not also exercised their mandate and oversight responsibility in ensuring that small-scale miners post reclamation bonds thereby denying the State monies that could have been used to restore the degraded mined sites.

Recommendations

70. We recommend that:

- In accordance with Section 18(1b) of Audit Service Act, 2000 (Act 584) the amounts of approved reclamation cost that EPA did not collect should be surcharged on the officials involved.
- EPA should take the necessary steps to standardize liability estimates for SSM and to insist on the posting of the approved reclamation cost as bonds before issuing prospective small-scale miners with Environmental Permit.
- EPA should take steps to open the escrow account to enable proponents deposit their reclamation bonds.

Auditee's comments:

71. *The Management of EPA agreed to the finding but indicated that they were constrained by extenuating circumstances which had not allowed them to carry out their full mandate as it related to reclamation and bond administration. In spite of the constraints, the EPA had been employing strategies to address the challenge. Examples are:*

- *Working on the standardization of the liability estimates for large scale mines, which will provide the basis for the computation of the reclamation cost for SSM companies; and*
- *Carrying out extensive stakeholder consultations with Ghana National Association of Small-Scale Miners, Chamber of Mines and financial institutions to explore innovative ways of implementing the bonding of small-scale miners.*

72. *The Management of EPA is of the view that in the light of the challenges and the efforts being made, the surcharge would be overly punitive measure.*

3.3 MC did not enforce the submission of operating plans

73. Regulation 472(2c) of the Minerals and Mining (Health, Safety and Technical) Regulations, 2012 (L.I. 2182) requires the Inspectorate Division (ID) of MC to ensure that proponents submit an operating plan together with other requirements for acquisition of SSM operating permit. In the plans, applicants are to explain how they intend to rehabilitate the mined areas by detailing the methods and procedures for revegetation. This is to enable ID to assess whether the process contained in the plan to be used by proponents to reclaim the mined areas is appropriate.

74. In our sample of 41 concessions, the MC had issued SSM Operating Permits to fifteen¹⁵ from 2019 to 2020. We found from files of the fifteen concessions that none of them had provided the operating plan as required.

75. Our reviews of the files showed ID ensured that all other requirements for issuance of SSM Operating Permit were met except providing Operating Plans. The files had requirements such as Environmental Permit from the EPA, the mineral license issued by the MC, receipt for payment made for the operating permit fees and the vetting report from the Inter-Ministerial Committee on Illegal Mining.

76. We noted from our interviews with two senior inspectors that ID was aware of the requirement of an operating plan but failed to enforce it. We found from the interviews that ID issued the SSM with Operating Permits without any form of assurance on how the land was to be rehabilitated.

77. We observed during our inspections that concessions the MC indicated had been fully reclaimed¹⁶ were not as presented. We observed more than one uncovered pit with water and/or natural shrub vegetation instead of the pits having been back filled, levelled and economic trees planted and nurtured. Examples of such concessions are as shown in Table 5.

¹⁵ Stone Aurum Mining Ent., Korl Ahweneasa Ltd., Longlife Mining Ent., Onyame Aseda Mining, Virgin Mining, Kae Dabi Mining and Trading Enterprise, Faithful Mining, DPgold Company Limited, Daakye Mining Ventures, Cecemas Ent., Bugart Mining Group, Baba Sala Ventures, Acquah Mining Group, 59 Street Mining Services, and 4give & 4get Mining and Trading

¹⁶ Pits backfilled, levelled and economic trees planted and nurtured

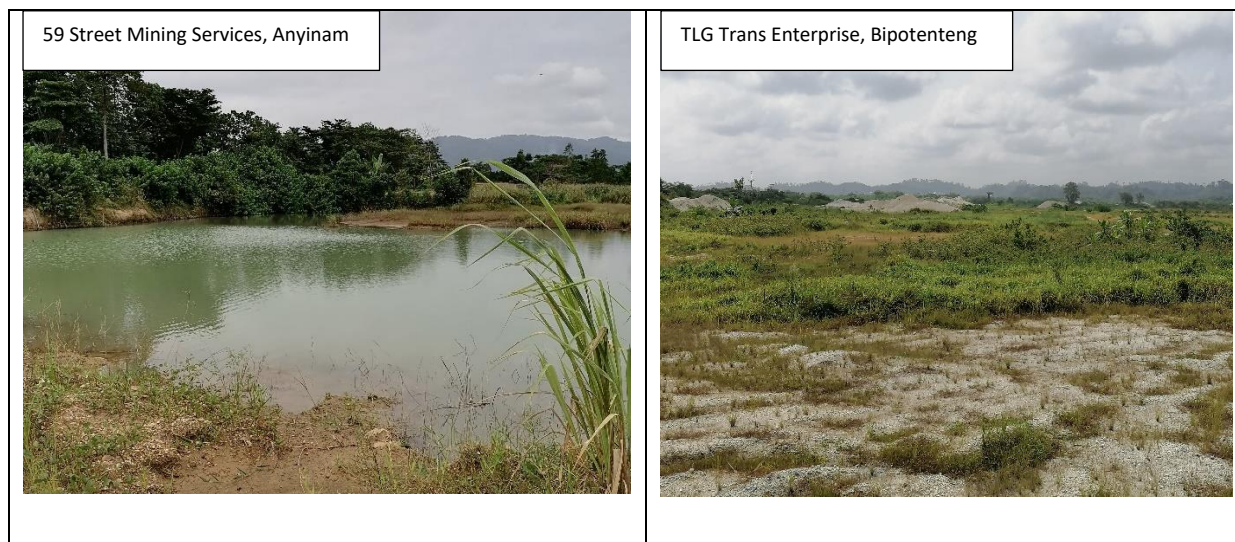
Table 5: Concession indicated as reclaimed but had more than a pit and natural shrub vegetation

No.	Name of concession	Mining District	No. of uncovered pits	Type of vegetation
1	59 Street Mining Service	Akim Oda	6	Natural vegetation
2	Joben Enterprise	Akim Oda	4	About half of the concession had acacia and teak trees planted, while the remaining portions had natural vegetation
4	Bugart Mining Group	Asankragwa	2	Natural vegetation
5	Prestige Mining	Assin Fosu	2	Natural vegetation
6	Faithful mining Ventures	Assin Fosu	2	Natural vegetation
7	Pofco Mining Enterprise	Bibiani	3	Natural vegetation
8	Solutions Mining Enterprise	Bibiani	10	Natural vegetation
9	Harry Mining Enterprise	Konongo	6	There are Acacia trees planted on some portions of the site with the remaining portions taken over by natural vegetation
10	T.L.G Trans Enterprise	Obuasi/ Dunkwa	3	Planted palm trees but not growing well with most portions of the concession covered by natural vegetation

Inspections by Audit Team, November 2020

78. Picture 2 shows examples of the pits and natural vegetation we found on the concessions in Table 5.

Picture 2: Examples of pits and natural vegetation on some of the concessions



Source: Field inspection by Audit Team, November 2020

79. Farmers who cultivate their crops around the concessions complained to us during our interactions with them about the dangers posed as they pass through the concessions to their farms. In addition, water collected in the pits render the farms waterlogged thereby causing stunted growth in the crops.

Conclusion

80. The Inspectorate Division (ID) of MC overlooked the submission of operating plans by proponents before issuing SSM Operating Permits and therefore had no reference to assess the appropriateness of reclamation method.

Recommendation

81. We recommended the MC to ensure that the ID insists on the submission of operating plans by proponents for assessment of reclamation procedures before the issuance of SSM Operating Permit.

Auditee's Response:

82. *The Management of MC agreed to the findings and recommendation and indicated that the Commission will take the necessary steps to ensure the submission of operating plans indicating how mined areas will be reclaimed.*

3.4 MC and EPA did not properly monitor and report on reclamation

83. Section 90(3b) of the Minerals and Mining Act, 2006 (Act 703) and Regulations 12(d) & 477 of Minerals and Mining (Health, Safety and Technical) Regulations, 2012 (L.I. 2182) require Mining Inspectors and District Officers of the MC to periodically monitor the operations of small-scale miners to control the performance of the miners in relation to reclamation.

84. The Regional/Area Officers of the EPA are required by Section 11(3) of the EPA Act, 1994 (Act 490) and the Operational Procedures of the Agency to inspect SSM sites for purposes which includes ensuring compliance with reclamation conditions in environmental permit.

85. The operational procedures of both MC and EPA require District and Area Officers to produce reports on their monitoring activities to indicate among other things, that reclamation was carried out in accordance with the approved plans. The MC and EPA carry out monitoring to ensure among other things, that miners comply with reclamation conditions in licenses and permits such as concurrent reclamation¹⁷ and revegetation¹⁸.

86. We found from quarterly reports of 2016 to 2020 at various District Offices that MC carried out a total of 1,458 visits to SSM sites. We also noted, as was captured in their reports that between 2017 and 2018 (the period of the ban on SSM activities), that MC monitors were visiting illegal mining sites. Extracts from the visits carried out in each quarter from 2016 to 2020 is presented in Table 6.

Table 6: The number of visits carried out by the District Offices of MC in each quarter for the period of 2016 to 2020.

District/ Quarter	2016				2017				2018				2019				2020				Total	
	1 st	2 ⁿ d	3 ^r d	4 ^t h	1 st	2 ⁿ d	3 ^r d	4 ^t h	1 st	2 ⁿ d	3 ^r d	4 th	1 st	2 ⁿ d	3 ^r d	4 ^t h	1 st	2 ⁿ d	3 ^r d	4 ^t h		
Obuasi	N/A				N/A		17	35	26	43	70	110	22	33	48	47	96	75	65	0	687	
Bibiani	0	33	40	30	35	0	4	8	15	10	13	7	9	5	21	11	17	8	8	0		
Asankrangwa	N/A				0	0	13	20	20	19	18	21	20	N/A				33	27	30		6
Akim Oda	16	25	27	27	N/A				N/A				0	0	0	3	2	7	4	3		
Konongo	28	30	0	0	N/A				0	9	11	0	0	0	0	0	0	4	4	0		
Assin Fosu	12	13	13	12	N/A				N/A				0	0	3	7	3	2	5	0		

Source: Quarterly reports of the various District Offices from 2016 to 2020 N/As = Reports were not available

¹⁷ non-mineral bearing materials taken from a current pit are used to back fill that of a previous one in the course of operations

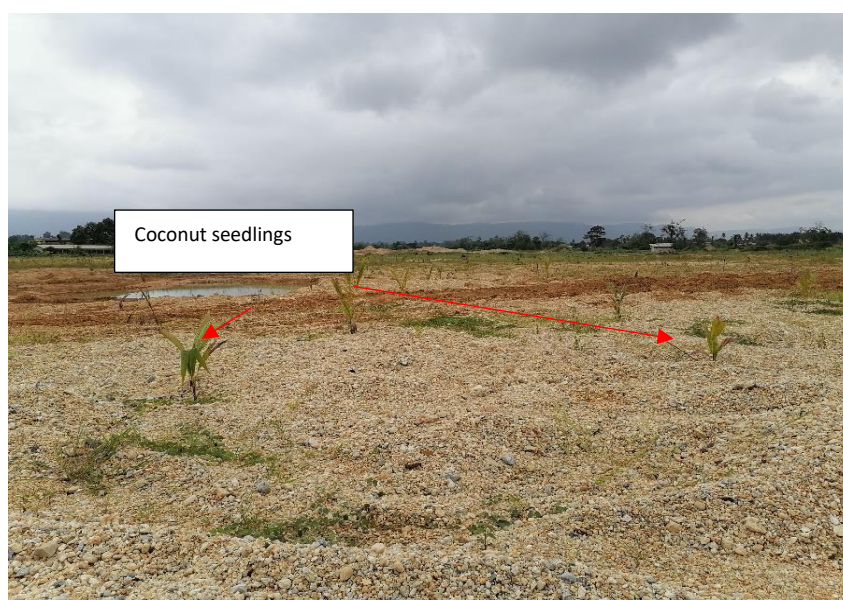
¹⁸ planting of economic trees and nurturing them

87. As shown in Table 6, Obuasi accounted for the highest number of monitoring visits largely due to the high level of mining activity in the area. Interviews with the various District Officers revealed that Bibiani, Asankrangwa, Akim Oda, Konongo and Assin Fosu are also areas with a high number of active mining activities. According to the District Officers they scaled down monitoring from 2017 to 2018 due to the ban on SSM activities. However, in Obuasi, Bibiani and Asankrangwa we found from interviews with the Officers that the monitoring they carried out within the ban period were on illegal mining activities within their jurisdictions.

88. We found that MC had indicated the extent of reclamation in 9 out of 94 quarterly reports. We observed in the monitoring reports that various District Offices had different methods of reporting. For instance, reports at Akim Oda and Assin Fosu, had a section on reclamation where it was indicated the number of active and inactive pits, as well as areas that had been backfilled on specific concessions.

89. On the contrary, reports of Bibiani and Asankrangwa indicated the number of routine visits but was silent on details of specific concessions reclaimed and the extent of reclamation done. We found that Akim Oda was the only District that had a concession with all pits covered, levelled and coconut seedlings planted. See Picture 3.

Picture 3: Acquah Mining Group at Atiwa, Akim Oda



Source: Field inspection by Audit Team, November 2020

90. In the case of Obuasi and Konongo none of the reports on the 687 and 86 visits to SSM sites had information on reclamation.

91. We observed that the template that the District Officers used for their reporting in 2019 and 2020 did not make provision for reclamation issues to be discussed. As a result, the quarterly reports from the District Offices did not provide information on the extent of reclamation to help the MC take actions to address outstanding or inappropriate reclamation issues.

92. On the part of EPA, we found from the 2016 to 2020 quarterly reports of the four Regional/Area Offices that they carried out a total of 3,290 compliance monitoring. Twenty-three out of the 3,290 compliance monitoring were on SSM concessions whilst 3,267 was on other environmental activities such as manufacturing, hospitality, health and energy. In the reports, the 23-compliance monitoring on SSM had information on illegal mining issues and inspections for new or renewal of environmental permits. There was no information in them that indicated the extent of reclamation on the concessions they visited.

93. We found that the quarterly reports made provisions for Officers to indicate the number of visits they have made to SSM sites but not the environmental issues on the various concessions. We observed that EPA through the Chief Programme Officer at its Mining Department had been developing a checklist for reporting on environmental management issues in the SSM sector since 2016.

94. We found during the inspections that SSM companies whose licenses had expired from 2018 to July 2020 had from two to seven abandoned pits filled with water. For instance, Faithful Mining Ventures and Harry Mining Enterprise had two and six pits while Joben Enterprise and 59 Street Mining Services had seven and six pits respectively. Each of these pits measured about half of a standard football pitch and were closer to farmlands. Our analysis show that monitoring and reporting did not address the problem of reclamation because if SSM had practiced concurrent reclamation, there should have been at most one inactive pit and not two to seven as we saw. See pictures of the pits in some of the concessions in Picture 4.

Picture 4: Examples of abandoned pits on concessions

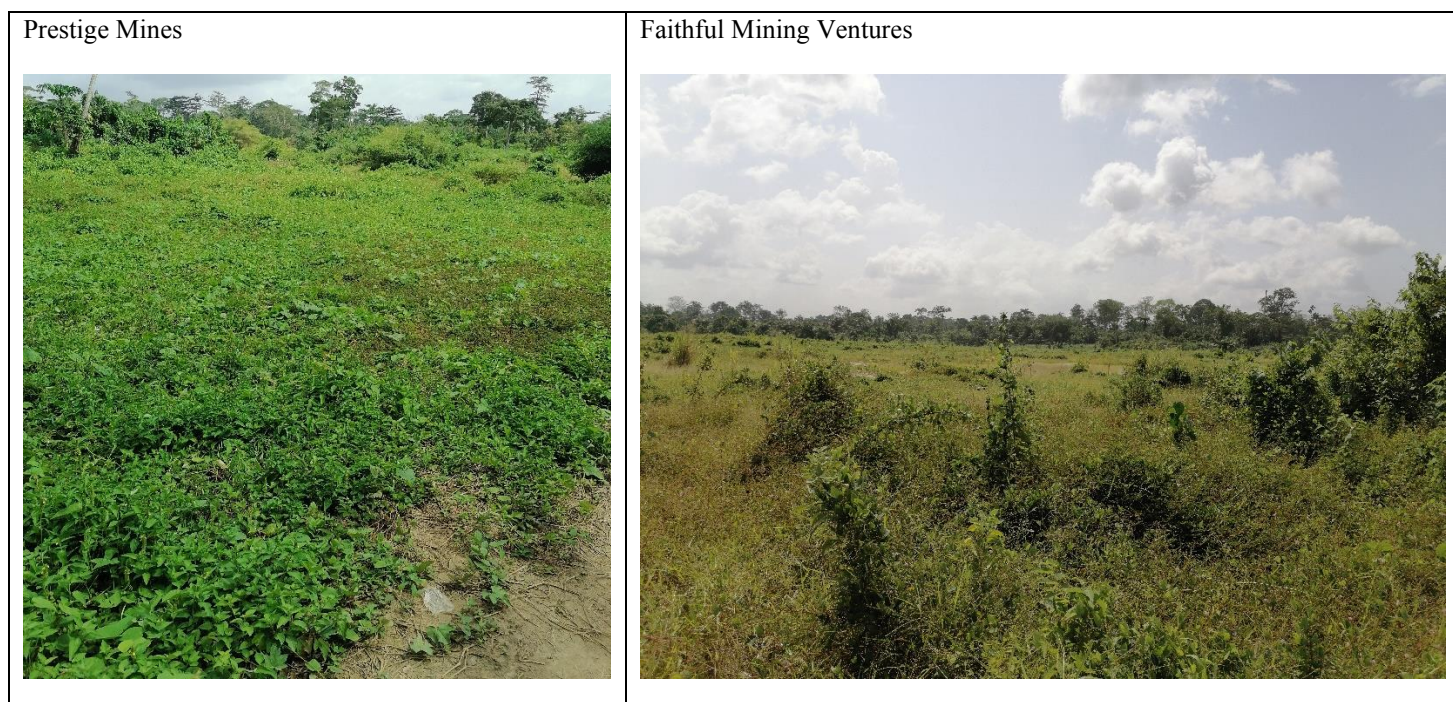


Source: Inspections by Audit Team, November 2020

95. The EPA officials at their Head Office explained that based on the principle of concurrent reclamation, as many pits as feasible are usually backfilled as mining progresses. As explained, some of the pits are used for mine infrastructure such as settling pond, water storage facilities and so on, in which case, they are left as pits until the resources has been exhausted. However, there was no information to indicate that the operators were going to continue with the mining and that any of the pits that we found would be used as mine infrastructure.

96. Other concessions such as Prestige Mines, Faithful Mining Ventures and Pofco Mining Enterprise had the backfilled portions covered with natural vegetation instead of planting of economic trees as required by permit conditions. See Picture 5.

Picture 5: Examples of backfilled portions covered with natural vegetation



Source: Inspections by Audit Team, November 2020

97. We found during the inspections that MC and EPA officials at the districts were aware of the status of the concessions but had not taken actions to ensure that the sites were appropriately reclaimed.

98. The MC Officials at the Head Office explained that the ban on SSM operations from April 2017 to December 2018 affected remobilization of logistics for reclamation by the miners, hence the presence of uncovered pits on some of the concessions that we visited.

Conclusion

99. The monitoring and reporting carried out by EPA and the MC did not ensure that small-scale miners complied with reclamation conditions in their licenses and permits. EPA gave minimal attention to the conduct of compliance monitoring on SSM sites, whilst both organisations did not take actions to ensure reclamation. The reporting format for both organizations did not allow for collecting information on status of reclamation to enable them to address the reclamation issues. So, pits were left opened and filled with water which posed threats to the lives of farmers and their farms.

Recommendations

100. We recommended that the:

- a) EPA and MC should put measures in place to ensure that monitoring undertaken by the Area/District Offices lead to reclamation of SSM sites.
- b) EPA should complete and approve the checklist for reporting on environmental management issues in the small-scale mining sector and ensure that the Area Officers use it to among other things, report on the extent of reclamation on concessions and
- c) MC should modify their reporting format to capture the extent of reclamation on concessions and ensure that the District Officers use them.

Auditees' Response

101. **EPA:** *The Management of EPA agreed to the findings and recommendations. They added that a component of Accountability, Rule of Law and Anti-Corruption Programme (ARAP) supplied drones to aid in the physical monitoring of SSM sites, which had been allocated to the respective Regional/Area Offices. The Agency's GIS Unit has been engaged in the training of officers in various Regional/Area Offices on the drones for enhanced compliance monitoring in the sub-sector. In addition, the Agency shall ensure that those pits which do not have alternative use central to the continued operations of the mines are backfilled within a period to be determined by the Agency.*

102. **MC:** *The Management of MC agreed to the findings and recommendations. They added that the MC will develop a standardized reporting format to capture the extent of reclamation on concessions to ensure compliance of the Regulations.*

3.5 MC neither verified nor certified SSM sites

103. Regulation 480 (1) and (2) of the Minerals and Mining (Health Safety & Technical) Regulations, 2012 (L.I. 2182) requires the Chief Inspector of Mines at the MC to verify completed reclamation works of abandoned small-scale mine sites and if satisfied with the rehabilitation, issue a rehabilitation certificate to the owners of the concessions.

104. According to Regulation 23 of the Environmental Assessment Regulations, 1999, EPA is required to verify reclamation works carried out by miners to know whether the site had been rehabilitated to a condition that is

compatible with the pre-existing land use of the area; and if satisfied, issue a certificate to indicate completion of reclamation. MC and EPA are to independently verify and certify reclaimed SSM sites. The verification and certification are done to ensure that small-scale miners carry out reclamation works satisfactorily.

105. MC provided us with a list of 13 reclaimed SSM concessions as having been fully reclaimed by the concessioners, but our checks on the status of verified and certified sites revealed the contrary. We noted that the 13 concessions as presented in Table 7 were neither verified nor certified.

Table 7: Results of assessment of the status of verification and certification of the 13 concessions listed by MC as fully reclaimed.

No.	Name of company	Status of Reclamation per list provided by MC	Our observations on the status of Verification and/or Certification
1	Prestige mining	Fully reclaimed	No
2	Ebenmens 2 Enterprise	Fully reclaimed	No
3	Faithful Mining Ventures	Fully reclaimed	No
4	Baymey Mining	Fully reclaimed	No
5	T.L.G Trans. Enterprise	Fully reclaimed	No
6	Firmstart company limited	Fully reclaimed	No
7	New generation Mining	Fully reclaimed	No
8	Harry Mining Enterprise	Fully reclaimed	No
9	Pofco Mining Enterprise	Fully reclaimed	No
10	Holyrose Mining	Fully reclaimed	No
11	Obeng Mining group limited	Fully reclaimed	No
12	Joben Enterprise	Fully reclaimed	No
13	Acqua Mining	Fully reclaimed	No

Source: MC's list of fully reclaimed concessions and verification by Audit Team

106. Our interviews with two Senior Inspectors of Mines, the Head of SSM Department and the six District Officers of the MC showed that the MC had not been certifying reclaimed mined sites because the authority to do so had not been delegated to them at the district level.

107. According to the Minerals and Mining (Health Safety & Technical) Regulations, 2012 (L.I. 2182), Chief Inspector of Mines and the Inspectors of Mines are authorised to verify and certify reclamation activities. However, all the District Officers who were in-charge of SSM operations at the areas we visited were not Inspectors of Mines and had also not been authorised by the Chief

Inspector of Mines to carry out verification and certification of reclaimed SSM concessions.

108. In addition, the Inspectors of Mines were stationed at either the Head Office or the Regional Offices of MC and had not been assigned the responsibility to verify and certify reclamation activities that were carried out by the various SSM companies/groups.

109. Similarly, there was no evidence at EPA Head Office that indicated the Agency had verified and /or certified SSM concessions as required. The Acting Director and Chief Program Officer at the Mining Department of EPA did not have information on SSM concessions that had been reclaimed as well as the status of verification and/or certification of the reclaimed concessions. The EPA did not also provide us with information on the extent of reclamation and certification of the SSM sites that we inspected, upon request. (See letter attached as Appendix H).

110. We observed that Konongo, Obuasi and Sefwi Wiawso offices of EPA were in-charge of five¹⁹ of the 13 concessions that MC had indicated as fully reclaimed. However, there were no information on the files of these concessions to indicate that EPA had verified and/or certified them.

111. We found that EPA did not have criteria and procedures for verification and certification of reclaimed SSM concessions. Instead, one has been developed for large scale concessions which were contained in EPA's Reclamation Security Agreement (Generic) (RSA). According to the Acting Director of EPA's Mining Department, the RSA is an agreement that indicates the obligations of EPA and mining operators on the reclamation of mined lands. A similar one on SSM operations that will form the basis of systematic procedures to verify and certify reclaimed SSM sites had not been envisaged.

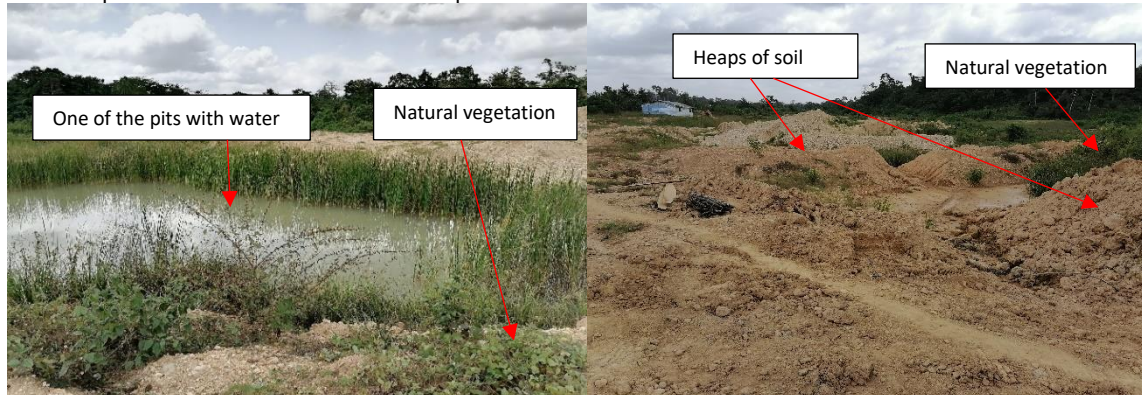
112. We observed during the inspections that the concessions MC provided as reclaimed (refer Table 7), had several uncovered pits filled with water, unlevelled surfaces and growth of natural vegetation. Also, where crops such as cassava, palm oil and coconut had been planted, the plants had not been natured as shown in Figure 2. These observations were contrary to the prescribed reclamation indicators²⁰ in the various license and permit conditions.

¹⁹ TLG Trans Enterprise, Firmstart Company Ltd., New Generation Mining, Harry Mining Enterprise and Pofco Mining Enterprise

²⁰ Systematic backfilling of pits with gravels; followed by other soils and then, levelling and spreading of the top soil on the surface. These are followed by planting of tree species and nurturing them for about six months to ensure their proper growth

Figure 2: Examples of supposed reclaimed concessions and pictures with brief description of our observations.

Pofco Mining Enterprise: Portions of the concession had been backfilled and taken over by natural vegetation. There were two pits filled with water and several heaps of soil scattered around



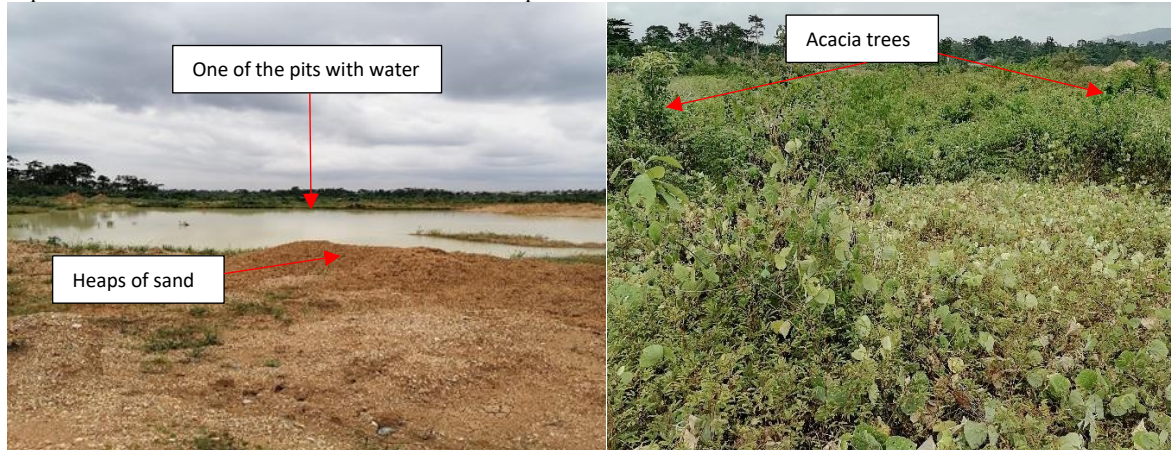
Harry Mining Enterprise: About half of the concession had acacia trees planted. The other half had six pits filled with water and each measured about a quarter of standard football field. The portions with the pits had several heaps of sand around.



Baymei Mining: Most of the areas have been backfilled but had undulating surface and scattered mini ponds. Had several heaps of soil scattered all over with one pit of about a quarter of a standard football field left uncovered. Planted cassava had withered leaves.



Joben Enterprise: Portions had acacia trees planted and other parts had four pits filled with water. Each measured about a quarter of a football field and there were several heaps of soil scattered around



Faithful Mining Ventures: Portions have been backfilled and covered by natural vegetation. There were two pits filled with water. Each of the pit measured about half a standard football pit and had several heaps of soil scattered around them



Inspections by Audit Team, November 2020

113. The various District/Area Officers of MC/EPA attributed the presence of these pits to illegal miners who work on the concessions after they had been reclaimed. However, these District officers did not have reports to show the status of the concessions at the time the reclamation took place. We noted that because they did not verify to issue certificates as required, the concessioners have been exonerated. By so doing the responsibility to backfill, level and revegetate the land fall on the government which should not be the case. In addition, the MC and EPA would find it challenging to determine the causes of such degradations and implement measures to remedy them.

Conclusion

114. MC and EPA have not implemented procedures to verify and certify reclamation works undertaken by small-scale miners. The MC did not delegate the authority to District Officers or make Inspectors of Mines at the various District Offices to verify and certify reclaimed SSM sites, hence the activity was not undertaken. The EPA had not customized the Reclamation Security Agreement to enable it to verify and certify reclaimed SSM sites, as a result, miners were not obliged or motivated to reclaim the pit as required.

Recommendations

115. We recommended that the:

- a) MC should delegate authority to District Officers to verify and certify reclaimed mined sites; or make Inspectors of Mines available at the District Offices to verify and certify reclaimed mine sites as and when necessary.
- b) EPA should develop and implement a Reclamation Security Agreement (RSA) for SSM to form the basis of systematic procedures that will lead to verification and certification of reclaimed SSM sites; and
- c) EPA should ensure that the Area Officers use the RSA that it would develop for SSM to verify and certify reclaimed SSM sites.

Auditees' Response

116. **EPA:** *The Management of accepted the findings and recommendations. They added that the Agency will expedite the process of getting the bond administration governance structure in place and implement the RSA to meets the needs of the SSM. They of the view that the Accountability, Rule of Law and Anti-Corruption Programme in addition to the recruitment of new staff in December 2020, will aid in the monitoring of SSM to enhance reclamation.*

117. **MC:** *The Management agreed to the findings and recommendations and added that Inspectors of Mines have been employed in some of the District Offices. In addition, they have empowered the District Officers to ensure compliance of the Regulations.*

Overall Conclusion

118. The activities of MC and EPA did not ensure that small-scale miners reclaim degraded mined sites to return them to their maximum beneficial value as required by the Mineral and Mining Regulations, 2012 (L.I. 2182) and the Environmental Assessment Regulations, 1999 (L.I. 1652).

119. EPA had not put the necessary measures in place to enforce the posting of reclamation bonds by SSM operators. While the MC did not enforce the submission of operating plans by SSM companies/groups, both organizations failed to appropriately monitor and report on the extent of reclamation to ensure compliance. In addition, the MC and EPA had not implemented procedures to verify and certify reclamation works.

120. Poor enforcement of the laws has resulted in several pits filled with water on the concessions, which have become death threats to people who live or work around them. On concessions where some level of backfilling of pits had taken place, there were patches of heaps of sand, mini ponds and natural vegetation cover, indications that the operators failed to level the land, and plant economic trees and nurture them as required.

APPENDICES

APPENDIX A

Names, locations, and districts of SSM companies/groups examined.

NO.	CONCESSION	LOCATION	MINING DISTRICTS OF MC
1	Pofco Mining Enterprise*	Sefwi Nketiesu	Bibiani
2	Beaver Mining*	Sefwi Nketiesu	
3	Solutions Mining Enterprise*	Ntakom	
4	Pafagold Ventures*	Mpesiem	
5	Double Nut Company*	Fawokabra	
6	Stone Aurum Mining Enterprise	Adwumadiem	
7	Holyrose Mining*	Sowodadeam	Asankrangwa
8	Bugart Mining Group*	Akwesi Opong krom	
9	Obeng Mining Group Limited*	Wasa Akrapong	
10	Davi Mining*	Amoaman	
11	Daakye Mining Ventures	Wassa Gyapa	
12	Prestige Mining*	Gyaeware/ Twifo Ati Mokwae	Assin Fosu
13	Ebenmens 2 Enterprise*	Twifo kyekyewere/ Twifo Ati Mokwae	
14	Faithful mining Ventures*	Assin Hwedem/ kushia	
15	Cecemas mining Enterprise	Gyetuakurom	
16	Baymeyi Mining*	Gyaeware/ Twifo Ati Mokwae	Konongo
17	Harry Mining Enterprise*	Anumso	
18	Positive Touch Enterprise	Kokoben	
19	Soft Hands Enterprise	Kokoben	
20	T.L.G Trans Enterprise*	Bipotenteng	Obuasi & Dunkwa
21	Anyinase-Danso Mining Company*	Kobro/ Sawdadeng (Odaho)-Amansie Central	

22	Firmstart Company Limited*	Badowa No.1	
23	New Generation Mining*	Bipotenteng	
24	4give and 4get Mining and Trading	Bepotenten	
25	DPgold Company Ltd	Nsiana	
26	Kai Dabi Mining and Trading Enterprise	Bepotenten	
27	Westline Mining Group	Brofoyeduru	
28	Blue Blue Enterprise	Akyempem	
29	Acqua Mining Group*	Akim Anyinam	
30	Foster Duodo Mining Group*	Anyinam-Atiwa	
31	59 Street Mining Services*	Anyinam-Atiwa	
32	Joben Enterprise*	Anyinam-Atiwa	
33	Baba Sala Ventures	Muoso	
34	Long life mining Enterprise	Gyampomani	
35	Onyame Aseda Mining	Anyinam	
36	Agona Mining Company limited	Asamama	
37	Virgin Mining	Twepease	
38	Korl Ahwerease	Ahwenease	
39	BNV Ventures	Akim-Dwenase	
40	Isadarte Mining Plus Enterprise	Kobreso	
41	King Addo Mining Group	Meremere	

*Concessions we inspected.

APPENDIX B

List of documents reviewed.

NO.	ENVIRONMENTAL PROTECTION AGENCY	MINERALS COMMISSION
1	Regulations/Laws/ procedures relating to Reclamation: Environmental Assessment Regulation 1999; Environmental Protection Agency Act 1994 (Act 490); Reclamation Security Agreement (Generic)	Regulations/Laws/ procedures relating to Reclamation: Mineral and Mining Act 2006, Minerals and Mining (health, safety and Technical) Regulations, 2012 (L.I 2182); Minerals and Mining (General) Regulations, 2012 (L.I 2173); Minerals Commission Act 1993 (Act 450); Minerals and Mining Policy of Ghana 2014.
2	Permit conditions for SSM gold/diamond	License/Permit Conditions
3	Annual Reports-EPA	License Application Forms
4	Annual Plans-EPA	Monthly, quarterly and Annual Reports: Small-scale mining- Assin Fosu, Obuasi, Konongo, Bibiani, Asankrangwa and Akim Oda
5	Annual Reports-Mining Department	Annual Plans: Small-Scale Mining Department
6	Annual Plans-Mining Department	List of permitted Small-Scale Mining companies
7	Quarterly reports-Mining Department	A list of companies issued with Operating permits (2019 and 2020)
8	Monthly and Quarterly reports of Obuasi, Konongo, Bibiani, and Akim Oda	Sources of Funding for Small-Scale mining activities
9	List of permitted Small-Scale Mining companies	Files of selected small-scale mining companies/groups.
10	List of regional and area offices	List of companies that are fully qualified and those partially qualified to commence work
11	Presentation to EPA Governing Board by the Mining Department	List of reclaimed SSM concessions
12	Reclamation Security Agreement between Environmental Protection Agency of Ghana and Mining Companies	
13	Files of selected Small-Scale Mining Companies	

APPENDIX C

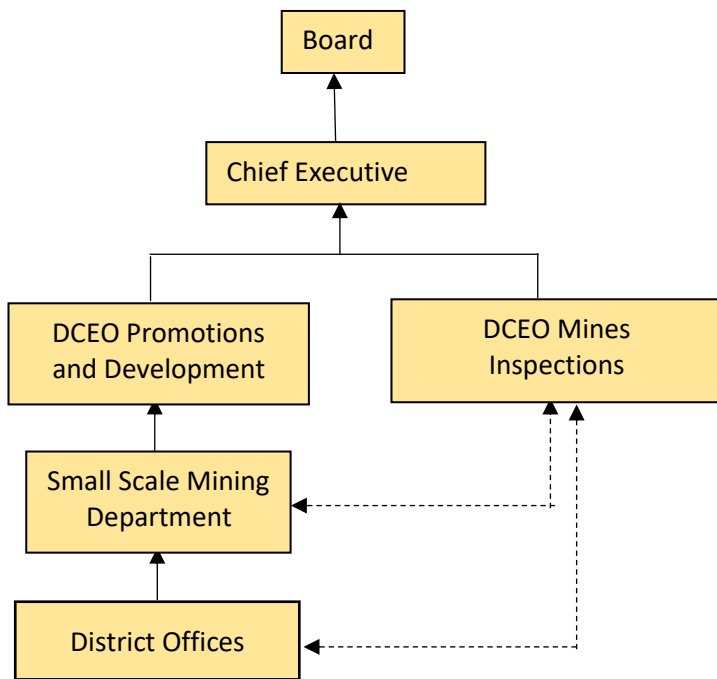
List of interviewees

Designation/ Role	Institution
Deputy Executive Director Technical	EPA
Acting Director-Mining Department	EPA-Mining Department
Chief Programme Officer	EPA-Mining Department
Programme Officer at Konongo	EPA
Area Head and Acting Director at Akim Oda District	EPA
Acting Regional Director at Sefwi Wiawso	EPA
Senior Programme Officer at Obuasi	EPA
Head-Small-Scale Mining Department	Minerals Commission-Small-Scale Mining Department
Senior Inspector of Mines	Minerals Commission-Inspectorate Division
Senior Inspector of Mines	Minerals Commission-Inspectorate Division
District Officer - Akim Oda	Minerals Commission
District Officer - Assin Fosu	Mineral Commission
District Officer - Konongo	Mineral Commission
District Officer - Asankrangwa	Mineral Commission
District Officer -Bibiani	Minerals Commission
District Officer -Obuasi	Minerals Commission

APPENDIX D

Organisational structure for MC and EPA

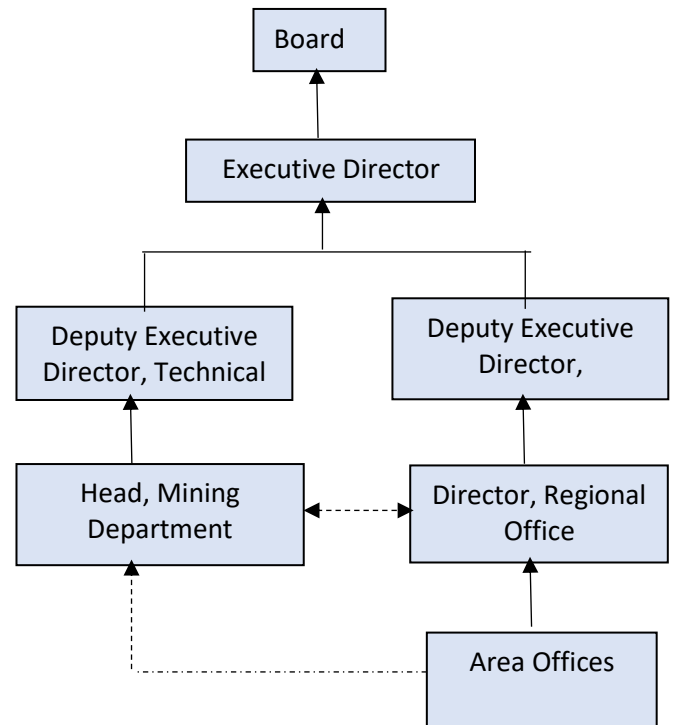
A. Minerals Commission



Key

←-----→ Coordination within Agencies

B. Environmental Protection Agency



APPENDIX E

Stakeholders and their responsibilities

Stakeholders	Responsibilities
Ministry of lands and Natural Resources	<p>-Ensuring the efficient formulation, Implementation, co-ordination, Monitoring and Evaluation of policies and programmes.</p> <p>-Ensuring efficient management of mineral resources to catalyse sustainable development</p>
Ministry of Environment, Science, Technology, and Innovation	<p>-Ascertaining the classification, monitoring rating and to supervise the activities of Environment, Science, Technology, and Innovation while seeing to the economic benefits</p> <p>- Ensuring the appropriate management of all planned programs and see to budgets in the area of environment, science, technology and innovation sector of the economy for aims of attaining a unified management system.</p>
Ghana National Association of Small-Scale Miners	<p>-Promoting the regularization and licensing for small-scale mining</p> <p>-Building centres for research and development and vocational training, that creates local capacity and innovate local technological, financial and social solutions for small- scale mining</p>
District Small-Scale Miners Associations	Ensuring members reclaim their sites after mining
Members of mining communities	They are impacted by the mining activities; and they expect SSM companies to practice sustainable mining

APPENDIX F

System Description

EPA

Submission of Reclamation Plan and Cost of Reclamation

SSM companies submit a reclamation plan which includes a cost estimate of the reclamation plan to the Regional or Area Offices of EPA as an attachment to an application for environmental permit. The companies will estimate how much they will use in backfilling, the cost of seedling and nurturing of plants until they grow.

Assessment and Approval of Reclamation cost.

The estimate of the reclamation cost is submitted by clients and is vetted and approved by the mining department of the EPA if they are satisfied with the estimates and the amount is what the applicant would be required to post as reclamation bond and issuance of environmental permits thereafter.

Posting of Reclamation bond.

SSM companies in line with Regulation 23 of the Environmental Assessment Regulations, 1999 (L.I. 1652), SSM company require a reclamation bond as a security for the rehabilitation of the disturbed sites within a period to be prescribed by the Agency. The reclamation bond sum to be posted shall be based on the cost of reclamation estimated by the mining company.

Compliance Monitoring of concurrent Reclamation

The Regional and Area Officers of EPA are to carry out monitoring to ensure that miners comply with the requirements of practicing concurrent reclamation by filling the old pits as they move to dig new ones. They are also to ensure that after backfilling, they add the top soil and plant trees in the area and nurture them. The Officers are also to report on the reclamation activities.

Enforcing Rehabilitation

The Regional or Area Offices are to ensure that miners rehabilitate mined out areas. The EPA usually rely on renewal of permits to enforce rehabilitation of the mined sites.

Monitoring the Rehabilitation Process/Inspecting Rehabilitation

Companies are to provide detailed information with pictorial evidence on the reclaimed portions of disturbed area(s) of the concession for verification by the Regional or Area Officers. When satisfied, EPA is to certify the reclamation works undertaken by concessioners.

MC

Submission of Operation Plans

Before a miner obtain Operating permit/License from the minerals commission to embark on mining activities, the clients need to submit Mine Operating plan (MOP) which include how mined sites will be rehabilitated or restored, if the MC is satisfied with the submitted MOP, it is approved and the client is permitted to mine in accordance with the operating plan.

Compliance Monitoring of concurrent Reclamation

The district officers of the Minerals Commission are to conduct routine monitoring and inspection of mining activities to ensure that miners comply with the requirements of practicing concurrent reclamation by filling the old pits as they move to dig new ones, they are also to ensure that after backfilling, the miners will add the top soil and plant trees in the area and nurture them. They ensure that unused machines and structures are cleared from the site and there should not be pollution of water bodies. The officers are to report on mining activities including reclamation works on quarterly basis.

Enforcing Rehabilitation

The MC use their task force team in the districts in collaboration with the District Security Council (DISEC) to ensure compliance with reclamation. MC are to ensure that clients reclaim mined out areas before any renewal of license or permit.

Inspecting Rehabilitation

The Inspectorate Division of the Minerals Commission are to supervise small-scale activities by conducting routine inspections both announced and unannounced as well as special inspections. They are to do so to ensure among other things, that disturbed areas rehabilitated as prescribed in the mining operating plans.

Issuing Rehabilitation Certificate

The Chief Inspector of Mines is to conduct a final inspection of an abandoned mine site or after rehabilitation work at a mine when completed and if satisfied with the rehabilitation, issue a rehabilitation certificate.

APPENDIX G

Approved reclamation costs for each of the 12 concessions

No.	Name of Concession	Approved Reclamation cost (GHC)
1	Pofco Mining Enterprise	70,000.00
2	59 Street Mining Services	18,800.00
3	Agona Mining Company limited	19,100.00
4	BNV Ventures	75,200.00
5	Isadarte Mining Plus Enterprise	52,300.00
6	King Addo Mining Group	19,500.00
7	Onyame Aseda Mining	73,600.00
8	Westline Mining Group	5,000.00
9	Harry Mining Enterprise	75,000.00
10	Beaver Mining Limited	80,000.00
11	Positive Touch Enterprise	21,500.00
12	Soft Hands Enterprise	14,300.00
	Total	524,300.00

APPENDIX H

Letter for request of information on the extent of reclamation of SSM sites to be inspected

AUDIT SERVICE

In case of reply the number and date of the letter should be quoted

My Ref. No:PSAD/PAU/PROJ.2020/14

Your Ref. No:

Tel: 233 (0) 302 664920/28/29

Fax: 233 (0) 302 6751495

Website: www.ghaudit.org



Good Governance
and Accountability

P. O. BoxM.96.....

ACCRA

29 OCTOBER 20 20

THE EXECUTIVE DIRECTOR
ENVIRONMENTAL PROTECTION AGENCY
ACCRA

Dear Sir,

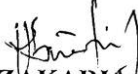
PERFORMANCE AUDIT ON THE RECLAMATION OF SMALL-SCALE MINING SITES

Per our letter dated 15 October 2020, referenced PSAD/PAU/PROJ.2020/13 and as discussed in our entrance meeting with you (Environmental Protection Agency) on Thursday 29 October 2020, we attach herewith a list of 30 selected mining concessions the team will be visiting.

We would be grateful if you could provide us with the necessary documentation and reports on the 30 sites by 13 November 2020, to enable us determine the extent of reclamation.

Should you need any further clarification on this subject, kindly call or email Zakaria Abukari on 0244081169 or Zakaria.abukari@audit.gov.gh.

Yours sincerely,


ZAKARIA ABUKARI
ASSISTANT AUDITOR-GENERAL/PSAD
For: AUDITOR-GENERAL

cc: The Auditor-General
Audit Service
Accra

The Head
Mining Department
Environment Protection Agency
Accra

The Head
Internal Audit Department
Environmental Protection Agency
Accra

Appendix A

List of small-scale mining sites to be inspected

Week 1 (1-5 November, 2020)

Assin Fosu

Prestige Mines

Faithful Mining Ventures

Ebenmens 2 Enterprise

Baymeyí Mining

Chejo Mining Enterprise

Obuasi/Dunkwa

T.L.G Trans Enterprise

New Generation Mining

Firmot Company limited

Akumat Mining Enterprise

Anyinse-Danso Mining Company

Week 2 (8-13 November 2020)

Konongo

E.K Agyeman Mining Group

Adom Mining Group

Bentcos Mining Enterprise

Positive Touch Enterprise

Soft hands Enterprise

Bibiani

Pofco Mining Enterprise

Beaver Mining

Solution Mining Enterprise

Double Nut Company Enterprise

Pafagold Ventures

Asankragwa

Awudu and Group

Bugar Mining Group

Davi Mining

Ernest Oppong Jnr. & Group

Ibrahim Mining Group

Week 3 (19 November 2020)

Akim Oda

Foster Duodo Mining

Acquah Mining

Joben Enterprise

59 Mining Street

Abu and Abu Mining Group



Mission Statement

The Ghana Audit Service exists

To promote

good governance in the areas of transparency, accountability and probity in Ghana's Public financial management system

By auditing

to recognized international standards and reporting our audit results

And

reporting to Parliament