

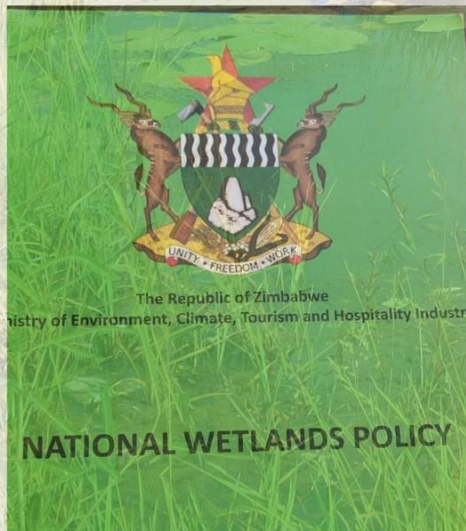


ENVIRONMENTAL MANAGEMENT AGENCY (EMA)

ANNUAL PROGRESS REPORT 2021



Protecting Wetlands for ecosystem and human well being.



TOGETHER-PROTECTING THE ENVIRONMENT

ABBREVIATIONS AND ACRONYMS

AED	Africa Environment Day
CWDCC	Coping With Drought and Climate Change
EEP	Environmental Education and Publicity
EIA	Environmental Impact Assessment
EMA	Environmental Management Agency
EMA (CAP 20:27)	Environmental Management Act Chapter 20:27
EMAL	Environmental Management Agency Laboratory
EMB	Environment Management Board
EMS	Environmental Management Services
EP	Environmental Protection
EPM	Environmental Planning and Monitoring
LEAP	Local Environmental Action Plan
RDC	Rural District Council
SADCAS	Southern Africa Development Community Accreditation Service
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNV	United Nations Volunteers
WED	World Environment Day
ZBC (TV)	Zimbabwe Broadcasting Corporation (Television)

Table of contents

Executive Summary	6
1.0 Introduction	8
2.0 Air Pollution Control	9
2.1 Law Enforcement	9
2.1.1 Licences issued	9
2.1.2 Vehicle Exhaust Emissions	9
2.1.3 Central African Batteries, Norton	9
2.1.4 Panellink Manufacturing, Bulawayo	10
2.2 Ambient Air Monitoring	10
2.2.1 Air Pollution from Richmond Sanitary Landfill, Bulawayo	10
2.2.2 Hwange Ambient Air Monitoring	2
2.2.3 Lafarge Ambient Air Monitoring, Harare	2
3.0 Water Pollution Management	1
3.1 Law Enforcement	2
4.0 Hazardous Substances and Waste Management	2
4.1 Law Enforcement	2
4.2 Hazardous Substances and Wastes Licenses	1
4.3 Chemical Imports and Transit	1
4.4 Hazardous Substance Spillages and Related Incidences	2
4.5 Hazardous Material (HAZMAT) Emergency Response Training	2
4.6 Zimbabwe and South African Hazardous Substances Monitoring Binational Agreement	2
5.0 Environmental Management Laboratory Programmes	3
5.1 Samples Analyses	3
5.2 Laboratory Accreditation Status	3
5.3 Projects	3
5.3.1 Antimicrobial Resistance (AMR)	3
5.3.2 Isotope Project	4
6.0 Solid Waste Management	4
6.1 Law Enforcement	5
6.2 Anti-littering Highways Roadblocks	5
6.3 National Clean-up Programme	6
7.0 Environmental and Social Impact Assessment (ESIA)	6
7.1 Law enforcement	7

7.2 Environmental Audits	8
During the reporting period, the Agency conducted a total of 1 723 environmental audits during the year translating to 74.6% increase as compared to year 2020 which had 987 audits conducted. The significant difference is a result of COVID-19 regulations and operating environment.	8
The audits revealed a general observation of increase in the number of project developers seeking to comply with EIA regulations in 2021 more than any other year before. However, of concern was the proliferation of legal and illegal hummer mills. Notable rehabilitation and compliance with EMPs was recorded within large scale mining operations.	8
Case 7.1-Alluvial Mining	8
Case 7.2: White ASB Mine, Mberengwa District Midlands Province	9
Case 7.3 Rehabilitation of Degraded Sites	9
8.1 Sand abstraction and Brick moulding	10
8.1 Wetlands and Sensitive Ecosystems Management	11
8.2 Veld Fire Management	11
8.2.1 Law Enforcement	12
8.2.2 The National Fire Week Launch	12
8.2.3 Education and Awareness	12
8.2.4 Community Fire Management Projects	13
8.3 Invasive alien species	13
8.4 Illegal mining	14
8.4.1 Law Enforcement	14
9.0 Environmental Community Projects, Environmental Planning and Environmental Research	15
9.1 Environmental Community Projects	15
9.1.1 Environmental Community Project monitoring	15
9.2 Local Environment Action Plans	16
9.3 Applied Environmental Research	16
10.0 Training, Education, Communication and Public Awareness	16
10.1 Stakeholder Capacity Building	17
10.2 Awareness, Stakeholder Engagement and Collaborative Meetings	17
10.1.1 Talk Shows	19
a) Community Talk Shows	19
b) Institutional Talk Shows	19
10.1.2 Mobile Road shows	20
10.1.3 Exhibitions	21
Case 10.1: Zimbabwe International Trade Fair (ZITF)	21
Case 10.2: Zimbabwe Agricultural Show	22

<i>Case 10.3: Provincial and District Agricultural Shows</i>	22
10.1.4 Environmental Days Commemorations	23
11.0 Catch Them Young Programs	24
11.1 Environmental School Club Support	24
11.2 Plastic Free Week with Schools	25
12.0 Environment, Responsible Business and Corporate Social Responsibility Awards 2021.	26
13.0 Media programs	27
13.1 Social Media and Public Feedback	28
13.2 Bulk SMS	28
14.0 Promotional and Publicity Material Produced	28
14.1 Journal of Environmental Management in Zimbabwe (JEMZ) Vol 1 of 2021	28
15.0 Synergies and Collaborations	29
Corporate Branding	29
16.0 Human Resources Annual Report	31
17.0 Conclusion	33

Executive Summary

The year 2021 was negatively impacted by the COVID -19 pandemic just like the previous year, 2020 with level 4 lock-down restrictions prevailing for almost half of the year hindering operations particularly fieldwork. The Agency adopted virtual working techniques for meetings and conferences. I. As guided by the Agency's strategic plan and Section 4(2)(a) of the Environmental Management Act (Cap 20:27), which stipulates that, 'all elements of the environment are linked and inter-related, therefore environmental management must be integrated and the best practicable environmental option pursued', thus efforts were made to ensure best coordination between sections of the Agency.

The Agency conducted a total of **24 984** compliance inspections on land, air and water quality while a total of **82 152** inspections were conducted on hazardous substances at the country's ports of entry/exit. During the inspections, corrective action was taken for noncompliance resulting in the issuance of **2 951** tickets and **7 862** environmental protection orders as well as opening of **119** dockets. The Agency processed **8 964** licenses during the year to control environmental quality. A total of **63** environmental protection orders were also served during the year to various institutions to implement proper waste management practices. Major drivers of land degradation noted during the year included sand and clay extraction due to increased demand in construction industry, deforestation for agriculture land clearance, urban firewood demand and tobacco curing processes, wetland ecosystems destruction through construction, veld fires and illegal mining. In the reporting period, a total of **1 396** prospectus and **698** EIA reports were reviewed translating to **37.5%** and **72.3%** increase respectively in comparison to year 2020 which had **1 015** prospectus and **405** EIA reports. A total **1 351** EIA certificates were processed which included **779** EIA certificates for new projects and **572** EIA Renewal certificates whilst **101** environmental consultants were registered. The Environmental Management laboratory (EMAL) analyzed water and soil for ambient environmental quality monitoring, discharge compliance monitoring, Good Agricultural Practices (GAP) and domestic use quality checks. During the year 2021, a total of **5 106** water and soil samples were analyzed. About a fifth of the samples, **1 000** were brought by external clients who used the results for decision making, **658** were for compliance checks, **3 279** ambient water quality monitoring and **164** for antimicrobial resistance (AMR) analysis. During the year, a total of **164** samples were analyzed for antimicrobial resistance with **132** samples being tested against 8 antibiotics and 32 analyzed specifically for extended spectrum beta-lactamase (ESBL) *Escherichia coli*. Of the 132 samples analyzed, major antimicrobial resistance in the environment was found to be against tetracycline and ampicillin. This *Escherichia coli* strain produces an enzyme (ESBL) such that infections become resistant to several antibiotics and was detected in **53%** of the samples.

The Agency has a robust environmental education programme designed to engage individuals and communities to promote environmental stewardship and nature-based solutions to environmental problems. A total of **49 646** education and **1 286** media publicity programmes were conducted reaching out to a total of **700 233** members of the public. A major achievement was the access of a total of **117 974** stakeholders through **3 242** physical awareness, collaborative and engagement meetings. In addition, **226** meetings were conducted online, reaching out to **10 588** participants. The Agency led the nation in the commemoration of **10** environmental days during the year, which included the National Clean-up Day, World Environment Day, Africa Environment Day, World Wetlands Day, Earth Hour, National Fire Launch, and World Day to Combat Desertification, World Clean-up Day, World Ozone Day and the National Tree Planting Day.

In addition, the Agency conducted project-based extension to demonstrate best practices at the same time empowering the beneficiary communities. In line with the National Development Strategy 1(NDS1), the Agency financially supported a total of **20** community based natural resources management projects throughout the country aimed at empowering the communities in natural resources management for sustainable utilization of natural capital for improved livelihoods. These initiatives included land restoration, wetland restoration, veld fire management, invasive alien species control, solid waste management, consolidated gardens and biogas. Generally, these initiatives resulted in important multiplier effects on food security, income generation, protection and sustainable management of the natural resource base.

1.0 Introduction

The report presents achievements of the Environmental Management Agency (EMA) during the year 2021. The mandate of EMA is guided by the Constitution of Zimbabwe, Section 73 which recognizes environmental rights as essential for every Zimbabwean. The Environmental Management Act (Chapter 20:27) expands the scope of work to ensure a clean, safe and healthy environment through,

- Promoting and facilitating sustainable utilization of natural resources with stakeholder participation,
- Regulating and monitoring the use of natural resources,
- Enforcing environmental standards and regulations.

The National Development Strategy 1 [NDS 1(2021-2025)] Chapter 12 on Environmental Protection, Climate Resilience and Natural Resources Management, sets out clear priority areas in terms of environmental management and natural resources conservation. Accordingly, EMA crafted a five year strategy plan with four (4) outcomes against which its performance was measured as follows,

- Improved Environmental Stewardship
- Improved Environmental Compliance
- Improved Synergies and Collaborations
- Organizational Development and Support

2.0 Air Pollution Control

2.1 Law Enforcement

The Agency conducted **1 607** inspections which resulted in the issuance of **100** tickets and **76** environmental protection orders to non-compliant companies and individuals. The inspections achieved was **19.7%** below the annual target of **2000** inspections and this was a result of the cancellation of the planned 2021 industrial emissions operations across the country due to COVID-19 pandemic related restrictions.

2.1.1 Licences issued

A total of **2 915** emission licences were issued in 2021 which was **16.6%** above the annual target of **2 500** emission licences. The Agency encouraged online application for the licences. Figure 2.1 depicts the number of licences issued in 2021 by category as compared to the previous 4 years.

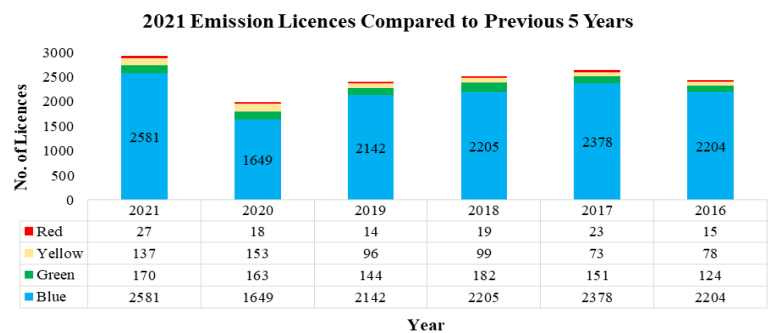


Figure 2.1: Emission Licences Issued by the Agency, period 2016 -2021

2.1.2 Vehicle Exhaust Emissions

The Agency conducted **9** roadblock operations which lead to **334** vehicle emission tests being conducted across the country. A total of **32** tickets were issued to motorists for failure to comply with exhaust emission standards. The exhaust emissions compliance recorded from the tests was **86.6%**.

2.1.3 Central African Batteries, Norton

An inspection was conducted following appeal against an order which had been issued. After emissions testing, it was noted that one of the two furnaces was emitting sulphur dioxide at a concentration of **944mg/m³** against a limit of **50mg/m³** stipulated in SI 72 of 2009 on Atmospheric Pollution Regulations. A ticket was issued for this violation. Furthermore, **50%** of the emissions were escaping as fugitives rather than being discharged via the stacks, as shown in Plate 2.1.



Plate 2.1: Fugitive furnace emissions at Central African Batteries (01/03/2021).

2.1.4 Panellink Manufacturing, Bulawayo

Panellink was operating a metal ingots pre-heating furnaces at the time of inspection on the 21st of April 2021. Stack emissions test at the Furnace Stack revealed that the emissions were **1042mg/m³** Sulphur Dioxide against the **50mg/m³** prescribed in SI 72 of 2009 for Iron and Steel process type. As a result, a ticket was issued and an environmental protection order to put in place measures to reduce SO₂ emission to acceptable levels according to SI 72 of 2009.



Plate 2.2: Black Stack and Fugitive Emissions From Panellink Furnace (21.04.2021).

2.2 Ambient Air Monitoring

The Agency conducted **4** ambient air monitoring exercises in 2021 in 3 provinces namely Matabeleland North, Harare Metropolitan and twice in Bulawayo Metropolitan.

2.2.1 Air Pollution from Richmond Sanitary Landfill, Bulawayo

The Agency conducted source-fugitive and ambient PM₁₀ respectively at and around the burning Richmond Sanitary Landfill in Bulawayo Metropolitan from the 15th to the 18th of May 2021. The burning Richmond Landfill caused deterioration of ambient air quality in the district as evidenced by PM₁₀ average readings which were above the **SAZ ZW997:2015** ambient air quality requirements in the receiving environment as observed from the established monitoring points from the 15th -16th of May 2021. The smoldering fire at Richmond Landfill resulted in emission of fugitive PM₁₀ in excess of the prescribed **<50 mg/m³** which is stipulated in **SI 72 of 2009**, see Figure 2. As a result, the Bulawayo City Council was ordered to submit the landfill's waste management plan, covering, Landfill Fire Preparedness, Alternating Waste and soil compaction plan, Land fill access security, Landfill hazardous substances entry-control, Waste pickers control, leachate management and new cells construction and old cells decommissioning plan. The fire outbreak incident at Richmond recurred in July, similarly ambient air assessments in and around the landfill conducted during the period 23rd to the 26th of July 2021 were above the **SAZ ZW997:2015** ambient air quality requirements.

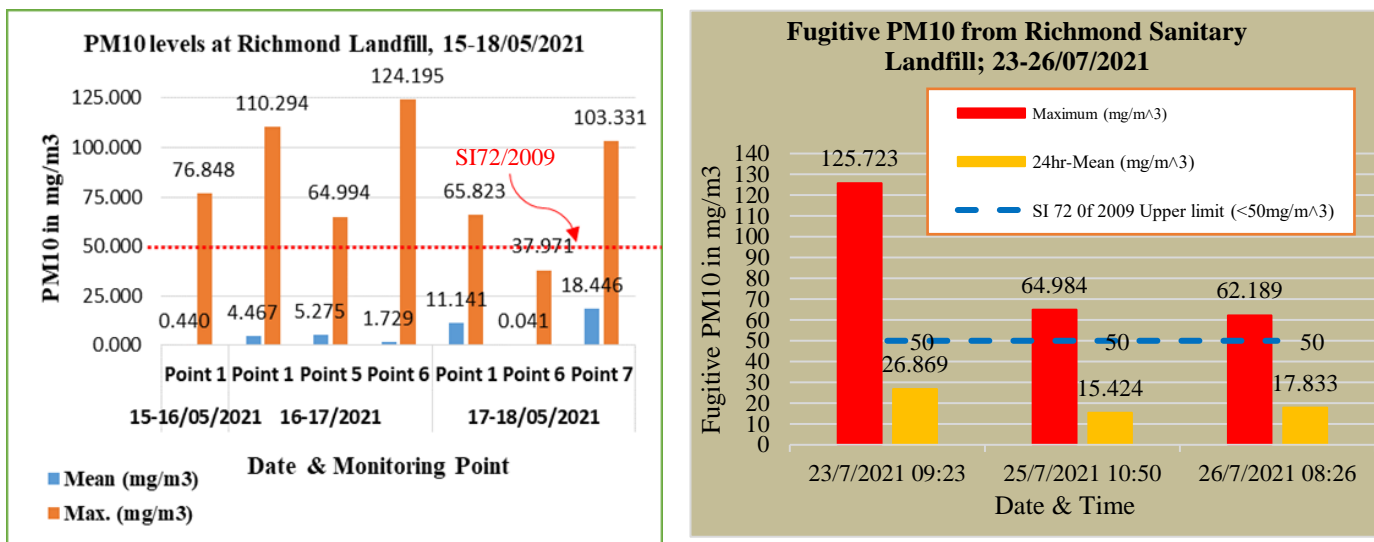


Figure 2.2: Excessive PM₁₀ Emissions At Richmond Landfill – During The Period May And July 2021

2.2.2 Hwange Ambient Air Monitoring

The assessment which was conducted at **4** monitoring points (Ingagula Clinic, No.2 Clinic, No.3 Clinic and St. Patricks Hospital) in **Zone 1** (Hwange Town) on the 21st – 25th of August 2021, revealed that the average for PM₁₀ Ground Level Concentrate (GLC) was **0.070 mg/m³** which was **40 %** above the **W.H.O** 24hr-guideline of **0.05mg/m³** and **53.3%** below the **0.15mg/m³** 24hr-guideline stipulated in the **SAZ ZW977:2015**. For Zone 2 (Hwange Rural), the assessment which was conducted at **3** monitoring points (Lucosi Irrigation, Bhangali Village and Madumabisa Village) on the 25th – 29th of August 2021, revealed that the average for PM₁₀ GLC was **0.041 mg/m³** which was **18 %** below the **W.H.O** 24hr-guideline of **0.05mg/m³** and **72.7%** below the **0.15mg/m³** 24hr-guideline stipulated in the **SAZ ZW977:2015**.

2.2.3 Lafarge Ambient Air Monitoring, Harare

The Agency conducted ambient PM₁₀ ground level concentration (GLC) assessment around Lafarge Manufacturing Plant at **3** monitoring sites. The monitoring sites comprised of one control site which was situated to the Eastern side of Lafarge Manufacturing Plant that is Fidelity number 237 (LAMP 1), other two sites were identified as the pollution sites because they were in the general wind direction and these are New Mabvuku at number 9645(LAMP2) and number 333 Manresa Park (LAMP3). The exercise was carried out from the 17th to the 28th of October 2021.

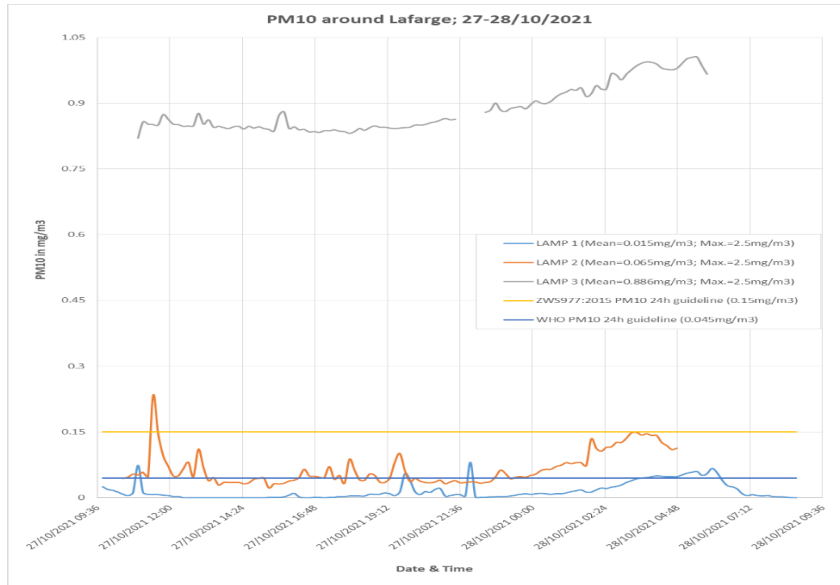


Figure 2.3: Ground-level concentrations of PM₁₀ in ambient air around the Lafarge Cement Plant – 27/10/2021 -28/10/2021.

3.0 Water Pollution Management

The Agency monitored **95** sewage treatment plants (STPs) from the 92 urban and rural local authorities across the country. Of these 95 STPs, 29% (28 STPs) were observed to be non-functional, hence discharging raw sewage into the environment, while 36% (34 STPs) were partially functional operating between 50% to 75% efficiency and hence discharging partially treated sewage. The combined volume of raw and partially treated sewage discharged daily into the environment was estimated at 364 megalitres. Twenty six (**26**) percent of the licenced municipal STPs were observed to be discharging effluent quality in the red class category which is considered to be extreme and poses high risk to the environment compared to **23%** in the blue class category which is rather safe and poses low risk to aquatic ecosystems. The majority of the licences were however in the moderate risk yellow class category (**52%**).

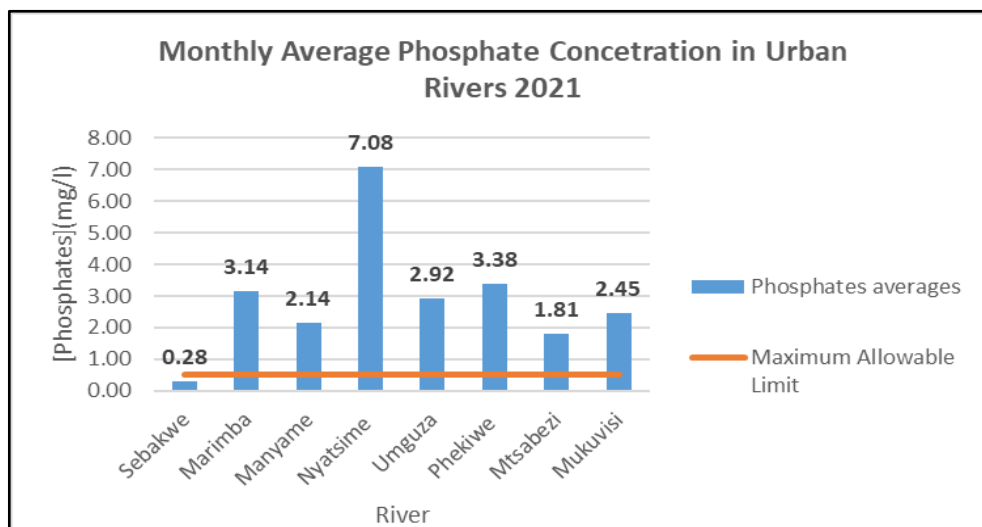


Figure 3.1: Monthly average dissolve oxygen levels and phosphate concentrations in urban Rivers

3.1 Law Enforcement

A total of **4 089** inspections were conducted against a target of 4300. A total of **583** effluent disposal licence applications were processed against a target of 430 licences. The licences were mainly issued to industrial, mining and local authorities' effluent facilities. The section issued a total of **244** tickets for effluent regulation violations, while **45** environmental protection orders were served.

4.0 Hazardous Substances and Waste Management

Among the key challenges currently facing the country included the absence of engineered hazardous waste landfills resulting in indiscriminate waste disposal practices. Such practices result in ground and surface water contamination affecting communities. On the other hand, by virtue of Zimbabwe's geographic location, it serves as a corridor for hazardous goods in transit between South Africa and the northern states, the likes of Democratic Republic of Congo, Zambia and Malawi. The country is therefore at high risk of accidental spillages during transportation. The sections below provide detail on the efforts by the Agency in implementing the provisions of the hazardous substances and waste regulations in the country.

4.1 Law Enforcement

A total of **4 443** inspections were conducted resulting in issuance of **397** tickets, **30** orders and the opening of **1** docket, see Figures 4.1. A total of **19** major hazardous substances spillages were recorded during the year. The Agency ensured there is timely emergency response, decontamination and rehabilitation of affected areas. During the year, **3 540** hazardous substances and wastes licenses were issued across the eight licensing categories nationwide. In order to enforce hazardous substances and wastes transportation regulations, the Agency conducted a total of **20** roadblocks countrywide. At the country's various border posts, the Agency managed to inspect a total of **82 152** consignments of hazardous substances and wastes.

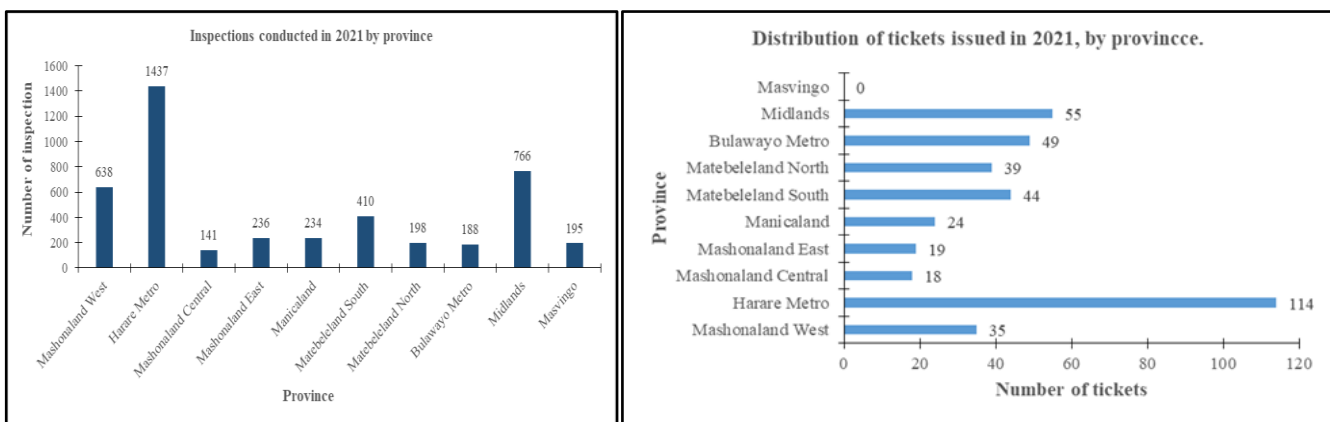


Figure 4.1: Provincial distribution of hazardous substances and waste inspections and tickets. 2021.

4.2 Hazardous Substances and Wastes Licenses

A total of **3 540 licenses** were issued in the year 2021. Hazardous Substances Storage and Sale, and Transportation contributed **37.99%** and **33.73%** of the licenses respectively. Figure 4.2 below gives the detailed breakdown of the licence distribution by class and category.

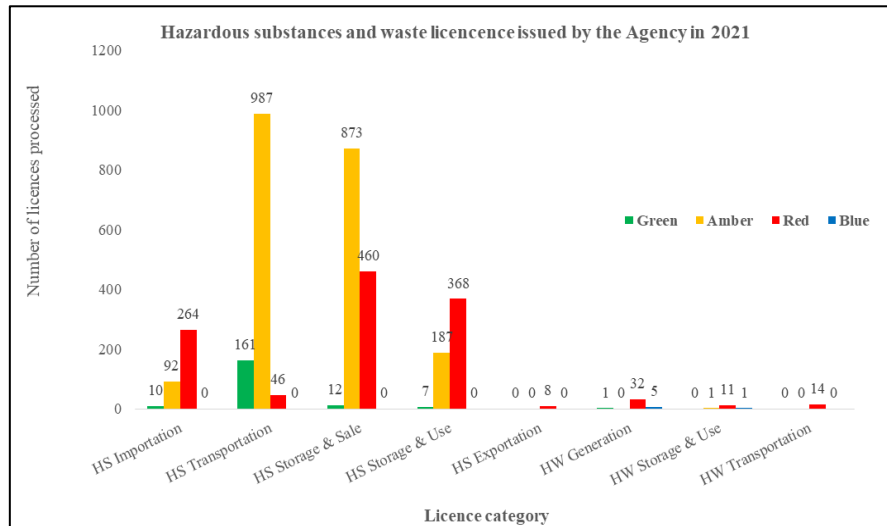


Figure 4.2: The distribution of hazardous substances and waste licences issued by the Agency in 2021, according to category and class.

The majority of the licences issued, 60.42% for transportation of hazards see Figure 4.2. Substance was petroleum fuel which is within the amber category of classification.

4.3 Chemical Imports and Transit

A total of **82 152 inspections** were carried out on trucks carrying hazardous substances across the country's ports during the year. The bulk of the inspections were on trucks transporting petrochemicals such as JET A1, diesel, paraffin and petrol. In comparison to the third quarter of 2020, there appears to have been a significant increase in the vehicles using the Forbes and Chirundu borders in 2021. In contrast, there was a reduction in the number of vehicle using the Victoria Falls Border Post which may be attributable to the commissioning of the Kazungula Bridge. Zimbabwe remained a destination of choice for chemical imports duration of the quarter, followed by Zambia, Democratic Republic Congo, Republic of South Africa, Malawi, Mozambique, Tanzania and Botswana in that order. Beitbridge border post saw an influx in Bitumen, that has been used across Zimbabwe in roads refurbishment, with Forbes border post adding to this as there has been an influx of fertilisers as well as sodium cyanide imported for use in the Country by various entities.

4.4 Hazardous Substance Spillages and Related Incidences

A total of nineteen (19) major hazardous substances spillages were recorded during the year.

4.5 Hazardous Material (HAZMAT) Emergency Response Training

A Hazardous Materials/Substances training was conducted by Rosenbauer for 9 inspectors from the Agency 2 Zimbabwe Republic Police officers from the 15th to the 19th of March 2021. The training was necessitated by the EMA acquisition and delivery of the specialised Hazmat Emergency Response Vehicle from Rosenbauer (Austria). The training covered aspects of Hazmat emergency response and decontamination which will improve the Agency's capacity to deal with chemical spills and emergencies.



Plate 4.1: EMA officers being trained on use of spill containment equipment by representatives from Rosenbauer.

4.6 Zimbabwe and South African Hazardous Substances Monitoring Binational Agreement

The Agency facilitated the bi-national meeting with Department of Forest, Fisheries and Environment (DFFE) of South Africa under the Bi-national Memorandum of Understanding (MOU) on environment and conservation. A visit was made to South Africa during the week 22-26 November 2021 to discuss hazardous chemicals and waste management, including the preclearance requirement for transboundary movement of hazardous substances and waste at Beitbridge. The format of the engagement included a binational meeting followed by benchmarking visits to hazardous waste management facilities. The Agency participated in a joint operation from 12 to 24 December 2021 at the Musina Traffic Control Centre which sought to expedite the clearance of hazardous chemicals and wastes at Beitbridge Border. The efforts were intended to minimize risks of disasters associated with the congestion of trucks carrying hazardous goods as witnessed in the run-up to the festive season in 2020

5.0 Environmental Management Laboratory Programmes

5.1 Samples Analyses

The laboratory received a total of **5 106** samples in 2021. Out of the total number of samples received, 1000 were external samples whilst 658 were compliance samples, 3279 ambient water and 164 for antimicrobial resistance (AMR) analysis.

5.2 Laboratory Accreditation Status

The laboratory had its annual SADCAS surveillance audit on the 3rd and 4th of November 2021. Eight NCs were raised, five for the microbiology section and three for the chemistry section. The laboratory was recommended for continued accreditation, and it was given 60 days to clear the non-conformances raised in the system. There was however improved risk assessments of the laboratory activities.

5.3 Projects

5.3.1 Antimicrobial Resistance (AMR)

The AMR project was being done under the one health approach which comprises of Ministry of Health and Childcare; Ministry of Lands, Agriculture, Water, Fisheries and Rural Development and Ministry of Environment, Climate, Tourism and Hospitality Industries. The Agency benefited from this project through capacitation of the laboratory and also training. The microbiology laboratory was refurbished through the Fleming Fund which was supporting the National Action Plan on Anti-Microbial Resistance (AMR) in Zimbabwe.



Plate 5.1: The Renovated Epoxy Floors and Scientific Laboratory Fridge

The laboratory also received a scientific laboratory freezer which will be used for storage of isolates and other consumables. Other materials that were received include sterile swabs, and sterile inoculating loops in an effort to capacitate the laboratory to carry out Antimicrobial Sensitivity Tests (AST) for different organisms found in the aquatic environment.

5.3.2 Isotope Project

Two experts from Germany were sent by International Atomic Energy Agency to Zimbabwe for the period between the 15th to the 22nd of November 2021. The key objectives of the visit was to train the team which comprised of participants from University of Zimbabwe, ZINWA and Environmental Management Agency (EMA) on radon detector RAD7 and liquid water isotope analyser.

6.0 Solid Waste Management

Solid waste management has become one of the biggest challenges confronting urban local authorities throughout Zimbabwe. Rapid urbanization leading to high population densities, sprouting illegal settlements as indicated in figure 6.1, expansion of residential and industrial areas as well as changing consumption patterns led to a dramatic increase in urban solid waste generation.

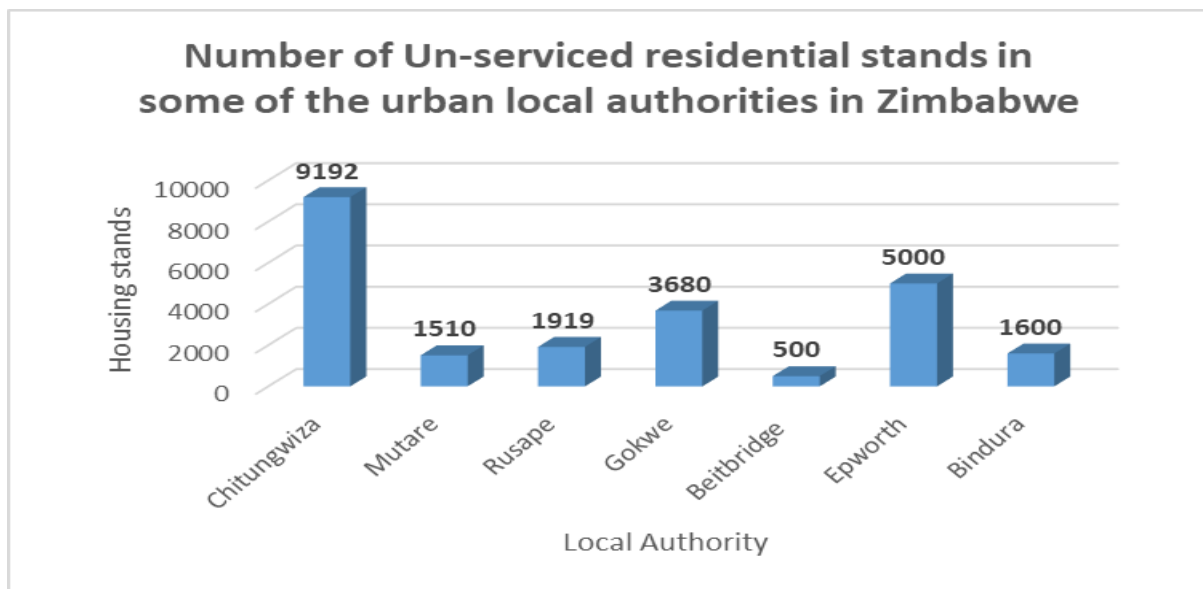


Figure 6.1: Number of un-serviced residential stands in selected urban local authorities.

According to Integrated Solid Waste Management Plan (2011), Zimbabwe’s estimated waste generation is **1.65 million** tons each year comprising of 18% plastics, 25% paper, 32% organic, medical 4%, 2%, electronic, 2% glass, 7% metals, 6% textile and 2% rubbles and other materials. The waste collection efficiency is estimated at **35%** nationwide.

Out of the **92** Local Authorities, **16** have Environmental and Social Impact Assessment (ESIA) certified landfill proposals and of these, only **3** have constructed standard sanitary landfills that are operational. These are Murehwa, Norton and Kadoma

6.1 Law Enforcement

In response, during the reporting period, **4 445** inspections were conducted surpassing the 2020 achievement of **2 791** inspections translating to **59.3%** increase. One hundred and thirty one (**131**) tickets were issued for various solid waste violations which included waste disposal at undesigned places, littering and failure to licence disposal sites, see Figure 6.2. A total of **63** environmental protection orders were also served during the year to various institutions to implement proper waste management practices. Four hundred and fifty five (**455**) illegal waste dumps with an approximate volume of **5 028.04 m³** were identified and cleared during clean ups which were conducted throughout the country upon issuance of environmental protection orders. A total of **314** solid waste licences were processed during the year showing an increase of 12.5% as compared to 2020, with significant increase noted on solid waste enterprises involved in waste recycling projects.

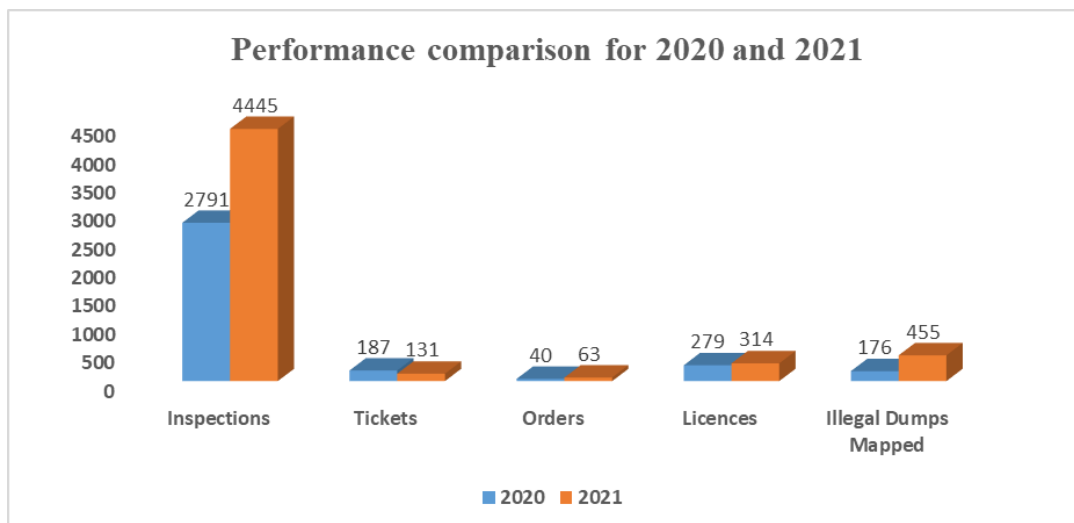


Figure 6.2: Comparison of Year 2020 And 2021 Law Enforcement Performance.

6.2 Anti-littering Highways Roadblocks

In an effort to raise awareness to motorists on waste management along road servitudes, the Agency in conjunction with various stakeholders such as the National Railways of Zimbabwe (NRZ), Traffic Safety Council, Zimbabwe Republic Police (ZRP) and the National Social Security Authority (NSSA) conducted **57** awareness roadblocks throughout the country.

The roadblocks reached out to **5 846** motorists. Waste receptacles inspections in public passenger vehicles revealed a **67.8%** compliance to legislation requirements.



Plate 6: Stakeholders Engaging The Motorists On Railway Safety And Solid Waste Management.

6.3 National Clean-up Programme

The National Clean-up Program remained key, despite the COVID-19 Pandemic and associated restrictions, a significant number of stakeholders maintained their participation during the year. A total of **3 879** clean-up campaigns were conducted with approximately **75 763** participants.



Plate 7: The Minister Of Environment, Climate, Tourism And Hospitality Industry, Hon. NM Ndhlovu, Minister Of State For Harare Metropolitan, Hon. O Chidawu And Several Stakeholders Cleaning Up At Kaguvi Building During The March National Clean-Up Day (05/03/21)

7.0 Environmental and Social Impact Assessment (ESIA)

In a bid to reduce the number of prescribed projects being implemented in contravention of Section 97 of the Environmental Management Act Chapter 20:27 as read with Statutory Instrument 7 of 2007 (Environmental Impact Assessments and Ecosystems Protection Regulations), the Agency had the following interventions;

7.1 Law enforcement

A total of **4 526** inspections were conducted in 2021 as compared to **2 598** inspections in 2020 translating to **74.2%** performance increase. As a result, **905** tickets were issued to offenders for environmental degradation offences and **668** environmental protection orders were served as compared to **905** tickets and **312** orders for the year 2020. The environmental protection orders issued were for the implementation of mitigation measures towards negative environmental impacts in an endeavour to protect the environment from further pollution and degradation. Efforts to increase compliance through prosecution resulted in the opening of **37** dockets being processed for non-compliance with EIA regulations.

A total of **1 396** prospectuses and **698** EIA reports were received and reviewed during the reporting period translating to **37.5%** and **72.3%** increase respectively in comparison to year 2020 which recorded **1 015** prospectus and **405** EIA reports. A total **1 351** EIA certificates were processed which included **779** EIA certificates for new projects and **572** EIA Renewal certificates. Projects in the mining and energy category topped the submission list of documents and their certification as shown in figure 7.1

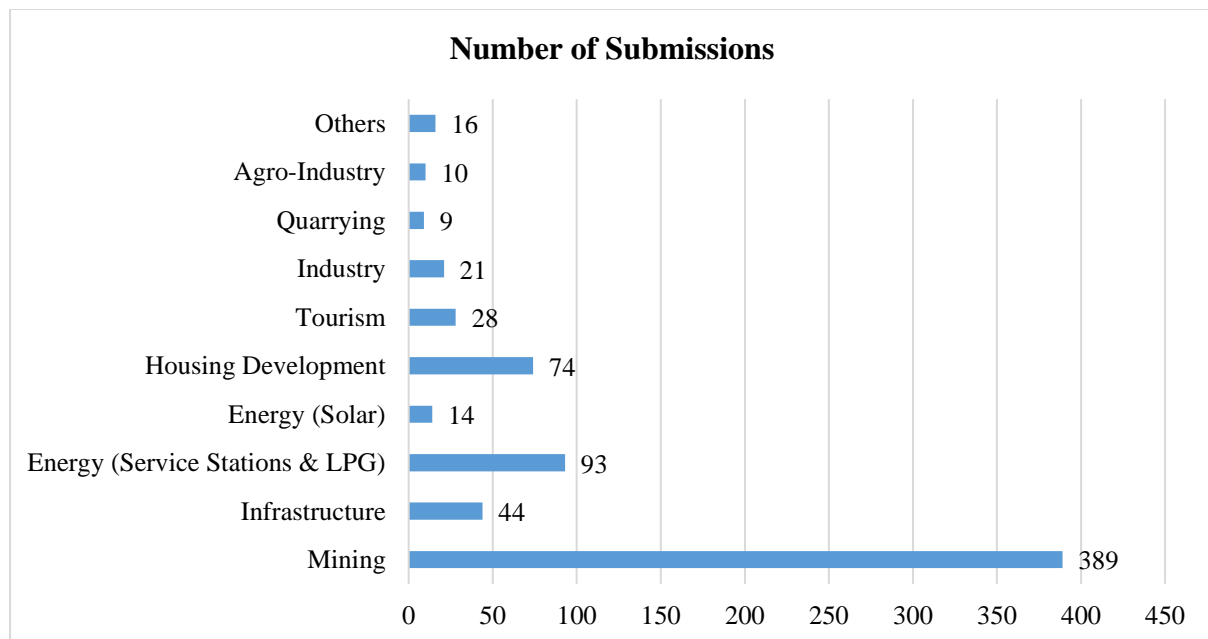


Figure 7.0: Breakdown Of EIA Submissions Received During The Year 2021.

7.2 Environmental Audits

During the reporting period, the Agency conducted a total of **1 723** environmental audits during the year translating to **74.6%** increase as compared to year 2020 which had **987** audits conducted. The significant difference is a result of COVID-19 regulations and operating environment.

The audits revealed a general observation of increase in the number of project developers seeking to comply with EIA regulations in 2021 more than any other year before. However, of concern was the proliferation of legal and illegal hummer mills. Notable rehabilitation and compliance with EMPs was recorded within large scale mining operations.



Plate 7.1: Rehabilitated Areas In The Dalny Mine, Chakari Claims That Were Mined By Open Cast Method Of Mining. (15.07.2021)

Case 7.1-Alluvial Mining

Cabinet pronounced the banning of alluvial mining on 8 September 2020. However, 6 months pilot projects were approved for Angwa, Save and Mutebekwe Rivers to be implemented by Zim Goldfields Limited, Falvect Mining and ENR Zim Resources respectively.

Statutory Instrument 104 of 2021 was gazette on 30 April 2021 permitting alluvial mining upon acquisition of written authorization from Ministry of Environment, Climate, Tourism and Hospitality Industry in terms of Section 3(1) of SI 104 of 2021 before undertaking alluvial mining. **4** dockets were processed during the year for alluvial mining without approvals by the Minister of Environment, Climate, Tourism and Hospitality Industry.



Plate 7.2: *Rehabilitation In Progress On Mutebekwi River By ENR Resources In Shurugwi (26/07/2021) And (Right) Community Protests Against Lightweight Investments Which Blocked The Nyagwi River (Goromonzi) Where Rehabilitation Was Done After Agency Intervention (14/05/2021).*

Case 7.2: White ASB Mine, Mberengwa District Midlands Province

White ASB Mine was involved in alluvial mining despite issuance of EIA certificate for reef mining and processing. A docket (**CR 75/7/21**) was opened for illegal alluvial mining along Dohwe River and the matter was still pending at the magistrate court. An urgent chamber lodged with the High Court (Case HC125/21) to compel the miner to stop alluvial mining was struck off on the basis that the Agency had issued the Company with a ticket, served an order to stop operation and also confiscated the keys of earth movement equipment.



Plate 7.3: *Environmental Degradation At Dohwe River (26/7/2021).*

Case 7.3 Rehabilitation of Degraded Sites

During the year, **2 602ha** of mined area was rehabilitated against annual target of **1 500ha** which was a milestone achievement towards environmental restoration. Large part of the rehabilitated areas were that of alluvial chrome mining along the Great Dyke by Zim Alloys and Zimasco as well as riverbed/alluvial mined areas. Muriel, Aryshire, Cam and Motor in Mashonaland West instituted rehabilitation activities on their open pits operation as part of Environmental Management Plans.

8.0 Ecosystems Protection

During the year, a total of **5 874** inspections were conducted resulting in issuance of **1 174** tickets for various offences and **4 887** orders served for remedial actions on various irregularities and protection of the environment with the majority being for veld fire management measures. Manual illegal stone quarrying in urban and peri-urban areas was noted as an emerging environmental degradation driver and was on the increase due to urban expansion. This needed to be dealt with by local authorities through enforcement of local by-laws. In 2021, a total of **261** licences were issued as follows, **16** brick moulding, **26** sand extraction and **219** sand transportation.

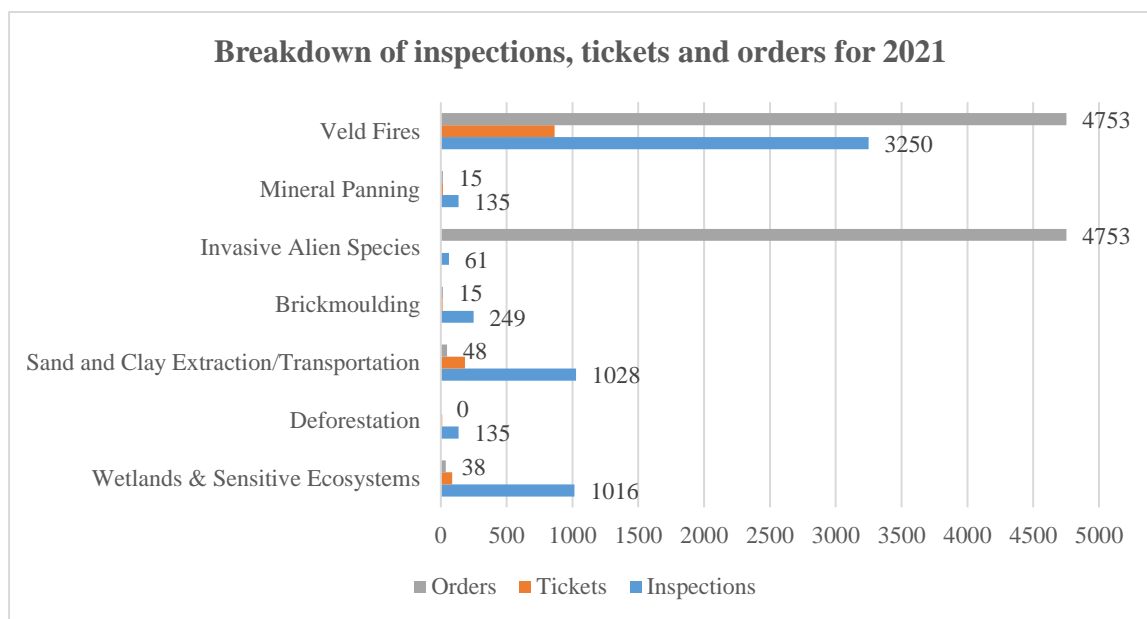


Figure 8.1: Breakdown of inspections, tickets and orders for the year 2021.

8.1 Sand abstraction and Brick moulding

Approximately **1 948ha** of land was destroyed due to illegal sand extraction with main targeted areas being peri-urbans and towns. General overview showed that most urban local authorities failed to designate and register appropriate sand extraction sites for easy of monitoring and controlling rampant sand poaching. During the year, **23** large scale commercial companies in Zimbabwe registered for commercial brick moulding. A total clay mining area measuring **2 078.4ha** was identified and to date **639.2ha** had been excavated leaving a legacy of unrehabilitated open pits posing safety risks to the surrounding communities such as drowning of people, loss of aesthetic value of land, loss of property value and threat to infrastructure.

8.1 Wetlands and Sensitive Ecosystems Management

A total of **1 016** inspections were conducted countrywide to monitor sensitive ecosystems utilization and streambank cultivation along river systems resulting in **87** tickets issued for either construction or cultivation in wetlands. Thirty-eight (**38**) environmental protection orders were issued for various remedial actions during the year and of these, four (**4**) orders were served to seed houses and fertiliser companies that are cultivating or supporting the cultivation of crops on wetlands. During the reporting period, **4** media outreach programmes were done sensitizing the population on importance of wetlands management in Zimbabwe.



Plates 8.1: Maize Crop Seed Companies on a Wetland Along Harare Drive (05/03/21 and 02/02/21)

8.2 Veld Fire Management

The 2021 fire season came at the backdrop of normal to above normal rains in the 2020/2021 rainfall season leading to high fire risk of **65.2%** of the country and extreme fire Risk of **24.7%** of the country due to high fuel load. Fire risk prediction done by the Agency revealed that provinces at **extreme risk** were Mashonaland West, Mashonaland East, Mashonaland Central and Manicaland, while Matabeleland North, Matabeleland South, Midlands and Masvingo were at **high risk** to veld fires.

A total of **3 948** veld fire incidences were recorded resulting in cumulative area burnt of **1 033 722.86Ha** and loss of property worth **US\$380 137.00** as well as **5** lives as compared to **4** lives lost in 2020. The statistics show that while the burnt area and incidences were high, the average burnt area was low because communities were on high alert and getting together to put out the veld fires that would have started in their various areas.



Plate 8.2: Homesteads and Agricultural Equipment Lost To Veld Fires In Ward 21 Mt Darwin District And Watakai Farm In Mazowe District, Mashonaland Central– 24/08/2021.

8.2.1 Law Enforcement

Increased law enforcement attributed to the low average burnt area as **3 250** inspections were conducted, **4 753** environmental preparedness orders and **889** tickets were issued in 2021, compared to **822** orders and **56** tickets in 2020. The Agency opened dockets across the country for some fire related offences. A total of **82** dockets were opened across the country with Mashonaland West (**31**), Matabeleland South (**22**) and Mashonaland East (**17**) contributing the highest number of dockets respectively. Veld fires negatively affected strategic infrastructure in the agriculture, tourism and communication sectors which are apparently key economic enablers.

8.2.2 The National Fire Week Launch

The National Fire Week launch was done on the 12th of May 2021 at Gwebi Agricultural College, Ward 24 of Zvimba District, Mashonaland West under the theme “**Veld fires and Food Security- Protect the Harvest**”. A total of **26** commemorations were done nationwide which attracted **9358** participants.

8.2.3 Education and Awareness

A total of **1 297** meetings with an attendance of **28 257** were held countrywide aimed at informing citizens of the impending fire season and sharing fire management skills. In addition, **10** fire management Indabas were held throughout the country during the year and were attended by Traditional Leaders, local authorities, civil society, corporate and government departments.

A total of **597** roadshows were also held nationwide in the **8** fire hotspots districts with an attendance of **78 353** people. Furthermore, a total of **205** fire-fighting teams with **805** participants were also trained to be team leaders in fire guard construction and fire-fighting.

8.2.4 Community Fire Management Projects

Local communities in fire prone districts were empowered by engaging in alternative sources of income such as hay baling and thatch grass harvesting to reduce biomass. A total of **20 324.09km** fireguards, **684 337** bales and **833 386** bundles of thatch grass were done protecting a total of **1 127 351.86ha** and **244 660.1ha** respectively. A total of **2 339** farms were protected by fireguards constructed by farmers and institutions across the country. Communities were supported through **143** beekeeping projects as a way of encouraging communities to protect forests from veld fires, at the same time providing a livelihood.



Plate 8.3: Bicycles, Hay Bales And Bee Hives Donated To The Bulilima District Environment Sub-Committees For Environmental Management Purposes.

8.3 Invasive alien species

Lantana camara and *Opuntia fulgida* were the most pronounced terrestrial invasive alien species in Zimbabwe threatening the terrestrial ecosystems by replacing native vegetation if left uncontrolled. A total of **81.2ha** infested by *L. Camara* was cleared in various provinces

with most notable area cleared in Masvingo, Bulawayo and Mashonaland East provinces as a result of interventions by the Agency which included **61** inspections and **15** orders served.



Plates 8.4: Lantana Camara Eradication Behind Rumwanda Business Center Ward 1 Zaka, Masvingo (09/09/2021).

8.4 Illegal mining

A survey by the Agency revealed that a total of **11 163 ha** and a stretch of **1 555km** of riverine ecosystems had been degraded country wide. Illegal mining hot spots sites were identified and mapped for illegal gold panning were dotted across the country's Provinces Globe and Phoenix, Silobela, Zhombe, Sessombi Yorks area and Wanderer in Midlands Province, Tarka Forest in Manicaland Province, Nugget and Vhovha area in Matabeleland South Province and Kitsiyatota, Msasa, Jumbo, Mukaradzi and Rosa areas in Mashonaland Central Province.

8.4.1 Law Enforcement

The Agency conducted **59** operations on illegal mining activities nationwide either destroying or threatening existing infrastructure. During the year, several joint operations were undertaken resulting in the issuance of **44** tickets and fourteen (**14**) environmental protection orders issued. A total of **10** dockets were opened at various stations. One of the cases, Leachdale 1 Mine case, was finalized and the offender was fined ZWL\$30 000 or five months imprisonment which was **wholly suspended** on condition that a similar offense is not committed within the next five (5) years.



Plate 8.5: Shows General Area Measuring Approximately 1ha Affected By Illegal Mining Threatening Infrastructure Of Chinhoyi Hospital Boundary Barricade And The Harare-Chirundu Highway.

9.0 Environmental Community Projects, Environmental Planning and Environmental Research

9.1 Environmental Community Projects

In line with the National Development Strategy 1(NDS1), the Agency supported a total of **20** community projects throughout the country aimed at empowering the communities in natural resources management for sustainable utilization of natural capital for improved livelihoods. These initiatives included land restoration, wetland restoration, veld fire management, invasive alien species clearing, solid waste management, consolidated gardens and biogas. Generally these initiatives had significant multiplier effects on food security, income generation, protection and sustainable management of the natural resource base.

9.1.1 Environmental Community Project monitoring

The Agency monitored a total of **144** community based natural resources management project countrywide. These projects are providing critical support to the usual agricultural production, cash income and insurance against drought and crop failure within the benefiting communities. Below is the footage of some of the projects implemented and monitored in the year 2021



Plate 9.1: Drilling Of A Borehole Taking Place In Nyamhara, Ward 12, UMP District.



Plate 9.2: The Councillor Chagumaira (Left), Nhakiwa 2 Village Head, Mr. Muskwe (Centre) and Project Chairperson, Mr. Musanhi At The Drilled Borehole. 04/05/2021

9.2 Local Environment Action Plans

The Agency facilitated the production of **5** Local Environmental Action Plans (LEAPs) by 5 local authorities. These local authorities were Chimanimani and Chipinge Districts in Manicaland Province, Gweru and Kwekwe Districts in Midlands Province, Bulilima District in Matabeleland South.

9.3 Applied Environmental Research

The Agency in collaboration with the University of Zimbabwe's Environment, Climate and Sustainable Development Institute (ECSDI), Midlands State University and Great Zimbabwe University conducted baseline surveys focusing on biophysical and socio-economic issues for Nyamhara wetland in Uzumba Maramba Pfungwe, Matambo Wetland in Gweru and Marongere Integrated Catchment Rehabilitation Project in Masvingo respectively. The surveys were meant to benchmark the wetland catchments for future monitoring purposes as well as recommending interventions to protect the wetland catchments and improve wetlands wetness level. The proposed interventions included fencing off the wetland core and introduction of climate smart gardening with effective and efficient water use such as drip irrigation for alternative livelihoods to reduce pressure on the wetlands.

10.0 Training, Education, Communication and Public Awareness

The Agency conducted **49 646**, education and public awareness programs across the country with an aggregate attendance of **700 233 people**, coupled with **1 286** mass media programs with an approximate listenership of **8 Million people** according to media surveys. Stakeholder groups engaged during the meetings included; traditional leaders, government ministries, civil society, politicians, miners, local authorities, religious leaders and communities at large. The Agency conducted **252** training sessions during the year, with **6 846** participants drawn from various stakeholder groups as part of stakeholder capacity building.

10.1 Stakeholder Capacity Building

The Agency conducted **252** training sessions during the year, with **6 846** participants drawn from various stakeholder groups, such as; anti-litter monitors, the Zimbabwe Republic Police, community health clubs, community based organizations, farmers, traditional leadership, miners and environment subcommittees. The training focused on pertinent environmental issues such as; environmental legislation, veldt fire management, pollution abatement measures, hazardous substances, waste management and stream bank cultivation.



Plate 10.1: The Agency's Environmental Protection Director, Mr C Mushava addressing Municipal Police officers from Kwekwe city council, Zibagwe RDC and Redcliff Municipality during a training workshop. (07/09/2021)



Plate 10.2: Participants from Redcliff municipality, Zibagwe RDC and Kwekwe city council received certificates after undergoing training on various environmental issues at King Solomon hotel in Kwekwe (08/09/2021).



Plate 10.4: Artisanal and Small Scale Miners training on completion of the Basic Environmental Management Plan (11/09/2021)



Plate 10.3: Training Of ZRP Sergeants On Hazardous Substances Management In Gweru (14/09/2021)

10.2 Awareness, Stakeholder Engagement and Collaborative Meetings

The Agency conducted programmes to create awareness and engage stakeholders and the general public in an effort to promote environmental stewardship and protection of the

environment. Figure 10.1 below shows the distribution of the activities.

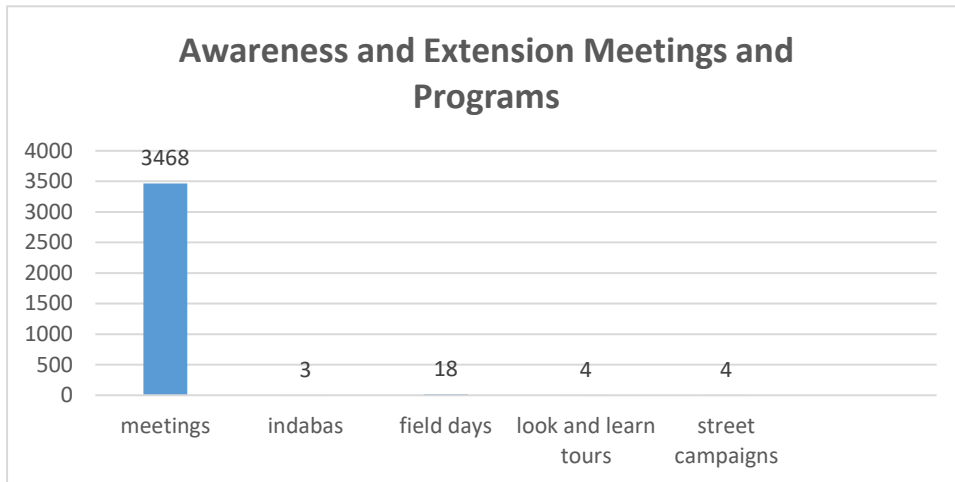


Figure 10.1: 2021 Awareness and Extension Programs Conducted In 2021



Plate 10.5: Community meetings in Mhondoro Ngezi District, Mashonaland West



Plate 10.6: Awareness Raising On Veld Fire Management at Masungamala Village, Sotani Ward 26, Lupane (05/05/2021)

10.1.1 Talk Shows

During the year, the Agency conducted talk shows with communities and institutions such as schools, churches and health institutions, in an effort to instil a culture of environmental stewardship among citizens.

a) Community Talk Shows

A total of **338** talk shows were conducted with communities, reaching out to **3 943** people. The shows raised awareness among community members on pressing environmental issues in the various provinces such as solid waste management, veld fire management, stream bank cultivation, deforestation, wetlands management, invasive alien species, sustainable mining methods, hazardous substances management, effluent management air pollution management and climate change mitigation and adaptation.

b) Institutional Talk Shows

The Agency conducted **498** Institutional talk shows at schools, churches, health institutions and irrigation schemes, reaching out to **23 337** learners and professionals. The talk shows were aimed at raising awareness on various thematic areas such as school club formation, solid waste management, veld fire management, sustainable farming practices and sound chemical management. Due to Covid-19 restrictions, an array of platforms were used to access school learners including virtual talk shows.

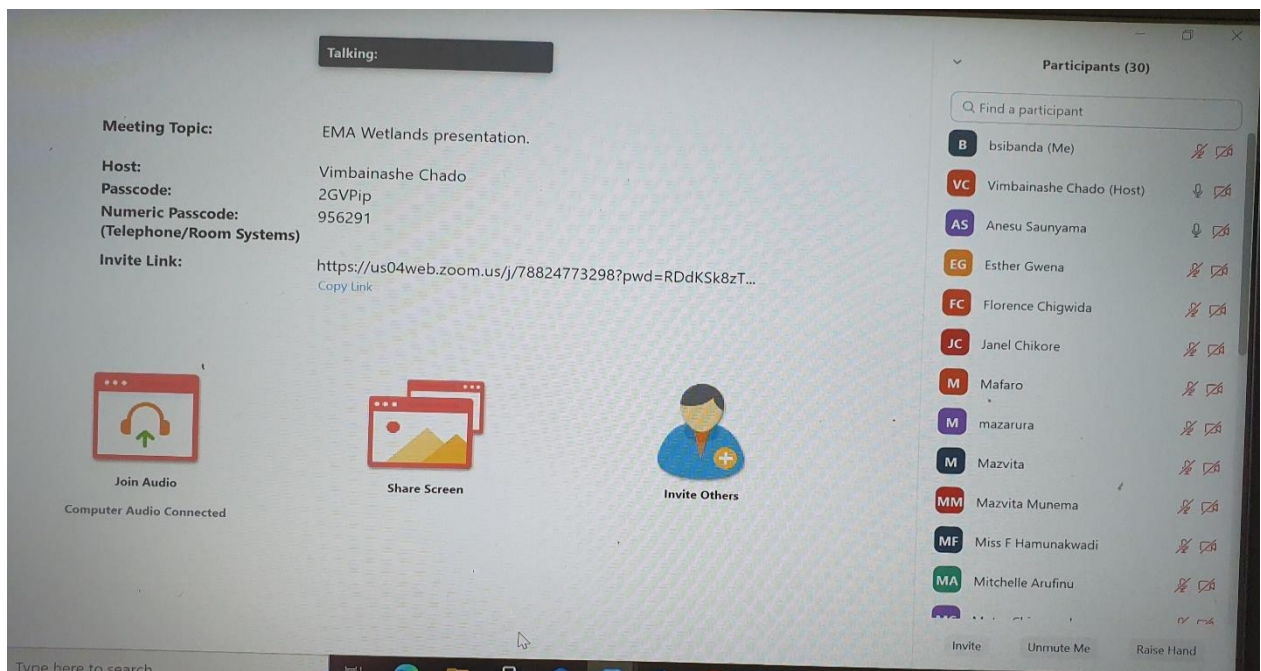


Plate 10.7: A List of Some of The Learners From Schools In Harare That Participated In A Virtual School Talk-Show (04/03/21).



Plate 10.8: School Talk Shows At Sakubva High 2, Mutare, Manicaland (10/10/21).

10.1.2 Mobile Road shows

The Agency conducted **3 554** roadshows, reaching **335 937**, to inform the public on pertinent environmental issues. The main objective of the campaigns was to educate communities on topical environmental issues, in particular; veld fire management, waste management and sustainable mining, among other issues.



Plate 10.9: EMA Officers Addressing The Public During Roadshows In Mbare; Harare (15/09/21) And Lwendulu Village In Hwange (28/08/21).



Plate 10.10: Roadshows held in Shurugwi town and Queenspark East, Bulawayo. (5/11/2021)



Plate 10.11: Roadshow at the University of Zimbabwe; 05/11/2021 and Ruwa; 22/11/21, in Harare.

10.1.3 Exhibitions

The Agency participated at exhibitions during the year and these included mainly agricultural shows and the Zimbabwe International Trade Fair. The focus of this year's exhibitions was mainly centred on how stakeholders can cope with the new normal, at the same time protecting the environment. A total of **22** exhibitions were held in all the 10 provinces reaching out to **12 121** people.

Case 10.1: Zimbabwe International Trade Fair (ZITF)

The 2021 edition of the Zimbabwe International Trade Fair was held under the theme “*Showcasing the New Normal for Business and Industry: Realities and Opportunities*”. The Agency customised to theme to “**Innovative Green Technologies: Realities and Opportunities**”, to emphasize the need for reduction of the carbon footprint by industry, as the nation is on a recovery path from the impacts of the COVID-19 Pandemic. The exhibition amplified the technologies used by the Agency for environmental monitoring and pollution control, in the new normal, which include; drones, the fire station, air pollution monitoring equipment, hazardous substances spillage response vehicle as well as green initiatives being employed by players in the industry.



Plate 10.12: EMA ZITF exhibition Pavillion and 2021 exhibitors

Case 10.2: Zimbabwe Agricultural Show

The 2021 Zimbabwe Agricultural Show was held in Harare, under the theme “**Synergies for Growth. Cooperate. Collaborate. Complement.**” The Agency exhibited under the theme “**Synergies for Green Growth. Cooperate. Collaborate. Complement.**” Green growth fosters economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. A total of **825** people visited the EMA stand, comprising of; corporates, government departments, civil society groups, farmers and the general public.



Plate 10.13: The Harare Provincial Environmental Manager, Mr Mavondo taking the Mayor and Acting Town Clerk from the City of Harare through the EMA stand (30/09/2021) and Environment Management Board Member, Mr. ID Kunene (in white shirt) toured the EMA stand at ZAS (01/10/21).

Case 10.3: Provincial and District Agricultural Shows

The Agency exhibited at the Provincial Agricultural Shows in Masvingo, Manicaland, Midlands, Mashonaland Central, West and East as well as Matabeleland North and South. District Agricultural Shows held this year included; Sanyati, Mhondoro and Goromonzi. The exhibitions focused on thematic areas of concern to the farmer such as sustainable farming practices, veld fire management, wetland management and invasive alien species, among other environmental issues.

The Agency scooped silver medals in Matabeleland North, Midlands, Mashonaland West and a bronze in Matabeleland South. The awards were an indicator of excellence in the displays and explanation of concepts being exhibited; and were critical for the Agency's corporate image.



Plate 10.14: Stakeholders Being Educated On Climate Change And Environmental Management During The Midlands Show (29/10/2021)



Plate 10.15: Proceedings during the Mashonaland West Provincial Agricultural show in Chinhoyi (09/10/21)

10.1.4 Environmental Days Commemorations

The Agency commemorated **10** environmental days during the year, which included the **National Clean-up Day, World Environment Day, Africa Environment Day, World Wetlands Day, Earth Day, National Fire Launch, and World Day to Combat Desertification, World Clean-up Day, World Ozone Day and the National Tree Planting Day**. Due to the Covid-19 pandemic and its associated restrictions, some of the commemorations were conducted virtually. The commemorations attracted a total attendance of **53 159**. Publicity material distributed during these commemorations amounted to **48 600** and these included t/shirts, hats, posters, brochures and booklets.



Plate 10.16: Virtual Africa Environment Day Flier



Plate10.13: Hon.NM Ndhlovu delivering a key note address on Africa Environment Day, (3/3/21).

11.0 Catch Them Young Programs

The Agency conducted a number of programs to reach out to learners with environmental information, and these included school environmental clubs, career guidance and counselling and engagement of patrons. School engagement programs were greatly affected by the Covid-19 lockdown and associated restrictions.

11.1 Environmental School Club Support

The Agency registered eleven (11) environmental clubs during the year, and reached 453 learners and teachers in the process. Meetings were also conducted with club patrons to come

up with strategies of coping with the new normal. The Agency partnered Friends of the Environment (FOTE) to support Environmental school clubs in Harare.



Plate 11.1: EMA and FOTE Engaging Teachers At David Livingstone School And Also Touring The School Projects (25/06/21)



Plate 11.2: School Environmental Club Patrons Meeting Held At EMA KG6 Offices (10/11/21)

11.2 Plastic Free Week with Schools

The Swedish Embassy in partnership with SI Alumni hosted high school students in Harare, where sharing of experiences and reflections on plastic waste were made as part of the #PlasticFreeWeek. The Agency shared with the students on waste value addition and how to make artefacts from plastic waste.



Plate 11.3: Activities That Took Place During The Plastic Free Week At The Swedish Embassy (15/10/2021)

12.0 Environment, Responsible Business and Corporate Social Responsibility Awards 2021.

In an effort to provide incentives for sustainable environmental management, the Agency collaborated with the Corporate Social Responsibility Network of Zimbabwe (CSRNZ) in the Environmental Stewardship, Responsible Business and Corporate Social Responsibility Awards. The Awards were meant to incentivize individuals, organizations and institutions that excelled in environmental sustainability. During the year, seven (7) regional and one national award ceremonies were held, table 11.1 refers.

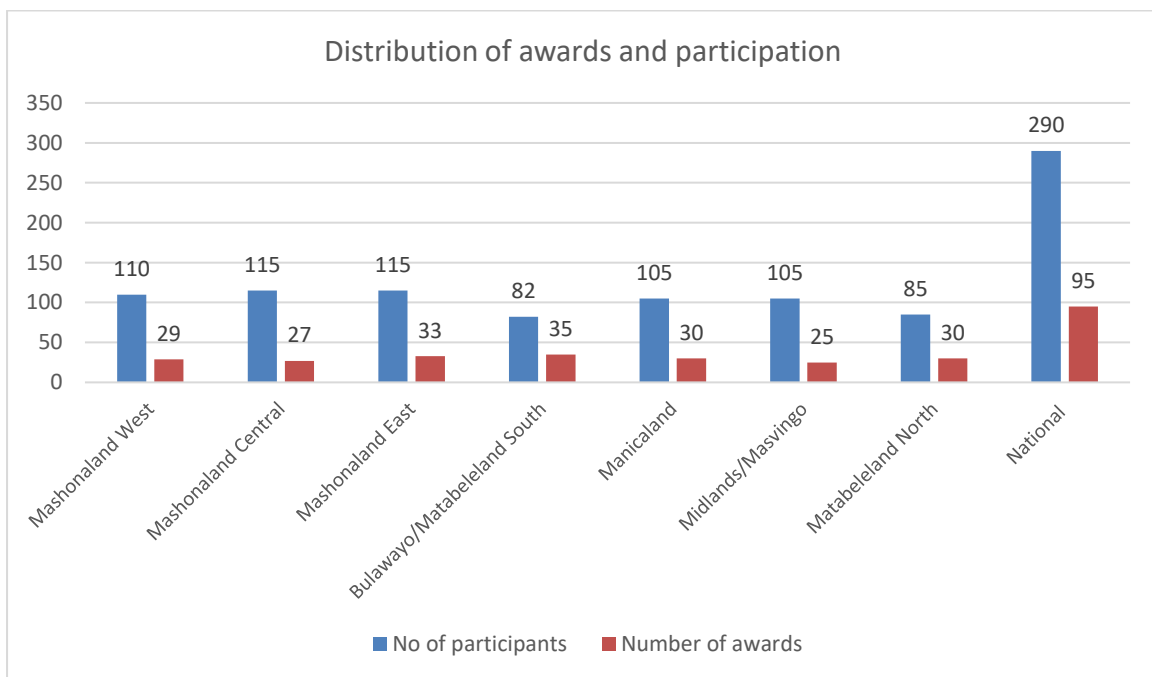


Figure 12.1: Distribution of Awards ceremonies held during the year.



Plate 12.1: The National Awards Ceremony, Harare (26/11/21)

13.0 Media programs

The Agency conducted a total of one thousand two hundred and eighty six (1 286) media programmes to enhance dissemination of environmental information to the public. These were in the form of media tours, documentaries, press conferences, radio and TV talk programmes.

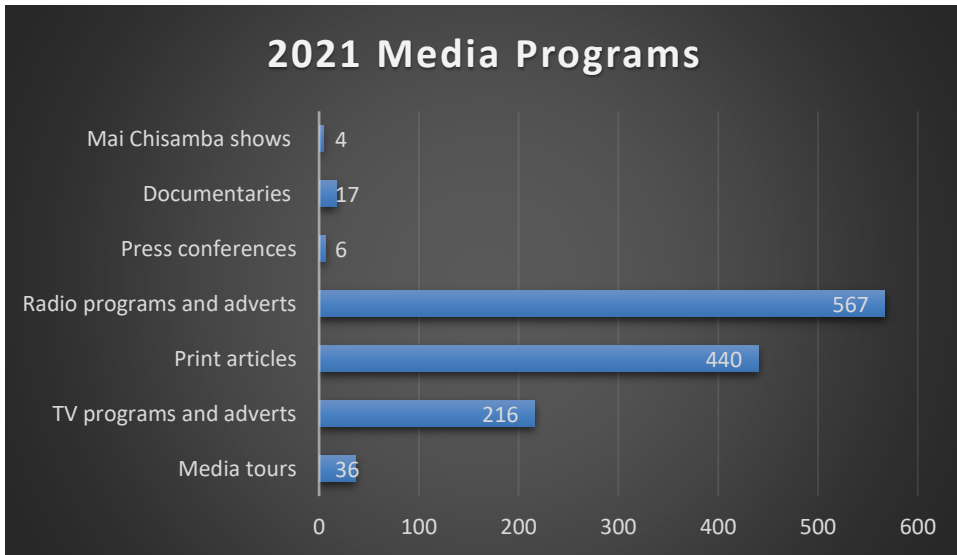


Figure 13.1: Media programs conducted in 2021



Plate 13.1: Radio Show On Plastic Pollution On Great Zimbabwe University Radio Which Broadcasts In Masvingo, Conducted At The ZITF (23/09/2021) And An Article On The Fining Of Pannar Seeds For Cultivating On Wetlands (08/02/21)



Plate 13.2: Highlights of the Mai Chisamba Show on veld fire management showing the Provincial Environmental Manager for Mashonaland Central, Mr. R Rwafa (right) participating in the show

13.1 Social Media and Public Feedback

The Agency received feedback from the public on various issues through platforms such as the toll free, corporate email, WhatsApp and Facebook.

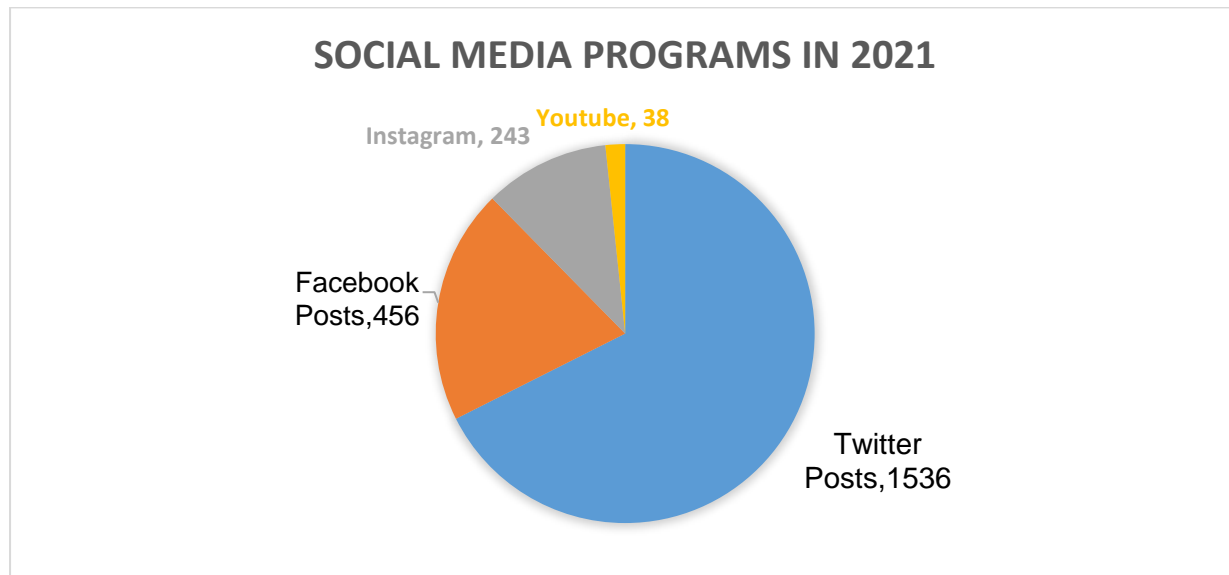


Figure 13.2: Environmental Information Dissemination via social media

13.2 Bulk SMS

During the year, **37 982** messages were sent to various stakeholders with various thematic areas such as licensing, veld fire management and waste management.

14.0 Promotional and Publicity Material Produced

During the year, the Agency produced and distributed **146 780** publicity and **84 110** promotional material in an endeavour to increase the Agency's visibility and communication with stakeholders on various thematic areas.

14.1 Journal of Environmental Management in Zimbabwe (JEMZ) Vol 1 of 2021

During the year, a total of **13** research manuscripts were published in the Journal of Environmental Management in Zimbabwe (JEMZ). These covered issues ranging from stakeholder participation, environmental policies, laws and regulations, waste management, water and environmental degradation assessment and earth observation techniques. A total of 100 library copies were printed and some distributed to the researchers. The Journal of was also uploaded on the EMA website.

15.0 Synergies and Collaborations

In fulfilment of sustainable development goal 17 on Partnerships for the goals, and the Agency's Mission statement, the Agency collaborated with a number of organizations for sustainable environmental management. The organizations included but not limited to, corporates, civil society organizations and international development partners.

Corporate Branding

The Agency collaborated with the Traffic Safety Council of Zimbabwe (TSCZ) in the production and installation of six (6) billboards along the Harare – Mutare – Chipinge Highway. The billboards reached out to the motoring public with environmental information on the sound management of waste, veld fire management and sustainable agriculture.



Plate 15.1: Billboards Installed Along Harare-Mutare-Chipinge Highway In Partnership With TSCZ

15.3.2 Environmental Events

The Agency collaborated with various players in the corporate world and civil society during environmental events, in particular; commemoration of environmental observance days and implementation of the National Clean-up Programme. The partners supported in various ways which included; advocacy and advertising, provision of cleaning material and personal protective equipment such as gloves, bin liners, brooms, rakes and shovels. Others donated Information, Education and Communication (IEC) material such as hats, dustcoats, t-shirts and eco-bags.



Plate 15.2: Pictures Showing Materials Donated By Stakeholders In Environmental Events

16.0 Human Resources Annual Report

In the midst of ongoing Covid-19 challenges, the Human Resources management environment in 2021 remained relatively stable. Despite these challenges, the Agency achieved a commendable staff growth rate of 5% compared to the previous year. Throughout the year, the Agency remained committed to hiring new personnel and maintaining over 80% of the Board approved staff establishment. Additionally, the focus on human capital development, performance improvement, and fostering a harmonious labour relations environment continued. The Agency's ability to retain critical skills highlights the effectiveness of competitive remuneration and staff benefits measures.

1. Staff Establishment

The table below shows a summary of the staff establishment in the year 2020, highlighting EMA establishment, year 2021 opening balance, staff mobility, and closing balance as at 31 December 2021.

Table 1: Staff Establishment, Year 2021

Establishment Establishment 01/01/07	Filled 01/01/21	Establishment Strength	Recruited	Total	Wastage	Filled 31/12/21	Strength
480	338	80%	21	359	12	347	88%

2. Human Capital Development

Due to Covid-19 related challenges, face-to-face staff training and development were heavily restricted. Lock-down measures, the need to minimize physical contact, and increased sick leave resulted in the cancellation or postponement of certain targeted training programs. To adapt to these circumstances, the Agency swiftly implemented the use of virtual platforms for staff training and development, ensuring continued learning opportunities despite the limitations. Despite the general slowdown in training provision, departmental coaching and mentoring initiatives were maintained to enhance staff capacity.

In the period under review, the Agency facilitated technical and non-technical training inclusive of an Overview of Environmental Legislation, Prosecution, Inspections, Orders, Ticketing and Dockets, Environmental Licensing, and Billing, and an Overview of EMA and the Agency's mandate. Furthermore, the induction of new employees, Code of Ethics, and Job Evaluation tenets were also undertaken.

The Agency remained committed to supporting and encouraging staff to pursue university studies, aligning this effort with the Results Based Management system (RBM) to achieve

specific goals and objectives. Furthermore, the Agency actively collaborated with partners to improve staff access to training and development opportunities, recognizing the importance of continuous learning and growth in achieving organizational excellence.

3. Performance Management

The Agency maintained its commitment to effectively coordinate and enforce the fully implemented Integrated Result Based Management (IRBM) System. This system, introduced by the Government for State Enterprises and Parastatals (SEPs) in 2010, aims to enhance organizational performance. By adhering to the principles and practices of IRBM, the Agency ensures a structured approach to setting and achieving results, ultimately driving continuous improvement and success.

4. Industrial Relations

The agency fostered a culture of employee engagement to promote performance and productivity, resulting in a harmonious industrial relations environment. The Works Council platform served as a means for employees to engage with management, while the introduction of the Management Forum facilitated engagement between members of management and the Directorate. By promoting openness and transparency, in alignment with the Agency's values, a culture of trust and collaboration permeated throughout the organization.

5. Health, Safety and Wellness

The well-being of staff remained a top priority for the Agency, as it continued to prioritize their health, safety, and wellness. This was achieved by promoting compliance with policies and national regulations, ensuring the creation and maintenance of a healthy and safe working environment. The Agency diligently adopted and adhered to the Ministry of Health and Child Care's recommended Covid-19 guidelines, emphasizing the importance of testing, mask-wearing, social distancing, and hand washing (sanitizing) protocols to minimize the risk of transmission. Efforts to address the impact of HIV/AIDS and other non-communicable diseases among staff were strengthened through the health insurance program.

The Agency recognizes the significance of occupational health, safety, and wellness programs in achieving a work-life balance for its staff, and remains committed to their implementation. By prioritizing the physical and mental well-being of employees, the Agency aims to create an

environment that supports their overall health and contributes to their overall satisfaction and productivity.

17.0 Conclusion

Though the year 2021 was impacted by the Covid 19 pandemic, the Agency devised strategies to execute its mandate in order to ensure a clean, safe and healthy environment for all as enshrined in section 73 of the Zimbabwean Constitution.