



ENVIRONMENTAL MANAGEMENT SYSTEM PROCEDURES MANUAL

ISO 14001:2015

THE FOLLOWING DOCUMENT CONTAINS ALL PROCEDURES AND WORK INSTRUCTIONS RELATED TO JSIF'S ENVIRONMENTAL MANAGEMENT SYSTEM

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RECORD OF REVISIONS:

Release Number	Date	Section	Page	Summary/History of Changes	Signature
0	August 1, 2008	-	-	Initial Release	George Blake
1	October 6, 2008	EMS-I-PR- NHWASTE- 01062008	15	Removal of newspaper & & monitoring officer, auto generate MIS reports, pick-up	George Blake
2	November 27, 2008	EMS-I-PR- NCPA- 24072008	81	Adjustments to how non-conformances are detected, general observations removed.	Gene Shaw
3	November 28, 2008	EMS-I-PR- DOCCTRL- 24072008	63	Fund Mgr. Reports not necessarily added to DMS as they are available through FM	George Blake
4	December 4, 2008	EMS-I-PR- NCPA- 24072008	83	Extra-ordinary circumstances added to NCPA close-out time	Gene Shaw
5	December 11, 2008	EMS-I- COMM- 24072008	56	Decision to communicate to external parties included	George Blake
6	February 10, 2009	EMS-I-PR- EPR-24- 72009	70	Removal of Reference to Fire Evacuation	Shirley McLean- Brown
7	March 18, 2009	EMS-I-PR- LEGAL- 24072008	40	Outline of Compliance check procedure	Keslyn Gilbert-Stoney
8	October 30, 2009	EMS-I-PR- COMM-	56/57	Clearer more accurate procedure	Stephannie Hutchinson-

Release Number	Date	Section	Page	Summary/History of Changes	Signature
		24072009			Ffrench
9	January 4, 2010	EMS-I-PR- NHWASTE- 01062008	17	Waste Mgt records & Site diaries now have 1 year retention.	Rhonda Lumsden-Lue
10	January 4, 2010	EMS-I-PR- DOCCTRL- 24072008	64	Waste Mgt records & Site diaries now have 1 year retention.	Rhonda Lumsden-Lue
11	January 20, 2010	EMS-PR- MSR- 24072008	89	Meetings now held annually	Rhonda Lumsden-Lue
12	August 11, 2010	EMS-I-PR- NHWASTE- 01062008	REMO	OVED	
13	February 24, 2011	EMS-I-PR- GSSWPOL- 24072008	33 & 35	Agriculture activities referenced	Omar Sweeney
14	December 9, 2011	EMS-I-PR- EPR-24- 72009	69	Drills defined as annually, and where events occur, they are recorded as part of test.	Rhonda Lumsden-Lue
15		EMS-I-PR- ME- 24072008	74	Frequency of site visit qualified to account for the actual state of works.	Omar Sweeney
16	April 30, 2012	EMS-I-PR- ME- 24072008	74	Frequency of JSIF's Officers site visit changed to twice per month.	Milton Clarke
17	April 30, 2012	EMS-I-PR- ME- 24072008	76	Reporting requirement during project stoppage/inactivity added.	Milton Clarke
18	March 31,	EMS-I-PR- LEGAL-	42	The number of	Milton Clarke

Release Number	Date	Section	Page	Summary/History of Changes	Signature
	2014	24072008		LRRS review changed from quarterly to annually.	
19	October 31, 2014	EMS-I-PR- TREES- 24072008	15-18	Delete Loss of Trees as a significant environmental a significant environmental aspect	Milton Clarke
20	October 31, 2014	EMS-I-PR- NOISE- 17082014	33-37	Inclusion of noise as a significant environmental aspect	Milton Clarke
21	October 31, 2014	EMS-I-PR- SOLID WASTE- 17082014	38-42	Inclusion of solid waste as a significant environmental aspect	Milton Clarke

1. <u>SCOPE</u>: JSIF has established and implemented an EMS system that considers all activities for which the organization is responsible or over which it exercises influence.

2. NORMATIVE REFERENCES:

3. TERMS AND DEFINITIONS:

3.1 Terms Related to Organization and Leadership

3.1.1 Management System

Α set of interrelated interacting elements or that organizations formulate policies objectives use to and and to establish processes needed the that are to ensure that policies are followed and objectives are achieved. These elements include programs, procedures, practices, plans, rules, roles. structures, relationships, responsibilities, contracts, agreements, documents, records, methods, tools, techniques, technologies, and resources.

There are many types of management systems. Some of these include environmental management systems, financial management systems, risk business management systems, quality management systems, continuity management systems, food safety management systems, information security management systems, occupational health and safety management systems, compliance management systems, and emergency management systems.

3.1.2 Environmental management system

One part of larger management system and is a set of interrelated or interacting elements that organizations use to implement their environmental policy, to achieve their environmental objectives, to meet their environmental compliance obligations, environmental address to manage their aspects, and to their environmental risks and opportunities.

3.1.3 Environmental Policy

A *policy* is a commitment, direction, or intention and is formally stated by the top management of an organization. An *environmental policy* should make a commitment to protect the environment, to meet all relevant compliance obligations, and to enhance environmental performance.

3.1.4 Organization

An *organization* can be a single person or a group that achieves its objectives by using its own functions, responsibilities, authorities, and relationships. It can be a company, corporation, enterprise, firm, partnership, charity, or institution and can be either incorporated or unincorporated and be either privately or publicly owned. It can also be an operating unit that is part of a larger entity.

3.1.5 Top Management

The term *top management* normally refers to the people at the top of an organization. It refers to the people who provide resources and delegate authority and who coordinate, direct, and control organizations. However, if the scope of a management system covers only part of an organization, then the term *top management* refers, instead, to the people who direct and control that part of the organization.

3.1.6 *Interested Party*

An interested party is any person, organization group, or can affect, be affected by, or believe that they are affected by a decision or activity. In the context of this ISO 14001 standard, an interested party or believe is anyone who can affect, be affected by, that they are affected by the environmental performance of an organization.

3.2 Terms Related to Planning

3.2.1 Environment

The term environment refers to an organization's natural and human surroundings. An organization's environment extends from within the

organization itself to the global system, and includes air, water, land, flora, and fauna (including people), and natural resources of all kinds.

3.2.2 Environmental Aspect

An environmental aspect is an element or characteristic of an activity, service that interacts or can interact with the environment. Environmental aspects environmental impacts. They can cause either have beneficial impacts or adverse impacts and can have a environment direct decisive impact on the or contribute partially or indirectly to a larger environmental change.

3.2.3 Environmental Condition

Environmental conditions characteristics are states or of the environment at a particular point in time. ISO 14001 expects you to identify the environmental conditions that are capable of affecting or being affected by your organization and to figure out what you need do to prevent or reduce the risk that these conditions could adversely affect its environmental performance.

3.2.4 Environmental Impact

An environmental impact is a change to the environment that caused either partly or entirely by one or more environmental aspects. An environmental aspect can have either a direct and decisive impact on the environment or contribute only partially or indirectly to a larger either environmental change. In addition, it can have environmental impact or an adverse environmental impact.

3.2.5 *Objective*

An objective is a result you intend to achieve. Objectives can be strategic, tactical, or operational and can apply to an organization as a whole or to a system, process, project, product, or service. Objectives may also be referred to as targets, aims, goals, or intended outcomes.

3.2.6 Environmental Objective

An *environmental objective* is an environmental result your organization intends to achieve. Your organization's environmental objectives should be based on or derived from its environmental policy and must be consistent with this policy.

3.2.7 Prevention of Pollution

To prevent pollution means to avoid, reduce, or control the creation, emission, or discharge of contaminants or waste materials. Pollution prevented in order to reduce adverse environmental impacts. must be wide variety Organizations of methods, use a techniques, practices, processes, products, and services to prevent pollution. These include the reduction or elimination of pollution at the source; the efficient use of materials, and energy; the reuse, recovery, resources, reclamation, and recycling of resources; the redesign of processes, products, and substitution of and services; the of one type energy source or substance for another cleaner energy source or substance.

3.2.8 Requirement

A *requirement* is a need, expectation, or obligation. It can be stated or implied by an organization, its customers, or other interested parties. A *specified requirement* is one that has been stated (in a document for example), whereas an *implied requirement* is a need, expectation, or obligation that is common practice or customary.

3.2.9 Compliance Obligation

obligation compliance is requirement. There kinds Α a are two compliance of compliance obligations: mandatory obligations and compliance obligations. Mandatory voluntary compliance obligations include laws and regulations while voluntary compliance obligations and industry include contractual commitments, community standards, ethical codes of conduct, and good governance guidelines. A voluntary obligation becomes mandatory once you decide to comply with it.

3.2.10 Risk

According to ISO 31000 2009, *risk* is the "effect of uncertainty" and an effect is a positive or negative deviation from what is expected.

Risk is often expressed as a combination of two factors: *probability* and *consequences*. It asks two questions: what is the probability that a potential event will occur in the future? And what consequences would this event produce or what impact would it have if it occurred?

Uncertainty (or lack of certainty) is a state or condition that involves information and leads deficiency of to inadequate incomplete knowledge understanding. In the context of risk or management, uncertainty exists whenever the knowledge or understanding of an event, consequence, or likelihood is inadequate or incomplete.

3.2.11 Risk and Opportunities

According to ISO 14001 2015, *risks* are potential adverse effects (or threats) and *opportunities* are potential beneficial effects.

3.3 Terms Related to Support and Operation

3.3.1 Competence

Competence being able to apply knowledge and skill means achieve intended results. Being competent having means the knowledge and skill that you need and knowing how apply it. It means that you're qualified to do the job.

3.3.2 Documented Information

The documented information refers to information that term must be controlled and maintained and its supporting medium. Documented information can be in any format and on any medium and can come from any source.

Documented information includes information about the environmental system and related It also includes the management processes. information that organizations need to operate and all the information that they use to document the results that they achieve (aka records).

3.3.3 Life Cycle

cycle refers life In the context of this standard, the term to the consecutive interlinked of product system the and stages from a The acquisition of raw materials to end-of-life disposal. life cycle of system all associated activities, product includes products, and services and include procured goods and services may as well as end-of-life treatment, decommissioning, and disposal.

3.3.4 Outsource

When an organization makes an arrangement with an outside organization to perform part of a function or process, it is referred as outsourcing. To outsource means to ask an external organization to perform part of a function or process normally done in-house. While outsourced organization is beyond the scope of EMS, your outsourced process or function itself may fall within the scope.

3.3.5 Process

A process is a set of activities that interrelated are or that interact with They transform into one another. inputs outputs. Processes are interconnected because the output from one process often becomes the input for another process.

3.4 Terms Related to Performance Evaluation and Improvement

3.4.1 **Audit**

An *audit* is an evidence gathering process. Evidence is used to evaluate how well audit criteria are being met. Audits must be objective, impartial, and independent, and the audit process must be both systematic and documented. Audits can be either internal or external.

Internal audits are referred to as first-party audits while external audits can be either second or third party. They can also be combined audits (when two or more management systems of different disciplines are audited together at the same time).

Audit evidence includes records, factual statements, and other verifiable information that is related to the audit criteria being used. Audit criteria may be thought of as a reference point and include policies, requirements, and other forms of documented information. They are compared against audit evidence to determine how well they are being met. Audit evidence is used to determine how well policies are being implemented and how well requirements are being followed.

3.4.2 Conformity

To conform means to meet a requirement (or a compliance obligation). Since there are many kinds of requirements, conformity can take many forms. You can conform (or comply) with mandatory requirements like laws and regulations or with voluntary requirements such as contracts, agreements, codes, and standards.

In the context of environmental conform management, you can comply) with (or to) the ISO 14001 requirements (or obligations) and to additional management requirements any environmental (or obligations) that your organization establishes for itself.

3.4.3 Non-Conformity

"non-fulfilment Nonconformity refers to the of requirement". a When an organization fails to meet a requirement, a non-conformity Since of nonconformity exists. there are many kinds requirements, can take many forms. You can fail to conform (or fail to comply) with mandatory requirements like laws and regulations with voluntary or requirements such as contracts, agreements, codes, and standards.

3.4.4 Corrective Action

Corrective actions are steps that are taken prevent recurrence eliminating existing nonconformity. by the of cause or causes an The corrective action process tries to make sure that existing nonconformities don't happen again.

3.4.5 Continual Improvement

In the context of this EMS standard, continual improvement is a set of recurring activities that organizations use to enhance their environmental performance. Environmental performance is enhanced whenever environmental of activities, and aspects processes, products, services, whenever controlled and adverse environmental systems are are reduced and beneficial environmental impacts are produced.

3.4.6 Effectiveness

Effectiveness refers to the degree to which a planned effect is achieved. Planned activities are effective if these activities are actually carried out and planned results are effective if these results are actually achieved.

3.4.7 Indicator

An *indicator* is a "measurable representation". It is used to indicate or measure the status or condition of an operation or an activity. In this standard, indicators can be used to quantify and the context of environmental performance. They can be used to how much success you've had and how much progress you've made relative to the environmental objectives you wish to achieve environmental policy you wish to implement. Indicators can also be used to monitor trends and to support decision making.

3.4.8 Monitor

To monitor means to determine the status of an activity, process, or system at different stages or at different times. In order to determine status, you may need to supervise and to continually observe and check the activity, process, or system that is being monitored.

3.4.9 Measurement

Measurement is a process that is used to determine a value.

3.4.10 Performance

According to ISO, the term *performance* refers to *a measurable result*. It refers to the measurable results that activities, processes, products,

services, systems and organizations are able to achieve. So whenever organizations perform well processes, products, services, systems, or it means that acceptable results are being achieved.

3.4.11 Environmental Performance

The term environmental performance refers to the environmental aspects results achieved whenever the environmental that are activities, processes, products, services, systems, and organizations managed and controlled. Environmental performance improved are the environmental aspects of activities, processes, whenever products, services, systems, and organizations are managed and controlled and adverse environmental reduced beneficial whenever impacts are and produced. environmental environmental impacts You are can measure performance by using indicators to compare environmental results objectives against environmental and environmental policies (or other suitable criteria).

3.5.11 Other Terms and Definitions

- **3.5.1 Appraisal:** The evaluation of projects that includes an examination of social, technical (including environmental), and financial considerations. This process includes consultations with key stakeholders and partners.
- **3.5.2 Business Continuity Plan (BCP):** The BCP outlines the steps to be taken in case of an emergency to minimize the loss of property and life and recovery time. The Plan will ensure that business priorities are properly identified, appropriate individuals are identified to manage the recovery efforts and methods of communicating the action plan to employees, stakeholders and beneficiaries are defined.
- **3.5.3 Community Based Contracting (CBC):** A project implementation modality that utilizes the community members as project managers.
- **3.5.4 Corrective Action:** Action to eliminate the cause of a non-conformity
- **3.5.5 Delegate:** An individual nominated to attend the Management Review based on their role in the EMS.
- **3.5.6 Designated Officials:** Persons responsible for coordinating emergency response

as identified in the BCP

- **3.5.7 Donor-Project:** Refers to a funding agreement outlining specific to macro objectives to be achieved through the implementation of various sub-project types. Example Integrated Community Development Project (ICDP), Rural Economic Development Initiative (REDI), Basic Need Trust Fund (BNTF).
- **3.5.8 Emergency:** Any event, natural or manmade, that may lead to the disruption of normal business operations
- **3.5.9 Emergency Project:** A Donor-Project which invokes Emergency Procedures, and is normally in response to a natural disaster.
- **3.5.10 Environmental aspect:** Element of an organization's activities or products or services that can interact with the environment.
- **3.5.11** Environmental impact: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
- **3.5.12 Environmental objective:** Overall environmental goal, consistent with the environmental policy, that JSIF sets itself to achieve
- **3.5.13 Environmental target:** Detailed performance requirement, applicable to the JSIF, that arises from the environmental objectives and that need to be set and met in order to achieve those objectives
- **3.5.14 Formulator:** The Consultant who has been engaged to prepare project designs and compile the Bill of Quantities (BQ)
- **3.5.15 Functional Manager:** This individual holds a management post with specific responsibility for a project or functional unit within the organization.
- **3.5.16 Fund Manager:** Mission critical software that manages the entire project cycle from appraisal to completion.
- **3.5.17 Information Package:** Data compiled or produced for the purpose of providing information on the EMS.
- **3.5.18 JSIF's Operations Manual:** Document details the approach and procedures to be followed by staff of the JSIF in Project implementation. The Operations Manual is

- revised and adjusted when a new Project starts. NB Where Operations Manual is referenced it applies to JSIF's Operations Manual
- **3.5.19 Legal requirement:** Includes applicable laws, statutes, Acts, regulations and contracts which are enforceable and which govern the operations of JSIF.
- **3.5.20 Operational Controls (OC):** The processes that ensure that activities carried out are consistent with the policies, objectives and targets of the organization and the Environmental Management System (EMS)
- **3.5.21 Other requirements:** Refers to commitments that JSIF agrees to be bound by, whether explicitly or implicitly, such as memoranda of understanding.
- **3.5.22 Preliminaries:** Items included in the BQ that speak to basic preparatory and running costs (not included in measured items), *inter alia* dust control, sanitation etc.
- **3.5.23 Preventive action:** Action to eliminate the cause of a potential non-conformity
- **3.5.24 Procurement Coordinator:** Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.
- **3.5.25 Procurement:** The process of acquiring required works, goods or services, this process is carried out by the Procurement (also referred to as Contracting unit) services or goods, and is guided by a Procurement Coordinator.
- **3.5.26 Project:** Refers to particular implementation activities geared towards achieving micro objectives. Example road, community centres.
- **3.5.27 Quorum:** A team of persons comprising the Managing Director, EMS Manager or Environmental Officer, Legal Officer and a minimum 60% representation of the senior management team
- **3.5.28 Screening:** The initial feasibility assessment of a project, including Technical, Environmental, Social and Financial review.
- **3.5.29 Supervisor:** Consultant engaged to carry out the monitoring and reporting of site activities in accordance with contract.
- **3.5.30 Technical Officer (TO):** A suitably trained and qualified individual with This is an "UNCONTROLLED" DOCUMENT when PRINTED 15

responsibility for the assessment, monitoring and supervision of physical infrastructure. This post may refer to individuals referred to as Site Supervisors, Assistant Project Managers, Engineers, Environmental Officers, Project Officers

- **3.5.31 Technical Review Committee:** A team convened to review all infrastructure designs, it comprises Technical Officers (including Environmental Officers) and may co-opt external expertise.
- **3.5.32 Training:** Includes awareness and exposure to any body of knowledge as well as structured sessions of knowledge delivery or activity.
- **3.5.33 Tree** refers to fruit trees, mature trees, shade trees and trees of national importance.

4. CONTEXT OF THE ORGANIZATION:

4.1 Understanding the Organization and its Context

The Jamaica Social Investment Fund (JSIF) is a limited liability company incorporated under the Companies Act of Jamaica. It was established in 1996 as a component of the Government of Jamaica's (GoJ's) national poverty alleviation strategy. The Fund was designed primarily to channel resources to small-scaled community-based socioeconomic infrastructure and social services projects with a view to improve the lives, livelihood and living conditions of the less fortunate across the entire Jamaica. These projects include but not limited to road rehabilitation; zinc fence removal and substitution; school rehabilitation, expansion or construction; construction of water and sanitation facilities; implementation of solid waste management programmes and projects; construction or rehabilitation of drainage systems; electricity regularization; construction of agro-processing facilities; implementation of community based tourism enterprises; and construction of community multi-purpose centres and sports facilities.

The implementation of these projects include activities which may have significant or minor environmental impacts, including:

- Deterioration of air, surface water and groundwater quality;
- Change in land use and land degradation;
- Noise pollution;

- Depletion of natural resources;
- Habitat destruction and loss of biodiversity;
- Improper disposal of solid and hazardous waste;
- Deforestation; and
- Occupational health and safety issues

Considering these potentially negative impacts, the JSIF thought it would be prudent to develop and adopt an environmentally sustainable approach to implementing its projects. Consequently, the decision was taken to develop and implement an environmental management system (EMS) with the goal to reduce or eliminate environmental impacts at its core. To this end, the JSIF continually inject resources into the EMS through funding from donor agencies and the Government of Jamaica. Additional programme inputs include the employment and retention of highly skilled personnel including environmentalists, legal and technical experts, and corporate specialist; continually train staff and stakeholders including ancillary workers, contractors and consultants; procurement of goods and services from environmentally reputable dealers; purchase of sustainable products; and work within the legal framework of applicable local laws and within the environmental guidelines and established needs of our funding partners and other stakeholders.

In spite of these inputs, there are a number of factors, internal and external, natural and manmade that can limit achievement of the EMS objective which is to reduce or eliminate environmental impacts. These factors include lack of financial support from donor agencies; shift in focus of top management or change of management; poor supervision and monitoring of staff; change in behavior and attitude of contractor and consultants or breach of contract; poor buy-in of project beneficiaries; inadequate local regulatory framework; staff turnover; community violence; and sabotage. Earthquake, droughts, landslide, flooding, storms and hurricanes, sea level rise and storm surges are some of the natural hazards that could impact on the organization's ability to meet environmental targets and outcomes. Changes in the social and political landscape of the country could also impact negatively or even positively on the future of the organization and by extension the environmental management system. Continual shifting in demography, cultural values, economic conditions, educational level, norms and attitude could shape how Jamaicans view the environment which may influence how the EMS is managed or whether or not environmental objectives are achieved.

Therefore, the JSIF will always assess and consider the key inputs and risks which could directly influence the organization's ability to completely fulfill its mandate and achieve the goals and objectives of the environmental management system when implementing projects. Climate change adaptation and mitigation and disaster risk reduction are cross cutting issues that are factored in the design and implementation of project interventions with a view to protect the poor and vulnerable, the segment of society we mainly serve. The JSIF will continually make assessment of its project impacts on the local environment and even on a wider scale; as well as the impact of the environment on the projects being implemented. These factors will continue to inform the strategy of the JSIF for managing its environmental risks and for leveraging opportunities geared at enhancing the local and global environment and to build a sustainable and resilient society. The JSIF will keep an open line of communication with our interested parties with a view to obtain suggestions and guidance for continual improvement of the EMS.

4.2 Understanding the Needs and Expectations of Interested Parties

Since the inception of the JSIF in 2006, the organization has partnered with a large number of stakeholders in the implementation of the project interventions. The JSIF has in 2016 identified a list of stakeholders that are critical to the effectiveness of the organization as an implementing entity. These stakeholders have helped to guide the evolution of the EMS since the organization received ISO 14001:2004 certification in 2009.

The JSIF is committed to doing the following in an effort to satisfy the needs and expectations of our key internal and external stakeholders and to garner their continued interest in the environmental management system and the approach we take in managing the environmental aspects associated with project activities.

I. The JSIF will on an annual basis, determine and record all relevant internal and external stakeholders or interested parties that are relevant to the EMS. The list of interested parties will be recorded in the document EMS-I-DOC-INPART-ddmmyyyy. In identifying the interested parties, the JSIF will make an assessment of all the possible stakeholders that will be necessary to ensure that our projects are implemented in accordance to plan and that the needs of the beneficiaries are addressed. These will include government entities, multi-lateral funders, NGOs, consultants, contractors, and community residents.

II. The JSIF will conduct assessment or determination of our interested parties' needs and expectations annually at minimum. The determination of interested parties needs and expectations will be done using different approaches depending on the stakeholder. The needs and expectations of our funding partners are typically outlined in their environmental and social safeguards policy framework (ESSPF). The JSIF will maintain a copy of the environmental and social safeguard policies of our funding partners as a reference to the EMS. The JSIF will have annual consultation with the funders during monitoring missions to determine if there are changes in needs and expectations outlined in the ESSPF that will impact the environmental management system.

The JSIF will facilitate an annual workshop or training session with project consultants and contractors and other stakeholders to communicate information on the operation of the organization's environmental management system and to establish the needs and expectations of these interested parties with respect to the EMS. The needs and expectations of our project beneficiaries will be ascertained through formal meetings or workshops with the community development committees (CDCs) or community based organizations (CBOs) and the wider community. The needs and expectations of our government entities and regulators will also be established through organized annual workshops or consultations. The laws that are applicable to our environmental aspects will also be reviewed annually as part of the interested parties' needs and expectations assessment.

The workshops and meetings will take the form of a presentation by JSIF's environmental staff to provide the context of the discussions to follow. Stakeholders will be asked to provide oral or written feedback with respect to the EMS and the specific needs to be met. The methodology used and the outputs from these consultations will be recorded in document EMS-I-REC-NEED&EXP-ddmmyyyy. The Register of the consultations will also be kept as records in EMS-I-N&E REGISTER-ddmmyyyy.

III. Using the outputs information from the needs and expectation assessments, the JSIF will determine which needs and expectations are compliance obligations in law and which are voluntary requirements. All needs will be assessed for relevance and treated accordingly. All compliance related needs including those

incorporated in laws, regulations, permits and licenses will be included in the legal regulatory and other requirements (LLRS) aspect of the EMS and communicated to all the stakeholders during EMS sensitization or workshop sessions moving forward. Projects environmental compliance will be assessed against these legal and regulatory obligations. The needs and expectations of our funders will be treated as obligatory even if not embedded in law. Any needs and expectations that are expressed by interested parties and are perceived to potentially to or have a negative impact on the environment or on the interested party shall be considered by JSIF and shall be incorporated in the planning for the EMS as organizational requirements. Where needs and expectations are conditions required by Law, then they will be considered compliance obligations.

In addition, internal and external consultations will be conducted whenever a new Project portfolio is about to come on stream. The outcome of these consultations will be recorded by the JSIF environmental staff and documented in the EMS Document Management System. These outcomes will be reviewed by the General Manager for Technical Services and where necessary, the Managing Director for consideration.

The outputs of clause 4.2 will be used to inform the following sections of the EMS:

- 4.3 Determining the Scope of the EMS
- 4.4 Establishing the EMS
- 6.1 Actions to address Risks and Opportunities Compliance Obligations (6.1.3)
- 7.4 Communications

4.3 Scope of the Environmental Management System

The Jamaica Social Investment Fund (JSIF) is a quasi-governmental entity that implements socio-economic development infrastructure projects in poor and underserved communities. The JSIF's office is located at 11 Oxford Road, ground floor Dorchester Building (Norwood Avenue entrance), Kingston 5, Jamaica, W.I. The office space is where the administrative activities of the organization is concentrated including recruitment of staff, planning of project activities, finance and procurement, project management, communications and Information Technology. Administrative

activities that will impact the EMS include energy consumption, waste disposal, water consumption, and procurement of goods, equipment and appliances. The organization do not produce any commercial products for marketing.

The JSIF's administrative activities facilitate the operational aspect through which communities are provided socio-economic infrastructure including the construction of schools, roads, community centres, sporting and agro-processing facilities, agricultural and tourism enterprises, health care facilities, drainage network, sanitation, electricity regularization and water supply systems to name a few. These facilities are constructed right across Jamaica, which in essence is our scope spatially. The implementation of these activities are outsourced to contractors and consultants, the latter of which are responsible for project design, supervision and monitoring of the contractors' work activities. Construction activities include delivery of materials, excavation, trenching, use of natural resources, employment of labour, extraction of water, and waste disposal *inter alia*, all of which has environmental and safety implications.

The scope of this EMS encompasses all aspects related to JSIF's administrative activities and services conducted within the confines of the office space and all operational activities being implemented in communities throughout Jamaica. JSIF will also endeavour to pursue environmental management strategies that not only applies to all our activities but also that of our suppliers, project beneficiaries, consultants, contractors, government entities and other interested parties. The aim of this approach is not only to manage the impact of JSIF activities on the environment but also to influence that of the entities, interested parties and stakeholders with which we work or transact business, with a view to reduce environmental degradation and promote long-term sustainability.

Within the scope of our project implementation, the JSIF will implement the necessary operational procedures to prevent or minimize discharge to water bodies, soil and the atmosphere; improper solid waste management; soil erosion and slope instability; noise nuisance; disturbance of natural drainage pattern; waste of potable water; disturbance of natural coastal processes; and introduction of foreign material or exotic species into our environment. The JSIF will also implement measures geared at climate change adaptation and mitigation and disaster risk reduction.

The scope of the EMS will be coded as EMS-I-DOC-SCOPE-ddmmyyyy and documented in the EMS Document Management System. The document will be made available to all interested parties upon request.

4.4 Environmental Management System

The JSIF shall establish, implement, maintain and continually improve its environmental management system, including the processes needed and their interactions, in accordance with the requirements of the International Standards, to enhance its environmental performance. The JSIF will consider its context in the execution of its daily activities with a view to identify strengths, weaknesses, opportunities and threats which can be leveraged to facilitate continual improvement of the EMS.

The EMS will be integrated in all aspects of the JSIF's project cycle from appraisal through to monitoring and evaluation. All construction project to be funded by JSIF will undergo environmental screening to identify potential impacts, permitting requirements and compliance obligations and to consider potential mitigation measures. Consultants will be procured to design and supervise the implementation of the project in accordance with the EMS requirements. Consultants are required to formulate the project to prevent or mitigate against any real or perceived environmental impacts, risks or threats. Disaster risk reduction and climate change mitigation measures including hurricane straps, reinforced concrete, energy and water conservation fixtures, rainwater harvesting, river training, coastal defense system, drainage systems, alternative energy source and slope stabilization measures will always be considered in the design of applicable projects. The consultant must present the project design to the JSIF Technical Review Committee (TRC). The applicable interested parties including the Parish Council, Ministry of Education representatives and community members will be invited to attend and participate in the technical review process. Environmental mitigations measures are costed in all project bills of quantities. The technical review checklist and meeting minutes are documented in the JSIF document management system as records of the meetings.

As per funder safeguard policy requirement, an environmental management framework (EMF) has been developed for each World Bank project portfolio. A generic environmental management plan (EMP) forms part of the EMF and is included in every

construction project contract to guide the implementation of project activities with a view to reduce environmental impacts. The consultants are required to supervise implementation to ensure that the contractor execute the project in accordance with the EMP and any permit or compliance obligations. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. With respect to environmental monitoring special focus will be placed on solid waste management, water pollution, air pollution, noise nuisance, health and safety and introduction of exotic species and disturbance of natural ecosystem processes as these are considered some of the major risk factors associated with the JSIF activities. JSIF will train all staff to increase awareness of EMS procedures and practices and to maintain compliance.

This JSIF's Environmental Management System (EMS) manual contains: 1. Understanding our business and its potential impact 2. The context of the organization 3. Leadership and commitment 4. The Environmental Policy; 5. Statements of responsibility and authority; 6. An overview of the company's environmental procedures and controls; 7. The identification of the resources and training allocated to management, performance of work and verification activities including internal audit; 8. The appointment of the Environmental Management Representative (EMR); and 9. The arrangement for periodic management reviews. The purpose of this Manual is to demonstrate that this EMS meets all ISO14001:2015 requirements and provide guidance and direction for the implementation and operation of the EMS to all personnel including all relevant documents.

The JSIF Managing Director or a designate will guide the direction of the EMS by providing resources; developing and/or approving new policies; and show strong leadership in the face of changing technologies, risks, opportunities and interested parties' needs and expectations.

5.0 Leadership

The existing Top Management of JSIF includes the Managing Director (MD), General Manager for Technical Services, General Manager for Corporate Services, two Social Development Managers, General Manager for Finance and Procurement, Legal and Governance Manager, and the Senior Operations Manager. The Managing Director is ultimately accountable for the implementation of the EMS through direct involvement in the process of planning and implementation and/or through the delegation of responsibilities to specific individuals. The MD has the responsibility for ensuring that the JSIF's Board of Directors are involved in the decision making process so that adequate resources can be made available to ensure compliance with the EMS standards and to promote continual improvement. While the MD is ultimately accountable for the implementation of the EMS, the General Manager for Corporate Services is appointed the EMS manager and will report to the MD on matters relating to environmental performance. The Systems Operation and Environment Manager is responsible for the day to day operations of the EMS and will report to the EMS Manager and/or the General Manager for Technical Services with respect to EMS matters.

5.1 Leadership and Commitment

The Top Management of JSIF also have responsibility for ensuring that all required EMS standard requirements that fall within their portfolio are implemented in accordance with the necessary guidelines. It is the responsibility of every member of Top Management to identify, eliminate or reduce any risks that may impact negatively on the achievement of EMS goals, objectives and targets.

Specifically members of Top Management have responsibility for ensuring that their sub-ordinates conform to the organization's environmental management policies and procedures. In so doing, this ensures that the JSIF meets its legal and other compliance obligations and ensures continual improvement of the EMS. Top Management shall through their own actions, provide guidance and commitments by:

- Ensuring staff are provided with, and kept up-to-date with the necessary training and appropriate records of such training are kept;
- Ensuring that the EMS Policy is integrated into the day to day actions of staff and that any new projects meet the Policy commitments;

- Enforcing the use of relevant EMS documentation; adhering to environmental management operating procedures and record keeping relevant to their job roles;
- Complying with the environmental screening, monitoring and reporting procedures;
- Directing and supporting environmental staff to facilitate effective and efficient implementation of environmental projects and achievement of intended outcomes;
- Helping to communicate EMS policies and procedures to existing stakeholders and potential interested parties;
- Promoting environmental sustainability in all aspect of the organization's functions to create a culture that will encourage continual improvement; and
- Providing resources and the support necessary for staff to carry out their specific environmental management responsibilities as identified in this document.

The Top Management of JSIF shall be accountable for the effectiveness of the environmental management system by doing the following:

- i. Include environmental management functions in the job description of all senior managers;
- ii. Actively involved in the setting of EMS objectives and targets on an annual basis. The Managing Director or Designate shall review the Objectives and Actions to achieve them. The record will be coded as EMS-I-RD-OBP-ddmmyyyy and documented in the organization's document management system.
- iii. Ensure that all managers and team leaders receive adequate management training.
- iv. Actively participate in management system reviews and make resources available to take corrective actions which will result in continual improvement.

Top management shall ensure that the environmental policy and environmental objectives are established and are compatible with the strategic direction and context of the organization.

Top Management shall lead the Management System Review process to determine if the EMS is suitable, adequate and effective.

5.2 ENVIRONMENTAL POLICY

The Jamaica Social Investment Fund (JSIF) recognizes environmental protection as one of our guiding principles and a key component of sound business practices. JSIF commits to exercising sound management of the environmental impacts of its projects, and will ensure compliance with applicable Jamaican law and regulations. Specifically JSIF commits to:

- Advance environmental stewardship by contributing to environmental protection, pollution prevention, and efficient use of resources.
- Comply with all applicable laws and honour all commitments; where consistent with our business objectives / procedures we will exceed these thresholds.
- Continually improve our processes such that our environmental performance and that of our contractors and community partners is enhanced.
- Enhance the environmental wellbeing of communities in which we operate (either by the nature of the project or the means by which the project is completed).
- Maintain an awareness of emerging technologies that may lead to improved environmental performance and implement those that are economically feasible.
- Strive to make environmental considerations and stakeholders concerns an integral part of decision making.
- Take all reasonable care to ensure that the disruption of the environment resulting from our projects is minimized.
- Promote environmental awareness among our employees, suppliers and stakeholders, through communication.
- Specify project specific mitigation measures and corresponding monitoring requirements for projects.
- Partner with communities and agencies to ensure the integrity of our environmental practices is maintained.
- Engage employees thereby tapping into a larger pool of human knowledge, energy and creativity.
- Establish procedures to ensure that all contractors and consultants are knowledgeable of, understand and comply with all applicable laws and regulations.

• Implement contractual procedures to address violations of environmental laws and regulations and JSIF's EMS standards by providers of Goods, Works and Services to include Consultants and Contractors.

The policy is signed by the Managing Director and the Chairman of the Board of Directors. It is made available to all staff on the intranet and through postings at strategic locations throughout the office building. The Policy is also communicated to new staff through the mandatory EMS sensitization training.

The Policy is made available to interested parties on the JSIF's website. The Policy will be communicated to JSIF's contractors, consultants and other interested parties at training seminars, workshops and stakeholder meetings. A copy of the policy will be included in all contract between JSIF and interested parties.

The Policy will be reviewed annually by Top Management in association with the environmental manager. Any revision to the Policy will be communicated to all staff and interested parties. The Policy will be documented as EMS-I-DOC-POLICY-ddmmyyyy.

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Environmental Procedures Manual	Effective Date: August 1, 2008	Date Created: July 24,2008	Page 27 of 238
ISO 14001:2015 – 5.3	Prepared by: Marcia Dacres - Administrative Officer (HR)	Approved by: G. Antonio Blake – EMS Manager	Revision No: 0

5.3 ORGANIZATIONAL ROLES, RESPONSIBILITIES AND AUTHORITIES

1.0 PURPOSE

The purpose of this procedure is to specify the roles, responsibilities and authorities assigned and communicated by Top Management for the establishment, maintenance and improvement of the EMS and for the effective management of the projects to protect the environment. The JSIF recognizes that all categories of staff and interested parties within its radius of influence have some responsibility for ensuring that the EMS is established and/or maintained by following guidance, operational procedures as relevant to job roles, attending training and getting involved in initiatives designed to achieve the intended environmental outcomes.

In order to facilitate this, each staff Job Description will be developed with environmental roles and responsibilities to ensure employees are aware that they have a significant part to play in shaping and implementing the organization's EMS Policy and to support sustainable development.

2.0 SCOPE

This procedure covers all activities related to the acquisition, distribution and improvement of specific resources throughout the organization. These resources include human resource and specialized skills, technology, organizational infrastructure and financial resources.

3.0 REFERENCE DOCUMENTS

Job Descriptions

4.0 REQUIREMENTS

The appointment of a Manager with the requisite authority for ensuring the establishment, implementation and maintenance of the EMS shall reside with the JSIF's Managing Director, whom shall also communicate such appointment to all staff. The EMS Manager shall –formally report to Top Management on the performance of the EMS at least annually through the Management System Review.

Taking into account current and future needs of the organization, Senior Management shall ensure adequate resources are made available to facilitate the implementation and establishment of the EMS. Resources and their allocation shall be reviewed as per the EMS Review Schedule to ensure adequacy.

The Human Resource Manager shall update job descriptions, where necessary, with clearly defined responsibilities relating to the EMS. Job descriptions shall be signed by the incumbents indicating understanding, commitment and acceptance of the responsibilities assigned.

The Human Resource Manager shall ensure that all staff as well as persons working for or on the behalf of the JSIF (e.g. contracted Janitorial staff and Security Officers) are made aware of their specific responsibilities within the EMS.

Senior Management, on the advice of the Human Resource and EMS Managers, shall review the responsibilities and authorities whenever there is a change in the structure of the organization and make the necessary adjustments.

5.0 RESPONSIBILITIES

Senior Management – shall ensure that resources are made available to establish, implement, maintain and improve the Environmental Management System. This team shall also ensure that Management System reviews are held and emerging actions carried through.

EMS Manager – responsible for budgeting and ensuring that the EMS system is established, implemented and maintained in accordance with the requirements of ISO 14001:2015. In reporting to Senior Management, the EMS Manager will make recommendations for improvement of the system. This role also requires that senior managers be provided with data and trends related to the EMS for consideration during Management System Reviews, and that action items assigned during these reviews are closed out.

System Operation and Environment Manager – Oversees the day to day operation of the EMS and present the performance of the EMS to Top Management at the Management System Review.

Finance Manager – ensures that available financial resources are approved and appropriately disbursed for maintenance and continued improvement of the EMS.

Human Resource Manager – responsible for recruitment and training of staff.

MIS Manager - ensures that technological support is current and available.

Functional Manager – ensures that staff follows EMS practices and procedures and that non-conformances are addressed appropriately.

Project Manager – has responsibility for the implementation and maintenance of the procedures and especially as it relates to the proper design and implementation of projects. The Project Manager must also ensure that all projects for which they are responsible pass Technical Review, Supervisors assigned are appropriately briefed on monitoring requirements and that reports (site visit reports, supervisor reports etc.) are completed and filed.

Technical Officer – is responsible for ensuring the maintenance and compliance with the relevant established procedures associated with specific areas of the organization's operations. They are specifically responsible for participation in the Technical Review process including attending meetings and completing Technical Review Checklist. During implementation they must ensure that project sites are visited as prescribed, and that project supervisors' reports are completed and submitted.

Social Officer- is responsible for ensuring maintenance of compliance with the relevant established procedures associated with specific areas of the organization's operations. They are specifically responsible for communicating and where required assisting in resolving those environmental issues that affect the communities. They also will play an important role in the general environmental awareness and information relayed to communities through project information meetings (PIM).

Environmental Officer – ensures that the following are developed and followed; EMS Review Schedule and Aspects Review. This role requires that all aspects of JSIF's EMS are maintained. The Environmental officer will play a key role in monitoring and supervision of project sites with a view to ensuring environmental protocols are being followed. The EO shall constantly research new technologies and practices for inclusion in the JSIF's operation to improve environmental sustainability.

Communications Manager – is responsible for ensuring activities between the various parts of the organization and management structures and the organization's environmental aspects of operations and its environmental management system, is communicated to the relevant stakeholders. This role requires that the procedure for logging / documenting of communications be followed.

Legal Officer – is responsible for identifying the applicable legal requirements to which the organization's environmental management system and aspects is subjected. This role also requires that the organization be kept abreast and documentation updated on relevant legal and regulatory requirements.

Procurement Coordinator – is responsible for ensuring operational resources are procured according to the established procedures of the Government of Jamaica and Donor Agencies. Specifically this role requires that contract documents contain all documents required for fulfillment of the EMS, these include specifications and requirements; environmental screening sheets, plans and monitoring sheets.

EMS Team – is responsible for oversight of the EMS through periodic review to ensure that the necessary policies, practices, procedures and actions are implemented or carried out.

Ancillary Staff – ensure waste generated in the office are properly separated and packaged for disposal and recycling. Assist with energy use management by turning off lights after work hours.

All Staff – must ensure individual compliance with established procedures and operational controls. They also have the responsibility to observe and report non-conformances as per established procedures.

Supervisor- Ensure compliance with all activities associated with JSIF's environmental aspects and environmental management system. This role requires that all projects are implemented in accordance with set procedures and standards, sites are visited as prescribed, monitoring carried out and reports completed and submitted.

Stakeholders – Ensure compliance with all activities associated with JSIF's environmental aspects and environmental management system. Various stakeholders will play differing roles; in the case of the Community they will ensure that contractors maintain the environmental standards as set in Legal and Regulatory requirements as well as JSIF's policies and procedures.

Formulators – Ensure that designs meet all associated standards set by Jamaican law, regulations and other requirements to which JSIF subscribes. This role requires that adjustments stipulated from technical reviews are incorporated in designs.

Internal Auditor – Ensures that the EMS is incorporated into the JSIF's auditing process, that audits are conducted at planned intervals and audit reports submitted / conveyed to relevant managers and supervisors.

6.0 RECORDS

Job Descriptions HR-I-JDS-"POST"-"ddmmyyyy"

Management Review Minutes EMS-I-REC-MINS-"ddmmyyyy"

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years

Jamaica Social Investment Fund Jamaica Social Investment Fund	6.1. Risks Asso Threats and O	Document No. EMS-I-PR- RISKS- 19092016	
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ISO 14001: 2015 – 6.1.1 General	Prepared by: Milton Clarke— Systems Operation and Environment Manager	Approved by: Howard Malcolm Company Secretary	Revision No: 1

1.0 PURPOSE

The purpose of the procedure is to determine the risks associated with threats and opportunities that needs to be addressed in ensuring that the EMS achieve its intended outcomes; reduce or minimize undesirable impacts and to ensure continual improvement of the EMS.

2.0 SCOPE

This scope covers all internal, external, natural and man-made factors that pose a risk to the achievement if the outcomes of the EMS. These may include environmental aspects, compliance obligations, the organization's context, new technologies, local political dynamics, natural disasters and climate change, changes in leadership, interested party perspective and Government policy changes.

3.0 REFERENCE DOCUMENTS

Threats and Opportunities Assessment Sheet EMS-I-REC-T&O-ddmmyyyy

Environmental Policy EMS-I-RD-ENVPOL-24072008

Minutes of Management Review meetings EMS-I-REC-MINS-"ddmmyyyy"

Aspects Sheet EMS-I-REC-IDASPTS-06062007

Roles and Responsibility Procedure EMS-I-PR-RES-24072008

Communication Procedure EMS-I-PR-COMM-24072008

Identification of Environmental Aspects Procedure EMS-I-PR-IDASPTS-06062007

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Legal and other Requirement Procedure EMS-I-PR-LEGAL-24072008

Organizations Context EMS-I-REC-CONTEXT-ddmmyyyy

Interested Parties' needs and expectations EMS-I-REC-NEEDS&EXP-ddmmyyyy

4.0 REQUIREMENTS

A. Determine Risks associated with Threats and Opportunities

The JSIF is aware that there are existing risks that could impact the organization achieving its environmental management performance goals and objectives. Consequently, the JSIF will make a deliberate assessment of its context (Clause 4.1) and compliance obligations with respect to interested parties needs and expectations (Clause 4.2) with a view to identify potential threats and opportunities and the associated risks. The JSIF will include both internal external and environmental factors in assessing risks. These will include existing social, technological, economic, environmental and political issues on the local and international landscape as well as cross cutting issues such as natural disaster. The JSIF will also evaluate risks associated with its environmental aspects and significant environmental aspects.

The EMS Team led by the Systems Operation and Environment Manager identify the risks associated with threats and opportunities based on the significant environmental aspects; compliance obligations associated with the environment aspects, the political and social environment; and interested party needs and new technologies, *inter alia*. The EMS team will also assess risks and opportunities associated with external environmental conditions such as natural disasters and

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climate change as well as any matter internal to the organization such as strategic directions, culture, potential for organizational changes and staff capabilities.

The EMS Team will also identify actions to be taken in respect of these risks and opportunities and determine any resources that are required to manage the potential risks or take advantage of the potential opportunities.

The Risks associated with the threats and opportunities shall be submitted to Top Management for review and approval.

The JSIF will develop an assessment tool to rank the risks associated with threats and opportunities according to level of importance (potential impact) and the probability of occurrence as outlined in the Threats and Opportunities Sheet EMS-I-REC-T&O-ddmmyyyy.

The Threats and Opportunities sheet EMS-I-REC-T&O-ddmmyyyy will be disseminated by the Communications Manager in accordance with the Communications Procedure EMS-I-PR-COMM-24072008

Review and update

While the identification of risks and opportunities will be done annually as a standard EMS procedure, the EMS Team may review and update the organization's risks and opportunities under the following and any other applicable conditions, as they occur:

- If there is a significant change in the organization including management;
- If there is a significant change in stakeholder needs and expectations including compliance obligations;

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- When a new Project is introduced to the JSIF's portfolio;
- If there is a threat of natural disaster and/or in the event of a natural disaster; and
- If there are changes in Environmental Aspects and/or Policy;

The review of threats and opportunities will be noted and any changes incorporated in the EMS-I-REC-T&O-ddmmyyyy and shall be submitted to Top Management for approval. The report will be documented in accordance with the Document and Record Control Procedure EMS-I-PR-DOCCTRL-24072008.

The Communication Manager will communicate changes to the relevant stakeholders in accordance with Communications Procedure EMS-I-PR-COMM-24072008.

5.0 RESPONSIBILITIES

EMS team: Identify risks associated with threats and opportunities and determine the resources need to manage the potential risks and opportunities.

Top Management: Conduct reviews and approval of threats and opportunities of the organization and provide resources needed to take any necessary actions. Reviews should be done in accordance with Management System Review Procedure EMS-I-PR-MSR-24072008 and make adjustments to the determined threats and opportunities and the associated risks determined by the EMS Team.

Communications Manager: Disseminate the organization's risks and opportunities to staff and the necessary stakeholders.

6.0 RECORDS

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Aspects Sheet EMS-I-REC-IDASTS-ddmmyyyy – prepared by EMS Team

7.0 **ATTACHMENTS / APPENDICES**

Aspects Sheet EMS-I-REC-IDASTS-ddmmyyyy

Legal Regulatory and other Requirements EMS-I-REC-LRRS-ddmmyyyy

RECORD RETENTION TIME 8.0

Seven years



Jamaica Social Investment Fund Sustainability Our RESPONSIBILITY	Identification of Environmental Aspects and Significant Environmental Aspects		Document No. EMS-I-PR- IDASPTS- 24072007
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ISO 14001:2015 – 6.1.2	Prepared by: Loy Malcolm – Environmental Officer	Approved by: George Blake- EMS Manager	Revision No: 0

1.0 PURPOSE

This procedure outlines how JSIF determines the environmental aspects and impacts associated with its operations and thereafter how the level of significance is determined. The procedure details how the JSIF's impacts are assigned scores, ranked and significance determined.

2.0 SCOPE

This procedure covers all aspects related to JSIF's on site activities as well as in office operations.

3.0 REFERENCE DOCUMENTS

- Operations Manual JSIF-I-MAN-OPSMAN-28032006
- Significant Environmental Aspects Sheet EMS-I-REC-ASPTS-06062007
- Communication Procedure EMS-I-PR-COMM-24072008
- Aspects Review Schedule EMS-I-AREVSCH-24072008
- Specification and Requirements Doc PROC-1-SPECSGEN-10051999

4.0 REQUIREMENTS

JSIF manages the implementation of infrastructure type projects as well as social interventions. JSIF's Operations Manual reflects the project types that JSIF is currently involved in; as the Donor-Project portfolio changes the Operations Manual will be adjusted to reflect new project types that fall within the portfolio.

This portfolio of projects is the starting point for the development of JSIF's Aspects Sheet. There are two main categories of activities from which the aspects will be drawn, and they are Operations and Administration. Operations include

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all activities involved in on-site infrastructure works, while Administration covers activities within the JSIF's offices.

The Aspects Sheet consists of the following sections:

- project
- Aspects
- Impacts
- Ranking Elements i.e. Compliance risk, Event Probability, Impact (with & without mitigation), Remediation cost
 - A. Identifying Activities, Aspects and Impacts

JSIF's activities fall in the category of administrative and operational. Operational refers to project activities and these are a function of the scope of the funding received from each source. The types of projects will be included in documents such as the funding agreements as well as the Operations Manual. This Operations Manual will be updated when Donor- Projects are modified or new ones added. It is from the Operations Manual that projects will be extracted.

Having generated the list of activities in which JSIF is involved and the associated aspects, the Environmental Officer will coordinate with key members of staff including Top Management and ensure that the list is vetted for completeness. The Environmental Officer will then determine the impacts associated with the aspects identified and apply appropriate scores to the different ranking elements. The process is outlined below:

The Top Management assigned the Environmental Officer (EO) the responsibility to assess environmental aspects and impacts. Aspects and impacts will be assessed for releases to the environment (air, water, soil, generation of waste)

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and impacts on human health. The potential for these impacts will be considered under normal conditions as well as emergency conditions (e.g. hurricanes, fires, spills).

B. Ranking of Aspects

The ranking of aspects will be a three part assessment:

- Determination of Influence
- Determination of Environmental Significance
- Determination of Business Significance

Determination of Influence involves an assessment of JSIF's ability to control the impact that is being considered. Where JSIF has a course of action that can be executed to reduce the likelihood of the impact occurring, this is considered as *control*, where JSIF can institute a measure that will indirectly control an event, this is *influence*.

Determination of Environmental Significance considers the likelihood of an event occurring as well as the magnitude of that event should it occur. The scoring mechanism is as follows:

Likelihood / Event Probability:

- Will occur (5)
- Likely (4)
- Possible (3)
- Low Possibility (2)
- Highly unlikely (1)

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Magnitude:

- Major and Irreversible (5)
- Major but Reversible (4)
- Minor and Irreversible (3)
- Minor and Reversible (2)
- No Impact (1)

Determination of Business Significance involves an assessment of issues external to direct environmental impact but which have implications for the normal functioning of the business. The scoring mechanism is as follows:

Compliance risk:

- Law in place with fines etc. (5)
- Regulation with no fines (4)
- Regulation or policy in place with no sanctions (3)
- Policy, but no regulation (2)
- No regulation or policy (1)

Stakeholder Interest:

- High Interest (5)
- Low Interest (3)
- No Interest (1)

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Business Risk or Benefit:

- Considered Highly Important to JSIF's business operations (5)
- Considered of Medium Importance (3)
- Limited Importance (1)
 - C. Determining Significance

The final score in determining the Significant Environmental Aspect is calculated by the following formula:

Environmental Significance = (Event Probability x Magnitude) + (Compliance risk + Stakeholder Interest + Business Risk or Benefit)

The established threshold for JSIF's Significant Environmental Aspects (SEAs) is twenty (20). JSIF will, however, consider the cost of management, degree of influence or control as well as other company issues when selecting the final SEAs. JSIF may also choose to include other aspects (scoring less than 20) as significant given other considerations such as general organizational and national implications.

Managing Environmental Aspects

The JSIF Aspects Sheet will be updated and reviewed annually by the EO as per the EMS Review Schedule. In addition to annual reviews, a review process will be triggered in the event that any of the issues outlined below occurs:

- changes to project type and activities
- changes to laws, regulations or other requirements
- changes to operational methods, or equipment

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- any emerging issue identified that may have an impact on aspects identified

The EMS Team will then review the sheet as produced by the EO and make suggestions as necessary. The final Aspects Sheet and a report on specific changes will be sent to the Top Management team for final review and sign off. Each SEA will be managed through programmes using the Plan, Do, Check, Act cycle by way of procedures, records, monitoring and corrective and preventive actions.

When new aspects are identified or are removed from the JSIF list of SEAs, all affected staff will be notified per the Communication Procedure. Updates and changes to SEAs will be recorded and reported through meetings of the EMS Review Team and will form part of the reports for Management Review.

5.0 RESPONSIBILITIES

The Environmental Officer (EO) will be responsible for assessing environmental aspects and impacts and reviewing and updating the list of activities. This evaluation will be carried out as necessary or when a new Donor-Project is started. The annual review will ensure *inter alia* that values assigned to the elements are still relevant; and that new projects undertaken are reviewed for potential impact and assessed as per the Aspects sheet.

The EMS Team or a member of top management must review the revised aspects sheet as produced by the EO and where changes are recommended the EO will incorporate these, after review and discussion.

A member of top management must review and approve the revised Aspects Sheet.

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The EMS Manager or Designate must approve and incorporate the final revised sheet into the EMS.

The Communication Manager will communicate changes to all JSIF stakeholders as per the Communication Procedure.

6.0 RECORDS

Aspects Review Schedule EMS-I-RD-AREVSCH-24072008 – updated and reviewed by EO

EMS Review Schedule EMS-I-RD-EMSTREV-24072008 - created by the EO

7.0 ATTACHMENTS / APPENDICES

JSIF Aspects Identification Sheet – EMS-I-REC-IDASPTS-06062007

8.0 RECORD RETENTION TIME

Seven years

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1.0 PURPOSE

This procedure outlines how JSIF will ensure that, on completion of all water projects, water that is brought from source to tap is safe for drinking. A life cycle approach will be taken in the implementation of all water projects as indicated in **Section 4** of this procedure.

2.0 SCOPE

The procedure covers the provision of potable water, i.e., from the testing and abstraction from source to the end of the major pipeline bringing water to the community.

3.0 REFERENCE DOCUMENTS

Abstraction License JSIF-E-WRA-APLS-"ddmmyyy"

Bid/Tender documents PROC-I-BID-"PROJECTNAME"-"ddmmyyyy"

Identification of Aspects Procedure EMS-I-PR-IDASPTS-06062007

Operations Manual JSIF-I-MAN-OPSMAN-28032006

JSIF Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

JSIF Training Procedure EMS-I-PR-TRAIN-24072008

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

4.0 REQUIREMENTS

Environmental and Technical Screening

Site assessment is carried out initially at the appraisal stage, when the Technical Officer, Social Officer or Formulator and community stakeholders make an initial visit to the site. When a community requires a new water supply system or an

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improvement of an existing system, the first step in the process is to conduct a site environmental review. This will provide information on the source location, general conditions and flow as well as accessibility. The site is screened using a generic site assessment tool covering various environmental and social safeguards as dictated by law or donor requirements. The screening is done to determine the potential impact of the project on the environment and vice versa. The screening is completed by the Technical Officer in Fund Manager (JSIF's critical MIS software) and submitted to the Environmental Officer for review and approval. A generic environmental management plan is generated automatically by Fund Manager for any issue identified as a potential problem.

Procurement of Consultant

The Environmental Screening Sheet and Environmental Management Plan (EMP) generated by Fund Manager are then submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator (Design Consultant) contracts. If issues highlighted can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Formulation

At this stage the formulator makes a more thorough visit and assessment of the site in order to produce complete designs and costs. The formulator must design the project to mitigate the issues that were identified during screening taking the provided environmental management plan into consideration. The Formulator then submit the project design to the designated authority for approval and a license to abstract. Where the project involves abstraction of water from a new source, a permit must be obtained from the Water Resources Authority. The water must be tested for the necessary quality parameters and meet the standards as per permit requirement. However, if the project only involves

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tapping into an existing system, then the only requirement is to obtain approval from the National Water Commission (NWC) in the form of a "No Objection" letter. If the necessary permit/license has been granted, the project will then pass through JSIF's approval, procurement and contracting process (JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006, Funding and Monitoring Community Projects\ The Community Project Cycle).

If the license is not granted, the project is terminated.

Technical Review

The preliminary drawings, BQ, recommendations and conditions associated with the project are brought before a technical review committee, where they are examined for completeness. Recommendations from technical reviews must be incorporated in final designs. The reviews must include an assessment of the EMPs generated from Fund Manager as well as the permits and licenses to ensure that the issues highlighted have been included both in the design and the final costs.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage environmental aspects at the project site.

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Construction – the Contractor will build the water supply as per the approved designs.

Monitoring and Supervision – The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Project monitoring will be carried out in accordance with *JSIF Monitoring and Evaluation Procedure* EMS-I-PR-ME-24072008. With respect to environmental monitoring, special focus are placed on solid waste management, water pollution, air pollution, noise nuisance, health and safety and introduction of exotic species and disturbance of natural ecosystem processes as these are considered some of the major risk factors associated with the JSIF activities.

Post Implementation

Flushing, Sterilization and Testing - Flushing, sterilization and testing will be done according to guidelines outlined in (JSIF, Specification and Performance Requirements Document PROC-I-SPECSGEN-10051999\Water Distribution

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System). This is done to ensure that water quality meets the necessary standards.

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008

Post-Project Monitoring

Post- Project Monitoring will be conducted in accordance with the stipulations of the license granted by the authorized government agency. Where the project is selected in the sample for post project analysis, JSIF will test for quality.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with specifications in the Works Contract Document. The supervisor will also be required to perform in accordance with Supervision Contract.

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per *JSIF*, *Monitoring and Evaluation Procedure* EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects and ensures that water quality control measures are included in the BQ.

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Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded

6.0 RECORDS

- Certificate of Analysis JSIF-E-"ORG"-COA-"ddmmyyyy"- received from external laboratory
- Authorized government agency Application and license (JSIF-E-"ORG"-APL-"ddmmyyy") – Environmental Officer
- Project Designs JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"- Produced by Formulator
- Site Reports JSIF-I-"SVR"- PROJECTNAME -"ddmmyyyy" Technical Officer
- Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy" – Produced by Convener/Chair
- Maintenance Training Records "DEPT"-I-TRAINREC-"TYPE" "ddmmyyyy" Produced by Training Facilitator
- Abstraction Data Reports "DEPT"-I-REPS-ABSRP"PROJECTNAME""ddmmyyyy" Generated by the Community

7.0 ATTACHMENTS / APPENDICES

None

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8.0 RECORD RETENTION TIME

Seven years

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1.0 PURPOSE

The purpose of this procedure is to outline process controls to minimize the consumption of electricity at the JSIF's administrative building and at completed building project sites. This procedure provides the energy efficient and conservation approaches that will be adopted to mitigate against excessive use of energy. A life cycle approach will be taken in the implementation of projects that include drainage as indicated in **Section 4** of this procedure.

2.0 SCOPE

This process relates to the management of energy consumption at JSIF's administrative office and projects involving building construction.

3.0 REFERENCE DOCUMENTS

JSIF's Green Elements Policy (EMS-I-RD-GEWWPOL-26072011)

Identification of Aspects Procedure (EMS-I-PR-ASPTS-06062007)

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

The process begins with an initial site assessment in the appraisal stage of the project cycle. This assessment is conducted by the Technical Officer, Social Officer and community stakeholders during the site visit. The site is screened using a generic site assessment tool covering various environmental and social safeguard criteria as dictated by law or donor requirements. The screening is done to determine the potential impact of the project on the environment and

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vice versa. JSIF Technical Officers assess sites for suitability in accordance with among other things, JSIF policies, environmental feasibility and structural feasibility. The Technical Officer will also make an assessment of the infrastructure and equipment needs including energy conservation and efficiency features required to be included in the project to make the building sustainable and to inform the project design and cost.

When environmental screening is completed in Fund Manager (JSIF's critical MIS software) and approved by the environmental officer, Environmental Screening Sheets, Environmental Management Plans (EMPs) and Monitoring Sheets are generated for integration firstly in the appraisal report and subsequently in technical reviews, bid/tender documents and contracts for contractors and formulators.

Once the proposed project successfully passed the environmental feasibility and social assessments, an appraisal report will be completed by the Social Officer and Technical Officer and submitted to the Social Reviews Committee (SRC) for approval to be funded. The scope of works is described in the appraisal report including the electrical works and equipment.

Projects approved by the SRC are submitted to the other hierarchal bodies for final approval to procure.

Procurement

At this stage, a consultant is procured to design and cost the project. The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager must be submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator (Design Consultant) contracts.

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Formulation

At this stage the formulator visit and make a thorough assessment of the site in order to produce complete designs and costs. The Consultant (formulator) must design the project to mitigate the issues that were identified during screening taking the provided environmental management plan into consideration. The Consultant is required to design the project in accordance with the requirements of the terms of reference. Environmental sustainability must be considered in the design of all building projects with a view to improve comfort of the users and importantly to reduce operational cost of the beneficiaries. With respect to energy management, the building must be equipped with energy efficient fixtures including t-8 fluorescent lamps or LED bulbs; photocell operated external lights; alternative energy solutions (solar or wind); sensor switches; and "Energy Star" rated appliances and equipment. The formulator is required to design the project to maximize the use of natural sunlight and natural and artificial shading.

The Formulator shall submit the completed project design to the designated authority for approval and any necessary permit. If approval is granted, the project will then pass through JSIF's approval, procurement and contracting process (JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006, Funding and Monitoring Community Projects\ The Community Project Cycle).

Technical Review

The Consultant will present the preliminary drawings, BQ, recommendations and conditions associated with the project to the JSIF's technical review committee, where they are examined for completeness. Recommendations from technical reviews must be incorporated in final designs. The reviews must

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include an assessment of the EMPs generated from Fund Manager; any applicable permits and licenses; and energy management features to ensure that the necessary requirements have been included both in the design and the final costs.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. However, detailed specifications for the electrical and lighting systems are specified under the electrical section. The contract documents also include the detailed environmental management plan outlining how to manage environmental aspects at the project site.

Construction – The Contractors must perform works as per Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999.** The Contractor will construct the building as per the approved designs.

Monitoring and Supervision – The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The consultant must ensure that the energy conservation and efficiency measures included in the design are implemented by the contractor. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors and should

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ensure that the project is meeting the specific requirements. Both the consultants and technical officers are required to produce site monitoring report which are currently documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The environmental officer will also maintain a log of the energy efficient and conservation features implemented at each project site. The number of projects implemented with alternative energy systems will be recorded by the environmental officer in the Alternative Energy Log EMS-I-REC-ALTENERGYLOG-ddmmyyyy. The number of projects implemented with energy conservation and efficiency systems will be recorded by the environmental officer the Energy Efficiency Log EMS-I-RECin ENERYEFFICIENCY-ddmmyyyy.

Energy Management at the JSIF Administrative Building

The JSIF recognizes that its environmental footprint can be reduced significantly through the adoption of sustainable energy management practices and technologies at its administrative office. The following approaches will be standardized as normal JSIF procedure to ensure that energy consumption at the office is minimized.

i. Green Procurement – The JSIF utilized various types of electronic items and appliances such as desktop and laptop computers, printers, copiers, refrigerators, microwaves, televisions and projectors as part of the normal office operation. These items are being used on a daily basis and are

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contributing significantly to the quantity of energy consumed in the workplace. Therefore, the JSIF could reduce energy consumption immensely if we think before we purchase. The Green Procurement Policy (EMS-I-DOC-GRNPROCUREPOL-ddmmyyyy) provides the guideline for the procurement of consumables and equipment to reduce energy consumption and environmental impacts. This includes:

- Procurement and installation of energy efficient light bulbs including T-8 compact fluorescent lamps and LED light bulbs
- Procurement of "Energy Star" rated appliances and electronics
- ii. **Replacement of existing light fixtures** The JSIF will seek to gradually replace the existing lighting at the office with a more modernized and energy efficient system. Whenever existing lamps become dysfunctional they will be replaced with modern T-5 and T-8 fluorescent tube with electronic ballast or LED lighting. This will improve energy efficiency of the building.
- iii. **Install Motion Switches** Motion sensors switches will be installed in the common areas including meeting rooms, bathrooms, kitchen and dining area and the lobby to control the use of lighting.
- iv. **Sensitization and Awareness** The JSIF will continually engage staff in various energy conservation type activities with a view to improve sensitization and awareness. The staff will be sensitized through training exercises, demonstrations, screen savers and posters/signs.

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v. **Monitoring** – The JSIF will maintain an energy management team as a subcommittee of the EMS Team. The group will be responsible for monitoring and reporting on the energy management performance at the JSIF's office. The team will track monthly energy consumption, staff energy conservation efforts and new applicable efficient technologies in the market. The administrative office energy consumption extracted from the monthly utility bills will be recorded by the environmental officer in the Energy Consumption Log (EMS-I-REC-ENERGYCONLOG-ddmmyyyy. Trend analysis will be conducted regularly to gauge and get an understanding of the direction and effectiveness of the conservation approach. Where necessary, mitigation measures will be taken to improve performance.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with construction and engineering standards and design specifications. Complete monthly reports and site meeting minutes as required. **See JSIF**, Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999**, and produces Supervision Reports "**DEPT**"-**E-REPS-SUPV-**"ddmmyyyy".

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

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Quantity Surveyor: Develop specifications for energy efficient items and incorporate such items in the cost database. Cost project and ensure energy efficient features are included in the project cost estimates.

Procurement Manager: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts. Procure goods and services in accordance with Green Procurement Policy.

Office Administrator: Provide monthly energy consumption data to the energy management subcommittee. Ensure upgrading of lighting system at the office is completed.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. Monitor projects to ensure that energy conservation and efficient systems are implemented at project sites. Document information on energy conservation at project sites.

The Functional Manager must sign off on all applications to regulatory agencies.

6.0 RECORDS

Environmental Screening Sheet **EMS-I-REC-ESS-"ddmmyyyy"**— Completed by Technical Officer / Formulator

Environmental Management Plan **EMS-I-REC-EMP-"ddmmyyy"**- Generated by Fund Manager

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Environmental Monitoring Sheets **EMS-I-REC-EMNS-"ddmmyyy"** – Completed by Supervisors

Drawings / Designs JSIF-E-DWG-"PROJECTNAME"-ddmmyyyy" – Produced by Formulator

Bill of Quantities (BQ) **JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"**- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyy" – Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyyy" – Produced by Relevant Agency

Site Visit Reports **JSIF-I-"STV"- PROJECTNAME -"ddmmyyyy"**- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervisor Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy" – - Produced by Supervisor

Contract Documents **PROC-I-CON-"PROJECTNAME"-"ddmmyyyy"**– Produced by Procurement Coordinator

Green Procurement Policy (EMS-I-DOC-GRNPROCUREPOL-ddmmyyyy)

Alternative Energy Log EMS-I-REC-ALTENERGYLOG-ddmmyyyy

Energy Efficiency Log EMS-I-REC-ENERYEFFICIENCY-ddmmyyyy.

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Energy Consumption Log (EMS-I-REC-ENERGYCONLOG-ddmmyyyy

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years or the life of the project whichever is longer.

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1.0 PURPOSE

This procedure outlines how the Jamaica Social Investment Fund (JSIF) or those working on its behalf will control the release of dust generated as a result of project activities. A life cycle approach will be taken in the management of dust at project sites as indicated in **Section 4** of this procedure.

2.0 SCOPE

This procedure relates to the control of dust resulting from excavation and other construction activities carried out on JSIF project sites.

3.0 REFERENCE DOCUMENTS

Specifications and Requirements Document PROC-I-SPECSGEN-10051999

Identification of Environmental Aspects EMS-I-PR-ASPTS-06062007

NEPA Air Quality Standards JSIF-E-NEPA-LEGAL-AIRQ-ddmm2006

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

Bills of Quantities (BQ) Bill of Quantities JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

All projects are screened at the appraisal stage for potential environmental impacts on Fund Manager by the Technical Officer or Formulator (in the case of Emergency Projects). Projects involving excavation and road works will be specially noted and the production of dust recorded on the Environmental

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Screening Sheet as being a potential impact of the project activities. The degree or type of dust control will be determined by the location of the receiving environment including but not limited to local biota, human settlement, and the potential for dust to become airborne etc.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator (Design Consultant) and contractor contracts. If issues highlighted such as dust emissions can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Formulation

At this stage the formulator makes a more thorough visit and assessment of the site in order to produce complete designs and costs.

This is the design and cost phase of the project cycle, where approaches for dust mitigation factored and costed in the project Bill of Quantities (BQ). The sum for dust mitigation is included under the preliminary component of the BQ. The Formulator then submit the project design to the designated authority for approval and any necessary permit. The permit dictates the monitoring system required for specific projects. If the permit is granted, the project will then pass through JSIF's approval, procurement and contracting process (JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006, Funding and Monitoring Community Projects\ The Community Project Cycle).

Technical Review

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The preliminary drawings, BQ, recommendations and conditions associated with the project are brought before a technical review committee, where they are examined for completeness. Recommendations from technical reviews must be incorporated in final designs. The reviews must include an assessment of the EMPs for dust management generated from Fund Manager as well as the application for any permits and/or licenses applicable to the project to ensure that issues highlighted and those related to dust have been included in the final costs.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage dust at the project site.

Construction – As it relates to dust issues as a result of project activities, Contractors must perform works as per Specifications and Requirements Document - PROC-I-SPECSGEN-10051999. The Contractor implement the project in such a way which result in the suppression of dust.

Materials that may become airborne 'dust' should be controlled at source e.g. aggregate storage areas, cement storage and mixing areas etc. and minimized where possible or otherwise controlled. The application of dust suppressants, such as water must occur at appropriate frequencies to meet the objective (e.g. NEPA Air Quality Standards, visible dust). Only environmentally friendly products may be used for this purpose. A suppressant such as water should be

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used; "used oil" should not be used. Locations that are cleared of vegetation should be replanted as quickly as possible. Wherever the Environmental Management Plans reflect that dust will be a problem; Contractors must be guided by the See JSIF, Specifications and Requirements Document PROC-I-SPECSGEN-10051999, Environmental, Health and Safety Guidelines, while Supervisors will ensure that these guidelines are met.

Monitoring and Supervision – The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The supervisor and technical officer must ensure that fugitive dust remain under control to minimize environmental impacts and human health effects. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Project monitoring will be carried out in accordance with *JSIF Monitoring and Evaluation Procedure* EMS-I-PR-ME-24072008. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices. With respect to environmental monitoring and

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supervision, the consultant must not only monitor dust management onsite but off site as well. The consultant is required to take the necessary steps to ensure that any construction material being transported to the site or waste being disposed of from the site are adequately protected to prevent or minimize emission of dust. Construction material and waste must be covered during transportation.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008. The maintenance committee is responsible for the maintenance of the project to ensure sustainability.

Post-Project Monitoring

Post- Project Monitoring will be conducted by the maintenance committee to determine if the success of established vegetation and to take corrective actions if necessary.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with construction and engineering standards and complete reports as required. **See JSIF,** Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999**

and produces Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME""ddmmyyyy"

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Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects and ensures that dust control measures are included in the BQ.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded

6.0 RECORDS

Environmental Screening Sheets **EMS-I-REC-ESS-"ddmmyyyy"** – Completed by Technical Officer / Formulator

Environmental Management Plan Environmental Management Plans EMS-I-REC-EMP-"ddmmyyyy"- Generated by Fund Manager

Environmental Monitoring Sheets Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy" – Completed by Supervisors

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Drawings / Designs Drawings / Designs - **JSIF-E-DWG-"PROJECTNAME"-**"ddmmyyyy" – Produced by Formulator

Bill of Quantities - JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"

- Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyy" – Produced by Relevant Agency

Site Visit Reports JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications – Produced by Environmental Officer JSIF-I-"ORG"-APPS-"ddmmyyyy"

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

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Seven Years or the life of the project, whichever is longer.

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1.0 PURPOSE

This procedure defines the health and safety practices and procedures the JSIF will apply in its operational activities to minimize the risk of injury, death and damage to property.

SCOPE

This procedure relates to all JSIF sites on which infrastructure works are carried out.

2.0 REFERENCE DOCUMENTS

Specifications and Performance Requirements, PROC-I-MAN-SPECS-12052002

Identification of Aspects Procedure, EMS-I-PR-IDASPTS-24072007

Project Emergency Response, EMS-I-DOC-PROEMERGRESPONSE-ddmmyyyy

Onsite Health and Safety Procedures, EMS-I-DOC-H&SGUIDELINES-25092017

Emergency Evacuation Procedures for Project Sites, EMS-I-DOC-EVACONSITE -25092017

Health and Safety Tailgate Meeting Register, EMS-I-REC-H&S TAILGATE - 25092017

3.0 REQUIREMENTS

Site Assessment and Environmental Screening

Site assessment is carried out initially at the appraisal stage, when the Technical Officer or Formulator (in the case of emergency projects) makes an initial visit to the site. An initial site review will indicate whether there is the potential for

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significant health and safety risk as a result of the nature of the site and / or as result of the type of works to be carried out. At this point the Technical Officer screens the project on Fund Manager. This environmental screening process will identify the potential for health and safety issues associated with the project.

JSIF Technical Officers assess sites for suitability in accordance with among other things, JSIF policies, EMS guidelines, Needs and Expectations of Interested parties and environmental feasibility. If issues highlighted, for example flooding, can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator (Design Consultant) and contractor contracts.

Formulation

At this stage the formulator makes a thorough visit and assessment of the site in order to produce complete designs and costs.

This is the design and costing phase of the project cycle, in which budget for health and safety is included in the project's Bill of Quantities (BQ). The sum for Health and Safety is included under the preliminary component of the BQ. The Formulator submit the project design to the designated Local Authority for approval. If approval is granted, the project will then pass through JSIF's approval, procurement and contracting process (JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006, Funding and Monitoring Community Projects\ The Community Project Cycle).

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Technical Review

The preliminary drawings, BQ, recommendations and conditions associated with the project are brought before a technical review committee, where they are examined for completeness. Recommendations from technical reviews must be incorporated in final designs. The reviews must include an assessment of the EMPs generated from Fund Manager as well as any required approval from relevant authorities.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage environmental aspects at the project site.

Construction – As it relates to health and safety issues as a result of project activities, Contractors must perform works as per Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999.** The Contractor is required to implement the project in such a way that results in the minimization of risks of harm to human, properties and the environment. The following are recommended practices that the contractor is expected to implement with a view to improve safety at project sites.

Provision of Safety Gears and equipment: The contractor shall ensure the provision of protective clothing and equipment including hard hats, gloves, ear

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protection, safety boots, goggles, safety vest and first aid kit for applicable project or activities.

Provision of lighting: The Contractor shall ensure that adequate and safe lighting is provided and maintained at applicable project site.

Safe handling any harmful substances: The Contractor shall ensure the execution of suitable arrangements for ensuring safety and absence of risks to health in connection with the use, handling, storage, transport and disposal of articles and substances.

Identify and Secure Hazardous Locations: The contractor shall adequately identify and secure any hazardous location onsite. All workers should be made aware of hazards onsite including deep excavations (e.g. trenches and pits) and hazardous chemicals. Safety signs, cones, caution tape, perimeter fencing and access limitation should be used as measures to control exposure.

Remove Trip and Fall Hazards: All walkways should be cleared of any obstacles that poses a risk of trip and fall to persons moving around onsite. Construction material, waste and boxes etc. should be stored in a safe area away from passages that are frequently used.

Conduct Safety Meetings: It is recommended that the contractor under the supervision of the consultant, conduct daily site health and safety meetings with all workers and visitors onsite. The health and safety tailgate form, EMS-I-REC-H&S TAILGATE -25092017 should be completed by the contractor and signed by all meeting attendees. The form should be stored onsite for reference. The consultant is required to submit four samples (1/week) of the signed form to JSIF with the monthly report to confirm that this activity is being conducted.

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Safeguarding Excavations and Protection of Adjoining Property: As part of the any excavation work, the Contractor shall remove any loose or unstable material which appears dangerous to workmen or to structures. Excavations for trenches and for walls shall be so shored and braced that they will be safe, that grounds alongside the excavation will not slide or settle, and that all existing improvements of any kind will be fully protected from damage. The Contractor shall furnish, put in place and maintain all timbering necessary to support the sides of the excavations.

For trenches made in roadways, footpaths and alleys or within 4.5meters of buildings or elsewhere in built up areas the Contractor will be required to execute the Works, so as to minimize damage and disturbance and, to achieve this, vertically sided trenches will, in general, be required, timbering or other support being employed where necessary. Undercutting of trench sides will not be permitted. In the case of all work in roads, and in the other cases where in the opinion of the Project Manager's Representative excavations are liable to cause interference to the public, the Contractor shall so organize his operations as to reduce to a minimum the interval between opening up and backfilling excavations and his particular attention is drawn to the next clause.

Should the Contractor fail to comply with the various requirements of this Clause, the various remedies provided in the Contract may be applied.

Removal of water from deep pits: Where practicable, the Contractor shall remove any water that accumulates in excavations that poses a risk of drowning. Otherwise, the contractor must keep the excavation covered at all times. The water or liquid pumped or raised from the excavations must be directed by the Contractor to a suitable outlet without causing any nuisance, injury, fouling or

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damage to streams, waterways or beaches. Any such impact must be corrected at the Contractor's own expense.

Cleanup of Spills: Where hazardous materials are stored onsite, the Contractor is required to maintain a spill clean-up kit. The kit should include supplies adequate to clean-up the chemical in question. The kit should include, gloves, boots, goggles, coveralls, shovel, absorbent material, storage container with lid and eye protection. The supplies shall be maintained and inspected by the Technical Officer, Environmental Inspector and/or the Consultant on a monthly basis to ensure that all materials are present in sufficient quantities.

All spill sites shall be cleaned up using the best available technique for each specific situation. The waste generated from cleanup activities should be disposed according to the manufacturer's specifications. The contractor should contact the National Environment and Planning Agency (NEPA) and/or the National Solid Waste Management Authority (NSWMA) for clarity on the disposal of the waste, if the procedure for disposal is unknown.

Fire Prevention: The Contractor shall take all necessary precautions to prevent personal injury, death and damage to the works or other property from fire. The Contractor shall comply with any relevant Codes of Practices. The Contractor shall remove all combustible materials arising from his works to off Site. No uncontrolled burning including combustion of waste shall be permitted within or in the vicinity of the Site.

Securing the site: The Contractor shall ensure that the work site is secured by providing hoarding or any other means necessary to limit unauthorized personnel from entering. The contractor should secure all Works sites are secure before night fall and ensure that all necessary precautions have been taken to

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prevent damage to the Permanent or Temporary Works that could increase the risk of accident or environmental degradation at the site.

Installation of Safety Signs: When required, the Contractor shall erect and maintain, all signs necessary for the proper direction and control of traffic. All such signs shall conform to Jamaican standards. Signs and road markers shall be installed to instruct and inform all drivers of local restrictions in a timely and safe manner.

Manually operated "stop/go" signals, if used, shall be of the size and type approved by the Project Manager. The Contractor may be required to construct and maintain temporary detour roads adjacent to construction as directed by the Project Manager. Safe access for pedestrian and non-vehicular traffic shall be provided through construction areas.

The Contractor shall furnish barricades or temporary fencing which may be required for the safety of the public or the security of the Works as required by the Project Manager, and erect such barricades or temporary fencing at locations specified by the Project Manager.

The Contractor shall provide, maintain and remove on completion of construction, adequate fencing or barriers around active zones of construction and all equipment/material staging areas.

All costs which may be incurred by the Contractor as a result of programming and coordinating work to enable any alterations to the services to be carried out and the cost of any safety precautions which shall be deemed necessary due to the proximity of the Works to the power lines shall be at the Contractor's expense.

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Implementation Monitoring and Supervision – The JSIF established a multilayered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations as well as to meet maintain safe working conditions at the site to reduce the risk of injury or death.

The supervisor and technical officer must ensure that health and safety management at the site is optimized and that the environment is conducive to work. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental and safety compliance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008. The maintenance committee is responsible for the maintenance of the project to ensure sustainability.

5.0 RESPONSIBILITIES

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Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports.

Contracting Department: Contracting ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects as well as for developing complete designs, bills of quantities and thereafter in his/ her capacity as Supervisor must ensure that the contractor performs in accordance with environmental, health and safety and construction and engineering standards. See JSIF, Specifications and Requirements, PROC-I-MAN-SPECS-12052002

Supervisor: This individual is contracted to monitor and ensure that all works are carried in accordance with applicable standards. See JSIF, Specifications and Requirements, PROC-I-MAN-SPECS-12052002

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded.

6.0 RECORDS

Environmental Screening Sheet **EMS-I-REC-ESS-"ddmmyyyy"** – Completed by Technical Officer / Formulator

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Environmental Management Plan **EMS-I-REC-EMP-"ddmmyyy"**- Generated by Fund Manager

Environmental Monitoring Sheets **EMS-I-REC-EMNS-"ddmmyyy"** – Completed by Supervisors

Drawings / Designs JSIF-E-DR-"PROJECTNAME"-ddmmyyyy" – Produced by Formulator

Bill of Quantities (BQ) **JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"**- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy" – Produced by Convener / Chair

Site Visit Reports **JSIF-I-SVR-"PROJECTNAME"-"ddmmyyyy"**- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"

Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications JSIF-E-"ORG"-APLS-"ddmmyyyy"

Produced by Environmental Officer

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyyy"

Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

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None

8.0 RECORD RETENTION TIME

Seven years of the life of the project whichever is longer.

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1.0 PURPOSE

This procedure defines how JSIF will reduce or eliminate the contamination of ground and surface waters as a result of project works being carried out at any JSIF project site. A life cycle approach will be taken in the management of water pollution as indicated in **Section 4** of this procedure.

2.0 SCOPE

This procedure relates to all JSIF project site and the ground and surface waters that they have the potential to impact.

3.0 REFERENCE DOCUMENTS

Abstraction License JSIF-E-WRA-APLS -"ddmmyyyy"

Bid/tender Documents PROC-I-BID-"PROJECTNAME"-"ddmmyyyy"

Identification of Aspects Procedure EMS-I-PR-ASPTS-06062007

Operations Manual JSIF-I-MAN-OPSMAN-28032006

JSIF Monitoring and Evaluation Procedure EMS-I-PR-M&E-24072008

JSIF Training Procedure EMS-I-PR-TRAIN-24072008

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Project Assessment and Screening

The nature (i.e. location to watershed areas, rivers, wells, springs etc.) of the project and its location will determine the potential to affect ground and surface

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waters. Any project that involves sewage works, agriculture, sanitation and waste treatment can impact the ground waters (GW). Projects involving the abstraction of water from any source or works being carried out near surface waters can impact surface waters (SW). During screening these potential issues will be highlighted. The Technical Officer or Formulator would make an initial visit to the site and screen on Fund Manager.

Whenever the site assessment reveals that a water source may be impacted by the project, in addition to being highlighted and flagged on Fund Manager, the program alerts the EO. Thereafter special efforts will be carried out before and during the implementation to mitigate contamination.

The screening of the project on Fund Manager; will generate a Screening Sheet and Management Plan which form internal and external records.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator (Design Consultant) and contractor contracts. If issues highlighted such as water pollution can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Formulation

At this stage the formulator responsible for the site design makes a more thorough visit and assessment of the site in order to produce complete designs and costs. As part of the design provisions must be made for accurate drainage to

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be put in place as required given slopes, location, soil types as well as other pertinent issues.

Where sanitation is involved, the EO will be alerted and recommendations given for the best waste treatment solution. The Formulators are then charged with the responsibility of assessing the site conditions (soil, slope, etc.) for suitability. Where water closets (recommended only where water supply is consistent) are selected, checks must be made to determine how the generated waste will be treated. In the case of urban solutions where off site treatment with sewerage network is available then the sanitation solutions (i.e. water closets) must be connected to the network. Where no network is available for connection, a suitable on site treatment solution shall be recommended.

When sewerage works and waste treatment systems form a part of the project a request must be made to the regulatory agency (National Environmental Planning Agency – NEPA). Where it is deemed necessary, depending on the scope of works a permit is required; the EO shall ensure that this application process is carried out by the consultant.

The project will not move forward to approval stages before the required permits and licenses with associated conditions are received. These conditions along with the Screening Sheets, Management Plans and Monitoring Sheets will be included with bid and contracting documents.

In the case of agricultural projects, the management of the purchase, application and storage of pesticides and feeds will be managed through training, monitoring, facilities design, integrated pest management and other applicable approaches to minimize pollution.

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Technical Review

The preliminary drawings, BQ, recommendations and conditions associated with the project are brought before a technical review committee, where they are examined for completeness. Recommendations from technical reviews must be incorporated in final designs. The reviews must include an assessment of the EMPs generated from Fund Manager as well as the permits and licenses to ensure that the issues highlighted have been included both in the design and the final costs.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to prevent water pollution at the project site.

Construction – As it relates water pollution issues as a result of project activities, Contractors must perform works as per Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999.** The Contractor must implement the project in such a way that prevents contaminants from entering ground and surface water.

As a policy, all JSIF sanitation projects must at minimum equipped with secondary or tertiary level sewage treatment system to minimize nutrient and microbial pollution of ground and surface water. Farmers at agricultural projects

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are provided the relevant training in pesticide and fertilizer management. Proper facilities to store pesticides and fertilizers are usually constructed at each site. Farmers are provided the necessary equipment. Charcoal pits are installed at project sites to help purify discharged pesticide rinsate. Sediments and waste are usually contained onsite to prevent migration into water bodies.

Monitoring and Supervision – The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The supervisor and technical officer must ensure that water pollution is minimized. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring reports which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Project monitoring will be carried out in accordance with *JSIF Monitoring and Evaluation Procedure* EMS-I-PR-ME-24072008. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices.

Post Implementation

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Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008. The maintenance committee is responsible for the maintenance of the project to ensure sustainability.

Post-Project Monitoring

Post- Project Monitoring will be conducted by the maintenance committee to assess the effectiveness of the project and to take corrective actions if necessary. As it relates to the prevention of SW and GW contamination the maintenance committee, check to ensure that sanitation facilities are functioning normally and are not posing an environmental threat. There is also a six months defects liability period whereby the project is monitored for functionality. Any defects associated with faulty construction must be corrected at the expense of the contractor.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with specifications in the Works Contract Document. The supervisor will also be required to perform in accordance with Supervision Contract.

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per JSIF, Monitoring and Evaluation Procedure, EMS-I-PR-ME-24072008.

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Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects and ensures that pollution control measures are included in the BQ.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded

The Functional Manager must sign off on all applications to regulatory agencies.

6.0 RECORDS

Environmental Screening Sheet **EMS-I-REC-ESS-"ddmmyyyy"** – Completed by Technical Officer/Formulator

Environmental Management Plan **EMS-I-REC-EMP-"ddmmyyyy"** – Generated by Fund Manager

Environmental Monitoring Sheet EMS-I-REC-EMNS-"ddmmyyyy"

- Completed by Supervisors

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Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"-Completed by Convener / Chair of meeting

Permits and Licenses JSIF-E-"ORG"-APLS-"ddmmyyy" – Obtained from External agency

Certificates of Analysis JSIF-E-"ORG"-COA-"ddmmyyyy"

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years of the life of the project whichever is longer.

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1.0 PURPOSE

This procedure outlines how the Jamaica Social Investment Fund (JSIF) or those working on its behalf will manage noise generated as a result of project activities. A life cycle approach will be taken in the management of noise at project sites as indicated in **Section 4** of this procedure.

2.0 SCOPE

This procedure relates to the management of noise generated from excavation, road works, demolition, drilling, blasting, and other construction activities carried out on JSIF project sites.

3.0 REFERENCE DOCUMENTS

Specifications and Requirements Document PROC-I-SPECSGEN-10051999

Identification of Environmental Aspects EMS-I-PR-ASPTS-06062007

Natural Resources Conservation Act JSIF-E-NEPA-LEGAL-24072008

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

Bills of Quantities (BQ) Bill of Quantities JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

All sub-projects are screened on Fund Manager by the Technical Officer or Formulator (in the case of Emergency Projects) during the appraisal stage for potential environmental impacts. Projects involving excavation, demolition, drilling, blasting and road works will be specially noted and the generation of noise recorded on the Environmental Screening Sheet as being a potential impact

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of the project activities. The noise management approach will be dictated by National Laws including the Town and Country Planning Act as well as the requirements of our international funding partners. The objective of the noise management approach is to minimize or prevent human and environmental health impacts.

When environmental screening is completed on Fund Manager, Environmental Screening Sheets, Management Plans and Monitoring Sheets are generated for integration in appraisal reports, technical reviews, bid/tender documents and contracts for contractors and formulators. These appraisal reports are generated for presentation and subsequent internal approval.

Environmental Screening Sheet and Management Plan form internal and external records.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator's (Design Consultant) and contractor's contracts. If the issues highlighted such as noise can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Formulation

This is the design and cost phase of the project cycle, where methods for noise management are applied, costs determined and included in the Bill of Quantities (BQ). At this stage the formulator makes a more thorough visit and assessment of the site in order to produce complete designs and costs. The consultant will make an evaluation with regards to the level of noise that will be generated

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considering the project activities and the potential impact on the environment and human health. The consultant will also make a determination as to the most appropriate or feasible mitigation measure(s) needed to ameliorate or negate any potential impact. The consultant will cost the project to include the recommended noise mitigation measure(s).

For projects that require NEPA permits including the integrated infrastructure projects, noise monitoring may be required as a standard condition of permit. An external environmental consultant will be contracted to perform the required site assessment using properly calibrated equipment.

Technical Review

The drawings and Bill of Quantities (BQ) are checked for completeness at this stage of the project cycle. The BQ must be checked to ensure that appropriate noise management measures have been included. Where this is not included, the Formulator is instructed to revise the BQ to include the appropriate sum for the proposed mitigation. The Special Conditions under the Preliminaries section of the BQ cover costs associated with environmental mitigation measures which include noise management measures however. It is the responsibility of the project's Technical Officer and the Technical Review Committee to ensure that adequate due diligence is performed to ensure that the consultant mitigation plans and costing are appropriate.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at

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the project site. The contract documents also include the detailed environmental management plan outlining how to manage noise at the project site.

Construction – As it relates to noise issues as a result of project activities, Contractors must perform works as per Specifications and Requirements Document - PROC-I-SPECSGEN-10051999; Environmental, Health and Safety Guidelines, while Supervisors will ensure that these guidelines are met. An environmental management plan (EMP) is included in all contractors' contract documents which outlines in details how works are to be conducted and the appropriate mitigation measures for the potential environmental impacts associated with project activities, including noise.

The generation of noise must be managed within safe limits by the contractor under the supervision of the consultant and Technical Officer to prevent environmental and human health impacts. The contractor is required to provide workers with ear plugs and other ear protection equipment for use during the noisy activities that are considered unsafe for human health. The contractor is also required to ensure that all machinery and equipment are adequately serviced to aid in the control of noise. Heavy equipment and machinery must be turned off when not in use. Only authorized personnel should be allowed around noisy machines and they must be adequately dressed. The beneficiary community must be informed of project activity and potential noise impact during project information meeting (PIM). It is recommended that works be confined to between 8:00 a.m. and 6:00 p.m. each day, however, where this is not possible due to other factors the community must be informed in advance.

The contractor is considered to be in breach of compliance requirements if workers are not wearing adequate protective gears when noise level is above regulatory limits; if the community is not notified of work activities and if the noise emerge as a result of contractor's negligence including faulty equipment.

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Monitoring and Supervision – The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The supervisor and technical officer must ensure that noise remain under control to minimize environmental impacts and human health effects. The JSIF Technical Officer is also responsible for monitoring and supervision of the consultants and contractors. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Project monitoring will be carried out in accordance with *JSIF Monitoring and Evaluation Procedure* EMS-I-PR-ME-24072008 until the project is completed where the risk of noise no longer exist. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008. The maintenance committee is

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responsible for the maintenance of the project to ensure sustainability. The JSIF's environmental practices and procedures are transferred to the maintenance committees to be used in the execution of their work.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with construction and engineering standards and complete reports as required. See JSIF, Specifications and Requirements Document - PROC-I-SPECSGEN-10051999 and produces Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects and ensures that sold waste management measures are included in the BQ.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded.

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6.0 RECORDS

Environmental Screening Sheets **EMS-I-REC-ESS-"ddmmyyyy"**– Completed by Technical Officer / Formulator

Environmental Management Plan Environmental Management Plans EMS-I-REC-EMP-"ddmmyyyy"- Generated by Fund Manager

Environmental Monitoring Sheets Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy" – Completed by Supervisors

Drawings / Designs Drawings / Designs - **JSIF-E-DWG-"PROJECTNAME"-**"ddmmyyyy" – Produced by Formulator

Bill of Quantities - **JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"**- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"

– Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyy" – Produced by Relevant Agency

Site Visit Reports JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications – Produced by Environmental Officer JSIF-I-"ORG"-APPS-"ddmmyyyy"

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Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

– Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years or the life of the project, whichever is longer.

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1.0 PURPOSE

This procedure outlines how the Jamaica Social Investment Fund (JSIF) or those working on its behalf will manage solid waste generated as a result of project activities with a view to mitigate environmental impacts. A life cycle approach will be taken in the management of waste generated by JSIF as indicated in **Section 4** of this procedure.

2.0 SCOPE

This procedure relates to the management of solid waste generated from excavation, road scarification and rehabilitation, demolition, agricultural operations, and other construction activities carried out at all of JSIF's applicable project sites.

3.0 REFERENCE DOCUMENTS

Specifications and Requirements Document PROC-I-SPECSGEN-10051999

Identification of Environmental Aspects EMS-I-PR-ASPTS-06062007

National Solid Waste Management Act JSIF-E-NSWMA-LEGAL-17082014

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

Bills of Quantities (BQ) Bill of Quantities JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

All projects are screened during the appraisal stage for potential environmental impacts on Fund Manager by the Technical Officer or Formulator (in the case of

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Emergency Projects). Projects involving excavation, demolition, agricultural activities, and road works will be specially noted with respect to solid waste management. The generation and disposal of solid waste is a typical activity at JSIF's project site and therefore is invariably recorded on the Environmental Screening Sheet for construction project as being a potential issue of concern. Fund Manager automatically generates an EMP once solid waste is checked as a potential issue onsite. The solid waste management approach will be dictated by the type and quantity of waste generated by the project and more so by National Laws including the National Solid Waste Management Act and the Natural Resources Conservation Act as well as requirements of our international funding partners. The objective of any approach taken is to minimize or prevent human health impact and environmental degradation.

When environmental screening is completed on Fund Manager, Environmental Screening Sheets, Management Plans and Monitoring Sheets are generated for integration in the appraisal reports, technical reviews, bid/tender documents and contracts for contractors and formulators. These appraisal reports are generated for presentation and subsequent internal approval.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator's (Design Consultant) and contractor's contracts. If the environmental issues highlighted including improper solid waste management can be mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

Formulation

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This is the design and cost phase of the project cycle, where best solid waste management practices are applied, costs determined and included in the Bill of Quantities (BQ).

At this stage the formulator makes a more thorough visit and assessment of the site in order to produce complete designs and costs. The consultant will make an evaluation with regards to the quantity and type of waste that will be generated and the potential impact on the environment and human health. The consultant will also make a determination as to the most appropriate or feasible mitigation measure(s) needed to ameliorate or negate any potential impact. The consultant will formulate and cost the project to include the recommended mitigation measure(s).

Technical Review

The drawings and Bill of Quantities (BQ) are checked for completeness at this stage of the project cycle. The BQ must be further checked to ensure that appropriate solid waste management measures have been included. Where this is not included, the Formulator is required to revise and resubmit the BQ to include the appropriate sum for the proposed mitigation. The Special Conditions under the Preliminaries section of the BQ cover costs associated with environmental mitigation measures which include solid waste management, however, it is the responsibility of the project's Technical Officer and the Technical Review Committee to ensure that adequate due diligence is performed to ensure that the consultant mitigation plans and costing are appropriate.

Implementation

Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and

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detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage solid waste at the project site.

Construction – As it relates to noise issues as a result of project activities, Contractors must perform works as per Specifications and Requirements Document - PROC-I-SPECSGEN-10051999; Environmental, Health and Safety Guidelines, while Supervisors will ensure that these guidelines are met. An environmental management plan (EMP) which outlines in details how works are to be conducted and the appropriate mitigation measures for the potential environmental impacts associated with project activities is included in the contract documents.

All waste generated at the project site including construction and demolition debris, garbage, excavation spoils, and other construction waste must be adequately managed by the contractor under the supervision of the consultant and Technical Officer to prevent migration and subsequent environmental and health impacts. The use of silt fence or other retaining material to contain excavated spoils is a requirement of the contractors. The contractor is also required to cover excavated materials or sediments when not in use in order to minimize dispersal of fine sediments in the atmosphere and erosion to surface water.

Where large quantities of non-hazardous waste is generated onsite it can be stored for up to two weeks providing that the waste is stored in a designated location where risk of environmental impacts is negligible and the waste is properly covered and contained. Where hazardous materials such as

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contaminated spoils or asbestos are generated onsite, the waste must be treated in accordance with local regulatory requirements for example, NEPA asbestos management guidelines. Hazardous waste must be removed from the site immediately and disposed of at a disposal facility approved by the National Solid Waste Management Authority (NSWMA) and NEPA. The contractor is required to provide suitable receptacles for temporary storage and collection of personal waste (e.g. lunch boxes) and to ensure that it is disposed of in an environmentally friendly manner. Once the site environmental assessment reflect that solid waste management will be an issue, the Contractors must be guided by the Specifications and Requirements Document PROC-I-SPECSGEN-10051999, Environmental, Health and Safety Guidelines, while Supervisors will ensure that these guidelines are met.

Monitoring and Supervision – Project monitoring will be carried out in accordance with **JSIF Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008** until the project is completed. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices.

The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The Supervisor must ensure that the Contractor carries out the recommended solid waste management measures on site to minimize environmental impacts and human health effects. The Supervisor is also responsible for ensuring that waste generated from the project site is disposed of

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appropriately by maintaining a manifest or ticketing system with the NSWMA to show chain of custody for the waste.

The JSIF Technical Officer is responsible for monitoring and supervision of the consultants and the contractor to a lesser extent. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, **Training Procedure EMS-I-PR-TRAIN-24072008.** The maintenance committee is responsible for the maintenance of the project to ensure sustainability. The JSIF's environmental practices and procedures are transferred to the maintenance committees to be used in the execution of their work.

Post-Project Monitoring

Post- Project Monitoring will be conducted by the technical officers and the site supervisor. The M&E Department may also conduct post project evaluation. As it relates to solid waste management, the team will check to ensure that all project generated solid waste is removed from the project site. During the six months defects liability period project will monitored and evaluated for defects.

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Any project generated waste identified onsite during this period shall be removed from the site by the contractor and dispose of at an approved facility.

The JSIF is also intent on managing administrative solid waste through the implementation of a number of initiatives. The JSIF intends to develop and continually improve its office solid waste management programme through the implementation of a structured plastic bottle and paper recycling initiatives; sustainable procurement practices; paperless initiatives; and potential banning of Styrofoam lunch boxes under the organization's subsidized lunch programme. The JSIF will develop a Green Procurement Policy as a first step in influencing suppliers of products to conform JSIF's EMS and to improve environmental sustainability.

The JSIF will continue to support community solid waste management recycling, composting, enforcement, capacity building, infrastructural development, waste separation at source, and waste separation at source initiatives to improve community environmental condition and public health in line with the World Bank funded SUPER 18 project being implemented in thirty (30) poor and underserved communities.

The JSIF will partner with other entities such as the National Solid waste Management Authority (NSWMA) to provide solid waste management training for select project beneficiaries and interested parties with a view to promote awareness.

5.0 RESPONSIBILITIES

Supervisor: Monitors and ensures that all works are carried in accordance with construction and engineering standards and complete reports as required. **See**JSIF, Specifications and Requirements Document - PROC-I-SPECSGEN-

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10051999 and produces Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Formulator: The Formulator is responsible for environmental screening in the case of Emergency Projects and ensures that sold waste management measures are included in the BQ.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded.

6.0 RECORDS

Environmental Screening Sheets **EMS-I-REC-ESS-"ddmmyyyy"** – Completed by Technical Officer / Formulator

Environmental Management Plan Environmental Management Plans EMS-I-REC-EMP-"ddmmyyyy"- Generated by Fund Manager

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Environmental Monitoring Sheets Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy" – Completed by Supervisors

Drawings / Designs Drawings / Designs - **JSIF-E-DWG-"PROJECTNAME"-**"ddmmyyyy" – Produced by Formulator

Bill of Quantities - **JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"**- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"

Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyy" – Produced by Relevant Agency

Site Visit Reports JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications – Produced by Environmental Officer JSIF-I-"ORG"-APPS-"ddmmyyyy"

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

- Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

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ISO 14001:2015 – 6.1.2	Prepared by: Milton Clarke – Environmental Manager Manager Managem	- General Project

None

8.0 RECORD RETENTION TIME

Seven Years or the life of the project, whichever is longer.

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ISO 14001:2015 - 6.1.2.	Prepared by: Stacey- Anne Preston – Environmental Officer	Approved by: Loy Malcolm – General Manager, Project Management	Revision No: 0

1.0 PURPOSE

This procedure outlines how the Jamaica Social Investment Fund (JSIF) or those working on its behalf will manage the disturbance of natural coastal processes which may be a result of project activities in the coastal environment. A life cycle approach will be taken in the management of potential environmental issues relating to disturbance of natural coastal processes as described in **Section 4** of the procedure.

2.0 SCOPE

This procedure relates to the implementation of all JSIF's civil projects being implemented in the coastal areas of Jamaica.

3.0 REFERENCE DOCUMENTS

Environmental Management Framework, EMS-I-DOC-EMF-18112015

Identification of Environmental Aspects EMS-I-PR-ASPTS-06062007

Beach Control Act JSIF-E-BCA-LEGAL-17112016

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

Bills of Quantities (BQ) Bill of Quantities JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

All projects are screened during the appraisal stage for potential environmental impacts on Fund Manager by the Technical Officer or Formulator (in the case of

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Emergency Projects). Projects involving coastal works, whether hard or soft engineering, will be specially noted.

The implementation of civil projects in coastal areas could lead to disturbance of coastal processes which invariably will result in some form of environmental impact. These potential impacts will be recorded on the Environmental Screening Sheet. When environmental screening is completed on Fund Manager, Environmental Screening Sheets, Management Plans and Monitoring Sheets are generated for integration in the appraisal reports, technical reviews, bid/tender documents and contracts for contractors and formulators. These appraisal reports are generated for presentation and subsequent internal approval.

The objective of any approach taken is to minimize or prevent impact on the natural environmental and its associated processes.

The coastal management approach will be dictated by the type of coastal works to be implemented by the project and national laws including the Natural Resources Conservation Act and the Beach Control Act, as well as requirements of our international funding partners.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator's (Design Consultant) and contractor's contracts. If the environmental issues highlighted including disturbance of natural coastal processes can be adequately mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

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Formulation

This is the design and cost phase of the project cycle, where methods for coastal zone management are applied, costs determined and included in the Bill of Quantities (BQ).

At this stage the formulator make a visit and conduct a more thorough site assessment in order to produce complete designs and costs. The consultant will make an evaluation with regards to the potential impact of the project on the natural coastal processes. The consultant will also make a determination as to the most appropriate or feasible mitigation measure(s) needed to ameliorate or negate any potential impact. The consultant will formulate and cost the project to include the recommended mitigation measure(s). Works in coastal areas typically require a permit or license from NEPA. It is the responsibility of the formulator to obtain the permit on the behalf of the JSIF.

Technical Review

The drawings and Bill of Quantities (BQ) are checked for completeness at this stage of the project cycle. The BQ must be further checked to ensure that appropriate coastal management measures have been included. Where this is not included, the Formulator is instructed to revise the BQ to include the appropriate sum for the proposed mitigation. The Special Conditions under the Preliminaries section of the BQ cover costs associated with environmental mitigation measures which include coastal management measures however, it is the responsibility of the project's Technical Officer and the Technical Review Committee to ensure that adequate due diligence is performed to ensure that the consultant mitigation plans and costing are appropriate and that the necessary permits are obtained.

Implementation

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Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage the project to reduce environmental impact at the site.

As it relates to implementation of civil projects in the coastal zone, Contractors must perform works as per NEPA permit or license as well as JSIF's Specifications and Requirements Document - **PROC-I-SPECSGEN-10051999**; **Environmental, Health and Safety Guidelines, while Supervisors** will ensure that these guidelines are met. An environmental management plan (EMP) which outlines in details how works are to be conducted and the appropriate mitigation measures for the potential environmental impacts associated with project activities is included in the contract documents.

All coastal works at the project site must be adequately managed by the contractor under the supervision of the consultant and Technical Officer to prevent the disturbance of natural coastal processes. All coastal works must be in accordance with the Natural Resources Conservation Authority's or NEPA Guidelines for the Construction and Maintenance of Coastal Protection Structures.

Before the commencement of the works, the contractor must erect continuous sediment control devices (e.g. silt curtains) around the work area to restrict and control the movement of sediment generated by the works into the adjacent

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marine environment. The use of sediment control mechanisms is a requirement, as is the monitoring and maintenance of same. The sediment control devices deployed must remain in place until turbidity values within and around the works area fall below 15 NTUs or ambient conditions outside the cordoned off area, whichever is lower. In the event that the sediment control devices are damaged, destroyed or otherwise rendered ineffective (e.g. by waves, currents and/or other meteorological events), the works shall be suspended until the disturbance has passed and the necessary repairs are carried out. Prior to hurricanes or tropical storms work must be halted and turbidity values allowed to fall below 15 NTUs or ambient conditions. Sediment control devices shall then be removed and the work area adequately secured to prevent any undue runoff into the adjacent marine environment.

The contractor shall ensure that there is no blasting or use of explosives in the works area. To reduce the amount of fine-grained materials placed into the marine environment directly or indirectly, and the possibility of foreign organisms being introduced, the contractor is also required to wash and screen all materials to be used in construction/maintenance works prior to it being introduced into the marine environment. Areas designated for washing of the material must be approved by the Consultant prior to commencement of the works.

The contractor must ensure that all sessile or slow moving organisms, including but not limited to corals, seagrass and associated invertebrates (urchins, star fish, sea cucumber, etc.) found within the footprint of, or in proximity to the works area, are relocated to an undisturbed area on the floor of the sea immediately adjoining the works area and outside the zone of influence of the works, and that

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a turbidity barrier is in place around the construction area prior to commencement of works.

All equipment, left over materials, equipment parts and any other material incidental to the works must be dismantled and removed from the floor of the sea and from shore based facilities at the completion of the activity and in any event, within seven (7) days of the completion of the maintenance activities.

Wherever the Environmental Management Plans reflect that coastal management will be a problem; Contractors must be guided by the environmental management plan, Environmental, Health and Safety Guidelines, while Supervisors will ensure that these guidelines are met.

Monitoring and Supervision – Project monitoring will be carried out in accordance with **JSIF Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008** until the project is completed. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices.

The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The Supervisor and Technical Officer must ensure that the Contractor carries out the recommended coastal management measures on site and that where coastal management is inappropriate, it should be documented in the Environmental Monitoring sheet in Fund Manager and in accordance with the Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

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The Supervisor must ensure that the Contractor carries out the recommended solid waste management measures on site to minimize coastal pollution. The Supervisor is also responsible for ensuring that waste generated at the project site is disposed of appropriately by maintaining a manifest or ticketing system with the NSWMA to show chain of custody for the waste.

The JSIF Technical Officer is responsible for monitoring and supervision of the consultants and the contractor to a lesser extent. Both the consultants and technical officers are required to produce site monitoring report which are documented in the project file or in Fund Manager the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with **JSIF**, **Training Procedure EMS-I-PR-TRAIN-24072008.** The maintenance committee is responsible for the maintenance of the project to ensure sustainability. The JSIF's environmental practices and procedures are transferred to the maintenance committees to be used in the execution of their work.

Post-Project Monitoring

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Post- Project Monitoring will be conducted by the technical officers and the site supervisor. The M&E Department may also conduct post project evaluation. As it relates to solid waste management, the team will check to ensure that all project generated solid waste is removed from the project site. During the six months defects liability period project will monitored and evaluated for defects. Any project generated waste or unnatural material identified onsite during this period shall be removed by the contractor and dispose of at an approved facility.

5.0 RESPONSIBILITIES

External Supervisor/Consultant: Formulates project design according to required standards and monitors project implementation to ensure that all works are carried in accordance with construction, engineering and EMS standards and complete reports as required.

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended. Ensures that the required permits and approvals are obtained by the consultant.

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Reviews bill of quantities for adequacy to implement the project including environmental mitigation.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded.

6.0 RECORDS

Environmental Screening Sheets **EMS-I-REC-ESS-"ddmmyyyy"** – Completed by Technical Officer / Formulator

Environmental Management Plan Environmental Management Plans **EMS-I-REC-EMP-"ddmmyyyy"-** Generated by Fund Manager

Environmental Monitoring Sheets Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy" – Completed by Supervisors

Drawings / Designs Drawings / Designs - **JSIF-E-DWG-"PROJECTNAME"- "ddmmyyyy"**– Produced by Formulator

Bill of Quantities - **JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"**- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"

- Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyy" – Produced by Relevant Agency

Site Visit Reports JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"- Completed by Technical Officer

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Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications – Produced by Environmental Officer JSIF-I-"ORG"-APPS-"ddmmyyyy"

Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

– Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years or the life of the project, whichever is longer.

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1.0 PURPOSE

This procedure outlines how the Jamaica Social Investment Fund (JSIF) or those working on its behalf will manage the introduction of foreign material and/or organisms into sensitive marine environments, which may be a result of project activities. A life cycle approach will be adopted in the management of this aspect as indicated in **Section 4** of the procedure.

2.0 SCOPE

This procedure relates to the management of all JSIF's coastal projects to prevent the introduction of foreign material and/or organisms into sensitive marine environments.

3.0 REFERENCE DOCUMENTS

Environmental Management Framework, EMS-I-DOC-EMF-18112015

Identification of Environmental Aspects EMS-I-PR-ASPTS-06062007

Beach Control Act JSIF-E-BCA-LEGAL-17112016

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

Bills of Quantities (BQ) Bill of Quantities JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"

4.0 REQUIREMENTS

Site Assessment and Environmental Screening

All projects are screened during the appraisal stage for potential environmental impacts on Fund Manager by the Technical Officer or Formulator (in the case of

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Emergency Projects). Projects involving coastal works, whether hard or soft engineering, will be specially noted.

The implementation of civil projects in coastal areas could lead to the introduction of unwanted species which could impact marine biological activities and chemical processes. These potential impacts will be recorded on the Environmental Screening Sheet. When environmental screening is completed on Fund Manager, Environmental Screening Sheets, Management Plans and Monitoring Sheets are generated for integration in the appraisal reports, technical reviews, bid/tender documents and contracts for contractors and formulators. These appraisal reports are generated for presentation and subsequent internal approval.

The objective of any approach taken is to minimize or prevent impact on the natural environmental and its associated processes.

The coastal management approach will be dictated by the type of coastal works to be implemented by the project and national laws including the Natural Resources Conservation Act and the Beach Control Act, as well as requirements of our international funding partners.

Procurement

The Environmental Screening Sheet, monitoring sheets and Environmental Management Plan (EMP) generated by Fund Manager are submitted to Procurement for inclusion in bid documents, as well as for inclusion in the Formulator's (Design Consultant) and contractor's contracts. If the environmental issues highlighted including disturbance of natural coastal processes can be adequately mitigated, the project then moves on to be evaluated for feasibility for JSIF funding.

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Formulation

This is the design and cost phase of the project cycle, where methods for marine management are applied, costs determined and included in the Bill of Quantities (BQ).

At this stage the formulator makes a more thorough visit and assessment of the site in order to produce complete designs and costs. The consultant will make an evaluation with regards to the potential impact if foreign material and/or organisms are introduced into sensitive marine environments. The consultant will also make a determination as to the most appropriate or feasible mitigation measure(s) needed to ameliorate or negate any potential impact. The consultant will formulate and cost the project to include the recommended mitigation measure(s) and apply for the necessary permits or license on the behalf of JSIF.

Technical Review

The drawings and Bill of Quantities (BQ) are checked for completeness at this stage of the project cycle. The BQ must be further checked to ensure that appropriate coastal management measures have been included. Where this is not included, the Formulator is instructed to revise the BQ to include the appropriate sum for the proposed mitigation. The Special Conditions under the Preliminaries section of the BQ cover costs associated with environmental mitigation measures which include marine management measures however, it is the responsibility of the project's Technical Officer and the Technical Review Committee to ensure that adequate due diligence is performed to ensure that the consultant mitigation plans and costing are appropriate and the necessary license obtained.

Implementation

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Procurement of Contractor – A contractor is procured through the bidding process to implement the project. The project design, bill of quantities and detailed generic environmental management plan are included in the contractor's bidding documents. The preliminary section of the bill of quantities outlined the items required to provide environmental and safety mitigations at the project site. The contract documents also include the detailed environmental management plan outlining how to manage the project to reduce environmental impact at the site.

Implementation must be carried out by the contractor in accordance with construction and engineering standards. Each contractor is provided a generic environmental management plan (EMP) which outlines in details how works are to be conducted and the appropriate mitigation measures for the potential environmental impacts associated with project activities.

Construction – All coastal works at the project site must be adequately managed by the contractor under the supervision of the consultant and Technical Officer to prevent the introduction of foreign material and/or organisms into the marine environment. All coastal works must be in accordance with the Natural Resources Conservation Authority's Guidelines for the Construction and Maintenance of Coastal Protection Structures. The consultant must ensure that the contractor is implementing the project in congruence with the conditions of the NEPA license.

In order to minimize the possibility for entry of foreign materials and organisms into the marine environment directly or indirectly, the contractor is also required to wash and screen all materials to be used in construction/maintenance works, for example boulders and aggregates, prior to use. Areas designated for washing

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of the material must be approved by the Consultant prior to commencement of the works.

The contractor must also ensure that there is no discharge of waste, including but not limited to sullage waste, solid waste, oil, oily waste, trade or sewage effluent, chemicals or any poisonous noxious or polluting matter into the water or on the ground as a result of the construction or maintenance activities. The contractor should provide suitable receptacles for collecting the waste and ensure that it is disposed of in an environmentally friendly manner and at a disposal facility approved by the National Solid Waste Management Authority (NSWMA). The contractor must immediately notify the National Environment & Planning Agency (NEPA) and JSIF of any spillage of, or accident with, any potentially hazardous or environmentally damaging material.

If necessary, a marine biologist should be contracted to conduct observation and possible detailed assessment to determine if the biology of the coastal area is impacted by the project. The system should be assessed for exotic species, possible change in the food web, fish and wildlife kill and species migration inter alia. All equipment, left over materials, equipment parts and any other material incidental to the works must be dismantled and removed from the floor of the sea and from shore based facilities at the completion of the activity and in any event, within seven (7) days of the completion of the works.

Wherever the Environmental Management Plans reflect that coastal management will be a problem; Contractors must be guided by the **environmental management plan**, **Environmental**, **Health and Safety Guidelines**, **while Supervisors** will ensure that these guidelines are met.

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Monitoring and Supervision – Project monitoring will be carried out in accordance with **JSIF Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008** until the project is completed. Projects are monitored against *inter alia*, approved designs, environmental management, good construction and engineering practices.

The JSIF established a multi-layered monitoring and supervision scheme with a view to maintain environmental compliance. The consultants are required to supervise the project during implementation to ensure that the contractor execute the project in accordance with the design, EMP and any permit or other compliance obligations. The Supervisor must ensure that the Contractor carries out the recommended marine management measures on site and that where marine management is inappropriate, it should be documented in the Environmental Monitoring sheet in Fund Manager and in accordance with the Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

The Supervisor must ensure that the Contractor carries out the recommended mitigation measures on site to minimize environmental impacts and breaches of conditions of the license. The Supervisor is also responsible for ensuring that any waste generated from the project site is disposed of appropriately by maintaining a manifest or ticketing system with the NSWMA to show chain of custody for the waste. As indicated earlier, a biologist or consultant with the required expertise may also be required to perform occasional monitoring.

The JSIF Technical Officer is responsible for monitoring and supervision of the consultants and the contractor to a lesser extent. Both the consultants and technical officers are required to produce site monitoring report which are

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documented in the project file or in Fund Manager, the JSIF's critical project management software.

The technical officers' environmental monitoring report is used to track the contractors' environmental management conformance which can be used to make management decisions. The JSIF's internal audit team, the environmental officer, and the EMS internal audit team also conduct random monitoring exercises and prepare project performance reports.

Post Implementation

Training and Notification - Maintenance training shall be delivered to the community maintenance groups or designated persons in accordance with *JSIF*, *Training Procedure* EMS-I-PR-TRAIN-24072008. The maintenance committee is responsible for the maintenance of the project to ensure sustainability. The JSIF's environmental practices and procedures are transferred to the maintenance committees to be used in the execution of their work.

Post-Project Monitoring

Post- Project Monitoring will be conducted by the technical officers and the site supervisor. The M&E Department may also conduct post project evaluation. As it relates to solid waste management, the team will check to ensure that all project generated solid waste is removed from the project site. During the six months defects liability period project will be monitored and evaluated for defects. Any project generated waste or foreign material shall be removed from the site by the contractor.

5.0 RESPONSIBILITIES

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Top Management: Ensure that resources are available for the implementation of the project and by extension supporting the EMS with a view to achieving performance objectives and targets.

External Supervisor: Formulates project designs in accordance with required standards and monitors project during implementation to ensure that all works are carried in accordance with construction, engineering and EMS standards and complete reports as required.

Technical Officer: The Technical Officer is responsible for site assessment and Environmental Screening at the Appraisal Stage; he/she is also responsible for assessing and recording Supervision Reports. In instances where the Technical Officer visits a site he/she is required to produce a Site visit report as per Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008.

Procurement Coordinator: Ensures that the Environmental Sheet, Management Plans and Monitoring Sheets are included in bid / tender documents and contracts.

Technical Review Committee: This group has the responsibility for ensuring that designs are reviewed for completeness and adjusted as recommended.

Environmental Officer: The EO ensures that the environmental screening process is completed. The EO also ensures that licenses and approvals are obtained, and project monitoring conducted and recorded.

6.0 RECORDS

Environmental Screening Sheets **EMS-I-REC-ESS-"ddmmyyyy"**– Completed by Technical Officer / Formulator

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ISO 14001:2015 – 6.1.2.	Prepared by: Stacey- Anne Preston – Environmental Officer	Approved by: Loy Malcolm – General Manager, Project Management	Revision No: 0

Environmental Management Plan **EMS-I-REC-EMP-"ddmmyyyy"-** Generated by Fund Manager

Environmental Management Framework, EMS-I-DOC-EMF-18112015

Environmental Monitoring Sheets Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy" – Completed by Supervisors

Drawings / Designs Drawings / Designs - **JSIF-E-DWG-"PROJECTNAME"-**"ddmmyyyy" – Produced by Formulator

Bill of Quantities - JSIF-E-BQ-"PROJECTNAME"-"ddmmyyyy"- Produced by Formulator

Technical Review Checklist "DEPT"-I-TRC-"PROJECTNAME"-"ddmmyyyy"

– Produced by Convener / Chair

Approvals and Permits JSIF-E-"ORG"-APLS-"ddmmyyy" – Produced by Relevant Agency

Site Visit Reports JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"- Completed by Technical Officer

Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME"-"ddmmyyyy"-Completed by JSIF Officers (Technical & Social)

Supervision Reports "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"-Produced by Supervisor

Authorized government agency Applications – Produced by Environmental Officer JSIF-I-"ORG"-APPS-"ddmmyyyy"

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Contract Documents PROC-I-CON-"PROJECTNAME"-"ddmmyyy"

– Produced by Procurement Coordinator

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years or the life of the project, whichever is longer.

1.0 PURPOSE

The aim of this procedure is to ensure that all applicable legal and other requirements are identified, assessed, operationalized and communicated to all stakeholders. The procedure also ensures that relevant staff have access to these laws and requirements, and that they are current.

2.0 SCOPE

The procedure refers to all of JSIF's operations including work being carried out by contractors and communities on JSIF's behalf that impact the environment and are covered by legal, regulatory and other conditions.

REFERENCE DOCUMENTS

- Legal, Regulatory and other Requirements Sheet (LRRS) EMS-I-RD-COMPOBLI-ddmmyyyy
- Aspects Sheet EMS-I-REC-IDASPTS-06062007
- JSIF's Identification of Environmental Aspects Procedure **EMS-I-PR-IDASPTS**-06062007
- JSIF's Training Procedure EMS-I-PR-TRAIN-24072008
- JSIF's Internal Audit Procedure EMS-I-PR-IA-24072008
- JSIF's Internal and External Communication Procedure EMS-I-PR-COMM-24072008

3.0 REQUIREMENTS

The JSIF will conduct an annual review to determine if there are new legislations, policies and guidance of relevance to the EMS or the organization's activities and services. The Legal Officer receives quarterly updates on the Jamaican Laws from Ziplaw which is used to identify changes or new requirements of relevance to the JSIF's environmental aspects.

The outcome of this compliance obligation review is documented as part of the Compliance Evaluation document (EMS-I-REC-COMPLIANCEEVAL-ddmmyyyy. The document will be circulated to all staff annually to ensure information is

available to guide the development of best practice and to raise awareness of changes to the compliance obligations of the organization.

The Legal Officer will advise the Systems Operation and Environment Manager of any changes in the law, policies or legislation that is relevant to the environmental aspects or any applicability to the EMS for which actions are needed. The Systems Operation and Environment Manager or the Environmental Officer will make the necessary updates to the EMS procedures manual or other applicable documents. The changes will be communicated to the staff by the Environmental Officer.

Identifying Compliance Obligations

The first step in the process is the identification of all 'aspects' of the organization that may be governed by regulation or commitment. This process is an extension of JSIF EMS, Identification of Environmental Aspects Procedure EMS-I-PR-ASPTS-06062007, and builds on the Aspects Sheet. The needs and expectations of interested parties including regulators, funding partners (donors), contractors, consultants, project beneficiaries and political representatives *inter alia* will be identified and those that are compliance obligations will be determined. These compliance obligations including relevant Laws and Regulations will be assigned to the applicable activities or aspects as listed in the Aspects Sheet. Included in these compliance obligations are requirements coming from Funding Agreements as well as other applicable International Treaties and Agreements to which Jamaica may or may not be a Party /Signatory.

The continued development of the Aspects Sheet to include the compliance obligations will be carried out by both the Legal Officer (LO) and environmental Officer. The Aspects Sheet will be reviewed as per JSIF, Identification of Environmental Aspects Procedure EMS-I-PR-ASPTS-06062007. The review of the compliance obligations will be carried out annually by the LO and this will be done after changes are made to the Aspects sheet or if there are new Laws and/or Regulations that may impact the EMS.

Extracting applicable sections

- The LO will assesses compliance obligations in conjunction with the Aspects Sheet and extract and reference the applicable sections, on the compliance obligations document EMS-I-REC-COMPOBLI-ddmmyyyy.

Making the requirements available and up to date

- The Compliance Obligation and Aspects Sheet will be made available to all staff as part of the EMS documents. The staff will have access to other legal documents through the LO.
- JSIF will subscribe to or make arrangements to have access to the media which produces updated versions of Jamaican Laws.
- The LO will review the Compliance Obligations annually and within six weeks of any changes as triggered by either the review of the documents or any other new information.
- The Communications Manager will ensure that relevant staff is notified of changes.

Incorporating Laws and Regulations into Project Documents as Required

- The EO must ensure that as per JSIF, Training Procedure, EMS-I-PR-TRAIN-24072008, contractors working on JSIF's behalf are fully aware of the legal and regulatory requirements associated with each project.
- The LO in conjunction with the Procurement Officer will ensure that the relevant requirements that would now pass to the contractor are included in the bidding and contract documents.
- Top Management must ensure that applicable penalties as designated by JSIF's contracts are applied when the contractor fails to comply with requirements as set out.

4.0 RESPONSIBILITIES

Legal Officer:

- Ensures that copies of legal and other requirements covered by this procedure are available, easily located and retrievable.
- Once the LO is made aware of a revised law, the EO, all staff and relevant stakeholders will be notified as per the JSIF, Communication Procedure, EMS-I-PR-COMM-24072008.
- Reviews standard contracts/agreements prepared by JSIF for completeness.

- Reviews copies of applicable Jamaican laws for revisions and replace outdated copies.

Environmental Officer:

- Reviews the changes and modify the Aspects Sheet and LRRS.
- Ensures that the LRRS is up to date and available to all staff

EMS Manager:

- Approves the document for inclusion in the EMS documentation.

5.0 RECORDS

Revised Legal, Regulatory and other Requirements Sheet (LRRS) **EMS-I-RD-LRRS-24072008** – prepared and updated by the Legal Officer

6.0 ATTACHMENTS / APPENDICES

Revised Legal, Regulatory and other Requirements Sheet (LRRS) EMS-I-RD-LRRS-24072008

7.0 RECORD RETENTION TIME

Seven years

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ISO 14001: 2015 – 6.1.4	Prepared by: Keslyn Gilbert- Stoney – Legal Officer	Approved by: Howard Malcolm Company Secretary	Revision No: 1

1.0 PURPOSE

The purpose of the procedure is to ensure that appropriate actions are taken to minimize risks associated with threats and opportunities and as well as environmental impacts. This procedure ensures that compliance obligations of the organization are identified, incorporated in the EMS procedures and evaluated for effectiveness with a view to improve environmental performance and ensure continual improvement of the EMS.

2.0 SCOPE

This procedure covers all actions to be taken to mitigate against identified risks associated with the environmental aspects, compliance obligations or other issues such as external environmental conditions and internal factors.

3.0 REFERENCE DOCUMENTS

Environmental Policy EMS-I-RD-ENVPOL-24072008

Minutes of Management Review meetings EMS-I-REC-MINS-"ddmmyyyy"

Aspects Sheet EMS-I-REC-IDASPTS-06062007

Roles and Responsibility Procedure EMS-I-PR-RES-24072008

Communication Procedure EMS-I-PR-COMM-24072008

Identification of Environmental Aspects Procedure EMS-I-PR-IDASPTS-06062007

JSIF, Operations Manual JSIF-I-MAN-OPSMAN-28032006

Legal and other Requirement Procedure EMS-I-PR-LEGAL-24072008

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4.0 REQUIREMENTS

Taking Actions to Mitigate Risks

The JSIF's identified significant environmental aspects as well as risks/threats and opportunities and compliance obligations (see EMS-I-REC-IDASPTS-ddmmyyyy), EMS-I-REC-T&O-ddmmyyyy and EMS-I-REC-LRRS-ddmmyyyy) will be addressed through deliberately planned actions. The prioritize actions to manage and mitigate the JSIF's aspects are set out in the Environmental Management Plan (EMP) which is subsumed in the environmental management framework. The JSIF's environmental aspects are reviewed annually and whenever there is a new project portfolio coming on stream. Where there are new aspects or potential impacts, plans and procedures are developed and incorporated in the JSIF's EMS procedures manual detailing specific actions to manage the aspect(s) and mitigate against impacts. Any associated Laws with respect to the aspects are also noted and incorporated in the LRRS as compliance obligations.

The Legal and Governance Manager will review the Laws applicable to the EMS and notify Top Management and the EMS team of any new legal requirements including pre-implementation activities such as acquisition of permits and any guidelines to follow during and after implementation. These will be incorporated in the EMS procedures manual under EMS-I-PR-LRRS-ddmmyyyy.

As indicated earlier, the EMS Team will conduct annual assessment of risks associated with threats and opportunities. Interim assessments may also be conducted if there are internal and/or external changes that necessitate a review. During this process, the Team will develop actions to mitigate or manage these risks to bring about positive outcomes. This include determining the resource needs and submitting the Threat and Opportunity Sheet EMS-I-REC-T&O-

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ddmmyyyy to Top Management for review and approval. Top Management will then make the necessary resources available to implement the measures necessary to meet compliance obligations, manage environmental aspects and to mitigate against risks and threats.

The necessary actions required to be taken to ensure conformance and continual improvement will be communicated to the applicable interested party and JSIF's staff. The communication of actions plans to consultants and contractors to whom projects are outsourced will be critical since they are at the forefront in managing and implementing projects on the JSIF's behalf.

The EMS team particularly the technical officers and environmental officer are key in the implementation of the actions plans. They are responsible for ensuring that the Consultants and Contractors are performing the works necessary to mitigate or control the risks associated with Threats and Opportunities related to the Significant Environmental Aspects and the Compliance Obligations of JSIF. The EMS team will work with the technical officers to implement mitigating measures tied to external environmental conditions such as natural disasters and climate change and any other issues that may present negative environmental consequences.

In order to ensure EMS compliance, environmental procedures are integrated in all aspect of the JSIF's project cycle, from project appraisal through implementation and monitoring and evaluation. By doing so, the necessary actions are addressed through a combination of processes as described in operational control, setting of objectives and plans to achieve them, emergency preparedness, and monitoring and evaluation in the EMS Procedural Manual.

The effectiveness of the action plans will be determined through a systematic monitoring system. Monitoring and evaluation will be done by the Monitoring

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and Evaluation (M&E) Department or by the EMS Team. The team will help to drive the direction of the by actively participating in the setting of SMART objectives and targets for the EMS.

In order to execute the plans associated with the EMS and achieve the objectives specific tasks will be assigned to the appropriate individuals or group to be accomplished within a defined timeline. Evaluation will be done periodically to measure accomplishments versus objectives and targets. Where objectives and targets are not being met, the contributing factor(s) will be identified, resolve and new targets set. In other words, a plan of action will be further developed for any targets that were not achieved.

The achievements of objectives and targets will be documented and coded as EMS-I-REC-ACCOMPLISHMENTS-ddmmyyyy.

Top Management will conduct annual management system review and make the necessary recommendations to ensure that identified risks and opportunities that could affect the intended outcomes of the EMS are taken into account in the organization's strategic plan.

Communications

The Environmental Aspect and the threats and opportunities sheets will be disseminated by the Communications Manager in accordance with the Communications Procedure EMS-I-PR-COMM-24072008

Review and update

Top Management shall review any plan to take action to address risks, change or factors that could influenced change in the organization.

5.0 RESPONSIBILITIES

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EMS team: Implement actions to manage risks associated with the Environmental Aspects and Compliance Obligations as well as external and internal conditions associated with the organization's context.

Top Management: Review and approve the planned programmes in accordance with Management System Review Procedure EMS-I-PR-MSR-24072008 and where necessary make adjustments.

Communications Manager: Disseminate the organization's planned actions to manage risks to the necessary stakeholders.

6.0 RECORDS

Aspects Sheet EMS-I-REC-IDASTS-ddmmyyyy – prepared by EMS Team

Compliance Obligation Sheet (EMS-I-REC-LRRS-ddmmyyyy)

JSIF's Context (EMS-I-REC-CONTEXT-ddmmyyyy)

Risk and Opportunities Sheet (EMS-I-REC-T&O-ddmmyyyy.

Environmental Management Framework, EMS-I-DOC-EMF-18112015

Objectives and Targets Sheet EMS-I-RD-OBP-ddmmyyyy

Communications Procedures EMS-I-PR-COMM-ddmmyyyy.

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years

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ISO 14001:2015 - 6.2	Prepared by: Celia Dillon- Assistant Project Manager Approved by: Omar Sweeney- Operations Manager	Revision No: 0

1.0 PURPOSE

The purpose of this procedure is to establish, implement and maintain JSIF's documented EMS objectives and targets and how they are updated and disseminated to relevant stakeholders.

2.0 SCOPE

This procedure covers all objectives and targets as per environmental aspects, compliance obligations and context of the organization as outlined in the Objectives and Targets Sheet EMS-I-REC-OBP-ddmmyyyy.

3.0 REFERENCE DOCUMENTS

Environmental Policy EMS-I-RD-ENVPOL-24072008

Minutes of Management Review meetings EMS-I-REC-MINS-"ddmmyyyy"

Aspects Sheet EMS-I-REC-IDASPTS-06062007

Roles and Responsibility Procedure EMS-I-PR-RES-24072008

Communication Procedure EMS-I-PR-COMM-24072008

Identification of Environmental Aspects Procedure EMS-I-PR-IDASPTS-06062007

Document Control Procedure EMS-I-PR-DOCCTRL-06062007

Monitoring and Evaluation Procedure EMS-I-PR-ME-24072008

JSIF, Operations Manual JSIF-I-MAN-OPSMAN-28032006

Legal and other Requirement Procedure EMS-I-PR-LEGAL-24072008

4.0 REQUIREMENTS

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Establishing Objectives

The EMS team will prepare the initial Objectives and Plans Sheet EMS-I-REC-OBP-ddmmyyyy taking into consideration the environmental policy, environmental aspects, risks and opportunities, the organization's context, legal and other requirements (compliance obligations) as well as other interested party needs.

The Environmental Management Plan and EMS Procedural Manual guide the desired continual improvement of the EMS and are aligned to the Environmental Policy EMS-I-DOC-POLICY-ddmmyyyy. The Environmental Management Plan is developed in response to the identified environmental aspects and associated risks and opportunities, as well as stakeholders' requirements.

The intent of the EMS is to reduce the JSIF's impact on the environment through compliance with applicable Laws and by implementing sustainable environmental management practices, procedures and technologies. Therefore, the JSIF will endeavor to set objectives and targets and plan actions to achieve the same with a view to reduce negative impacts or improve environmental performance. Consequently, the JSIF's Objectives and Plans sheet EMS-I-REC-OBP-ddmmyyyy will set out the objectives, SMART targets and actions for the following but not limited to:

- Climate change adaptation and mitigation
- Use or extraction of Potable Water
- Energy Consumption
- Pollution Prevention
- Waste Management
- Sustainable Procurement
- Coastal Protection

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- Compliance obligations
- Health and Safety

The objectives and targets shall be time-bound. Once the objectives and targets sheet is completed by the EMS Team, the document will be submitted to Top Management for review.

The M&E Department and/or the EMS Team will monitor the EMS to determine if objectives and targets are being achieved. Evaluation will be done to ascertain the level of accomplishments or success vs targets. This will be documented in a report and kept as record. There will be an assessment of targets or objectives that were not achieved and recommendations made for improvement or for achieving them in the future.

The Objectives and targets will be communicated to applicable staff and interested parties including consultants and contractors. Communications will be done through e-mail, training, website and social media, etc.

The objectives and targets will be updated annually as a standard procedure, however the document may also be revised providing the occurrence of any changes that impact the EMS. The objectives and target sheet as wells as M&E reports will be held as record or output of this process.

Planning Actions to Achieve Environmental Objectives

The environmental objectives and actions to achieve them will primarily be developed by the Systems Operation and Environment Manager with support from the EMS team. Several factors will be considered in the development of the EMS objectives and plans to achieve them. These include the environmental aspects, interested parties needs and expectations such as compliance

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obligations, the context of the organization, strategic direction of the organization, the environmental Policy and resources needs.

The Team will ensure that objectives are specific, measurable, achievable, relevant and time-bound (SMART). Each objective will have associated targets and tasks to be accomplished. This action plan will comprise of set timelines, roles and responsibilities and resources required. Specific individuals or Department within the organization will have intimate responsibility and will give account for the accomplishments of the objectives. Once the objectives and actions required to achieve them are established, the document will be submitted to Top Management for review and approval.

Subsequent to Top Management approval, the Objectives and Actions to Achieve them will be disseminated by the Communications Manager or the Systems Operation and Environment Manager in accordance with the Communications Procedure EMS-I-PR-COMM-24072008 to all the staff and applicable interested parties in order to improve awareness of the JSIF's EMS performance goals. The Objectives and Actions to Achieve them may also be posted on the intranet or on the notice board in the office for staff to view and become familiar with.

Review and update

The Systems Operation and Environment Manager and/or the EMS Team shall review and update the Objectives and Plans if and when there is a significant change to the operations of the organization, the environmental aspects, needs and expectations of interested parties, strategic direction of the organization and/or the environmental policy. The updated document will be submitted to Top Management for review and update. Top management especially during the management system review will be required to set environmental objectives and provide guidance for the direction of the EMS. All updates will be done in

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accordance with the Document and Record Control Procedure EMS-I-PR-DOCCTRL-24072008. Changes to the Objectives and Actions to achieve them will be communicated to interested parties including staff.

Tracking of Objectives and Targets

The tracking of Objectives and Targets shall be done by the Systems Operation and Environment Manager and/or the EMS team. Where necessary, the Monitoring and Evaluation Department may conduct assessment of progress towards achievement of environmental objectives. Quantitative and qualitative evaluation will be done to ascertain actual accomplishments versus planned milestones. This will be done on a semi-annual basis and the results documented as EMS-I-REC-ACCOMPLISHMENTS-ddmmyyyy.

The performance of the EMS against objectives and targets will be presented at the annual Management System Review by the Systems Operation and Environment Manager.

Communications with Stakeholders and Interested Parties

As indicated earlier, the Communication Manager and or the Systems Operation and Environment Manager will communicate changes to relevant stakeholders in accordance with Communications Procedure EMS-I-PR-COMM-24072008.

5.0 RESPONSIBILITIES

EMS team: Review the aspects sheet, compliance obligations, and the organization's context in light of new and existing activities; this team in collaboration with the EMS Manager will establish the environmental objectives and targets. The team will also determine what actions are necessary to achieve the objectives and develop plans for implementation including the resources needs, roles and responsibilities and timelines for accomplishment. The

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objectives and targets sheet will be submitted to Top Management for review and approval.

Top Management Team- shall conduct reviews of the EMS in accordance with Management System Review Procedure **EMS-I-PR-MSR-24072008** and provide the necessary resources to ensure that objectives and targets are met. Top Management shall also review, update and approve the recommended objectives and target sheet.

Communications Manager: Dissemination of the EMS objectives and targets to all stakeholders or interested parties.

6.0 RECORDS

Aspects Sheet EMS-I-REC-IDASTS-ddmmyyyy – prepared by EMS Team

Compliance Obligation Sheet (EMS-I-REC-LRRS-ddmmyyyy)

Objectives and Targets Sheet EMS-I-RD-OBTS-ddmmyyyy

EMS-I-PR-COMM-ddmmyyyy.

7.0 ATTACHMENTS / APPENDICES

Aspects Sheet EMS-I-REC-IDASTS-ddmmyyyy – prepared by EMS Team

Compliance Obligation Sheet (EMS-I-REC-LRRS-ddmmyyyy)

Objectives and Targets Sheet EMS-I-RD-OBTS-ddmmyyyy

EMS-I-PR-COMM-ddmmyyyy.

8.0 RECORD RETENTION TIME

Seven years

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ISO 14001:2015 – 7.1 Resources	Prepared by: Marcia Dacres – Administrative Officer (HR)	Approved by: G. Antonio Blake – EMS Manager	Revision No: 0

1.0 PURPOSE

The purpose of the procedure is to outline how the JSIF will determine and provide resources needed to establish, implement, maintain and continually improve the EMS.

2.0 SCOPE

This procedure covers all resources including human resources, natural resources, infrastructure, technology, and financial resources needed for the establishment, implementation, maintenance and continual improvement of the EMS.

3.0 REFERENCE DOCUMENTS

Minutes of Management Review meetings EMS-I-REC-MINS-"ddmmyyyy"

Roles and Responsibility Procedure EMS-I-PR-RES-24072008

JSIF, Operations Manual JSIF-I-MAN-OPSMAN-28032006

Legal and other Requirement Procedure EMS-I-PR-LEGAL-24072008

4.0 REQUIREMENTS

The environmental objectives, targets and programmes including the management of the environmental aspects and associated environmental risks form the basis for the resources needed to support the environmental management system. The EMS team and or the Systems Operation and Environment Manager is required to assess the resource needs of the EMS and This is an "UNCONTROLLED" DOCUMENT when PRINTED

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180 14001:2013 – 7.1	Frepared by.	Approved by.	Revision No. 0	
Resources	Marcia Dacres –	G. Antonio Blake –		
Resources	Administrative	EMS Manager		
	Officer (HR)			

communicate the same to Top Management whom will make the resources available. However, this may not always be necessary in all cases since the bill of quantities for JSIF's project include budget for environmental management.

JSIF is a project that is supported by Donor funds (grants or loans) and by funding from the Government of Jamaica. The resource required to support the EMS will be provided through a combination of these sources. Resources required to establish, implement, maintain and continually improve the EMS will be included in the budget of each sub-project as prepared by the respective project managers. The EMS team will use the proposed EMS objectives, targets and programmes as a guide to estimate the cost of resources required to support the EMS. This information will be communicated to the respective project managers for inclusion in the project budget and procurement plan where necessary.

Resources for EMS promotion are also included in the procurement or operations plans of project portfolios. The budget and procurement plan must be approved by Top Management prior to implementation of the sub-project. Cost estimates for implementation of environmental programmes must be included in the sub-projects bills of quantities under the preliminaries section.

The General Manager (GM) for technical Services in consultation with the Systems Operation and Environment Manager is required to assess human resources needs to improve the effectiveness of the EMS. The GM will then make the necessary recommendations for employment to the Human Resources

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Manager. Funds to cover salaries are included in the Project Management or administration component of each project portfolio or from the Government of Jamaica.

Top Management will ensure that adequate resources including financial and human resources are available to support the establishment, implementation, maintenance and continual improvement of the EMS.

Communications with Stakeholders and Interested Parties

In order to achieve EMS goals and objectives, the input of stakeholders and interested parties is critical. It is absolutely important to develop strong partnerships with interested parties and ensure that they are fully aware of any developments with respect to the EMS considering that their support is critical to the success of the EMS. Therefore, when necessary the Communication Manager is responsible for communicating with the relevant stakeholders to garner any support or resources that may be required on them to facilitate the success of the EMS. There are situations where the project manager or project coordinator is in the best position to communicate with the interested parties to secure the support required and is therefore allowed to do so. Communications will be done in accordance with Communications Procedure EMS-I-PR-COMM-24072008 and to seek support in achieving common goals.

5.0 RESPONSIBILITIES

EMS team: shall determine the resources required to establish, implement, maintain and continually improve the EMS using the Objectives, Targets and This is an "UNCONTROLLED" DOCUMENT when PRINTED

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Programmes as a guide. The EMS team shall ensure that environmental mitigations and adaptations measures are included in project designs and costed in the project bills of quantities.

Top Management: Review and approve resources required to support the EMS.

Project Managers: shall ensure that funding for environmental mitigation and adaptation measures are included in project budget and procurement plan. The budget shall be communicated to the General Manager for Technical Services for final approval by Top Management.

Communications Managers: communicate resources needs and support to interested parties in accordance with Communications Procedure EMS-I-PR-COMM-24072008 and to seek support in achieving common goals.

6.0 RECORDS

Objectives and Targets Sheet EMS-I-RD-OBTS-ddmmyyyy

Bills of Quantities

7.0 ATTACHMENTS / APPENDICES

Objectives and Targets Sheet EMS-I-RD-OBTS-ddmmyyyy

Bills of Quantities

8.0 RECORD RETENTION TIME

Seven years

	E HVIRO MAIL	7. Support		Document No.
	~ ~ ~			EMS-I-PR-
-	Jamaica Social Investment Fund OUR RESPONSIBILITY			RES-24072008
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		August 1, 2008	July 24,2008	
		71ugust 1, 2000	July 2 1,2000	
1	ISO 14001:2015 – 7.1	Prepared by:	Approved by:	Revision No: 0
	150 14001.2013 7.1	Trepured by:	ripproved by.	recvision 1.0. o
	Resources	Marcia Dacres –	G. Antonio Blake –	
		Administrative	EMS Manager	
		Officer (HR)		

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Competence and Awareness	Resource		

1.0 PURPOSE

The purpose of this procedure is to highlight how stakeholders (staff, community members, consultants, and contractors) competence and training needs are identified and met.

2.0 SCOPE

This training and competence procedure applies to any knowledge transfer and structured training delivered directly by JSIF or otherwise with the intent to increase stakeholders' awareness of the EMS and to improve environmental protection.

3.0 REFERENCE DOCUMENTS

ISO 14001:2015 Standard EMS-E-RD-ISOENV-ddmmyyyy

Training Matrix HR-I-PERS-TRAINMTX-24072008

Job Descriptions HR-I-JDS-"POST"-"ddmmyyyy"

4.0 REQUIREMENTS

The JSIF will employ competent persons to perform specific job functions within the organization. The staff will periodically be exposed to new information, experiences and technology that will improve their knowledge of the environment and to increase work efficiency. Additionally, the JSIF requires that all stakeholders and interested parties especially consultants and contractors are fully apprised of the EMS. Therefore external stakeholders will be trained to

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Competence and Awareness	Resource	Manager	

increase awareness and competence with respect to environmental management and preservation.

Determining Competence

Competence of persons that will impact on the performance of the environmental management system will be determined in two ways:

1. Comparing qualification with Job Description – A terms of reference (TOR) or bidding document will be prepared by JSIF for works to be outsourced to consultants or contractors. Consultants will be evaluated and selected based on the alignment of their qualification with the required competence outlined in the TOR. While Least Cost Selection is often the method—used to hire contractors, technical competence is the key predetermining factor in evaluating and selecting contractors. The evaluation records of the consultants and contractors will be documented in the Procurement Department.

JSIF's staff will be hired through an application and interview process. Potential employees are required to submit an application and/or resume for job vacancies. The HR Department will assess the application documents to determine if the applicants' qualification (educational background and/or experience) is congruent with the job roles and responsibilities. Qualified applicants will be interviewed to determine competence. Only candidates that meet and requirements and demonstrate competence will be selected.

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Competence and Awareness	Officer –Human Resource	Manager	

2. Performance Evaluation – Staff are required to complete an annual performance evaluation with their respective supervisors or manager. The Manager will seek to identify and highlight any limitations that will impact the EMS. Consultants and contractors performance is evaluated for competence after completion of each project. These documents are kept as record.

The provision of training for staff and other stakeholders is engrained in the JSIF operations.

Training Needs

There are four (4) categories of training:

- Core Training
- Designated Training
- Opportunistic Training
- Demand Training

Core training

This refers to basic foundation training that all staff must receive in the operations of the JSIF. It is conducted on an annual basis. These training types may include i) CBC ii) EMS iii) Fund Manager iv) Procurement.

It is also important for individuals or groups to which JSIF's work is outsourced are aware of the EMS, the roles they play in its effectiveness and improving environmental performance as well as the implications for non-compliance.

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Therefore, consultants and contractors as well as certain project beneficiaries will receive annual EMS awareness training in which they will become exposed to the EMS Policy, environmental aspects and impacts, objectives and targets, compliance obligations and actions to be taken to reduce environmental impacts or control environmental aspects.

Designated Training

This type of training is department specific and will be triggered in two circumstances:

- 1) HR Manager and Department Manager will identify training needs according to job description
- 2) Managers upon evaluation of staff may recognize the need for different staff members to be exposed to certain types or additional training or awareness. In the first instance, the training is predetermined and immediately follows the core training. In the second instance, the Managers, will stipulate that staff or stakeholders be trained in particular areas and be reinforced at scheduled intervals as outlined in the Training Matrix.

Opportunistic Training

The JSIF, will from time to time be invited to participate in seminars or workshops focused in a particular area of interest or relevance to the organization and its activities. This presents an opportunity for staff to be exposed to new body of knowledge. Functional Managers recommend these training opportunities to HR Manager who handles the logistics.

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Demand Training

A member of staff or stakeholder at any time during their interactions with JSIF, may identify a need for training or awareness, and make a request of the organization. This request is made to the Functional Manager who in collaboration with the HR and Finance Managers will make a decision.

Scheduling and Delivering Training

Only core and designated trainings are scheduled. This schedule is outlined in the JSIF Job Descriptions **HR-I-JDS-"POST"-"ddmmyyyy".** Core training for consultants and contractors are scheduled by the environmental team and approved by Top Management.

Evaluating Training

The HR Dept. is charged with the responsibility for assessing all training and trainers sanctioned by JSIF. Where the training is delivered internally an assessment is done, where it is done externally the trained staff member is charged with reporting Post Course Evaluation HR-I-PSCEVAL-"ddmmyyyy" and assessing the training delivered.

Documenting Training

All training delivered to JSIF staff is recorded by the HR dept. The HR Department is responsible for managing training records.

Awareness

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All staff and stakeholders to which work is outsourced such as consultants and contractors will be made aware of the JSIF's environmental policy, the significant environmental aspects and associated impacts, implications for non-conformances with the Law and other requirements as well as their own role in ensuring that the EMS is effective and delivers the intended outcome. The level of awareness required will be achieved through a number of strategies. The JSIF will conduct annual training for consultants and contractors during which the above mentioned requirements will be discussed. The consultant and contractors contract documents will include the environmental policy. Also, there will be EMS promotional activities which will expose the consultants and contractors to the performance requirements. Ancillary workers will also be provided training in this area. The environmental policy and the aspects will be posted around the JSIF's office as means of sensitization. Screensavers will also be used as a method for communicating EMS related information to staff.

5.0 RESPONSIBILITIES

Top Management has overall responsibility for providing resources to implement training and awareness activities.

Department Managers are responsible for evaluating staff and determining required training, the Manager must then pass the request for training on to the HR Manager.

The HR Manager has overall responsibility for training which include: developing the training matrix, and making all staff aware of the matrix as well as the procedure for acquiring, delivering, scheduling, evaluating and recording training activities.

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The Systems Operation and Environment Manager has overall responsibility for coordination of environmental training and awareness activities for staff and interested parties.

The Environmental Officer has overall responsibility for preparation of awareness documents and implementation of activities.

All staff must ensure that they are properly equipped to carry out their tasks as assigned. Staff may request additional training through the necessary manager if he/she felt incompetent in a particular area.

6.0 RECORDS

Training Matrix **HR-I-PERS-TRAINMTX-24072008** – adjusted by the HR Administrative Officer

Attendance Registers Attendance Registers HR-I-"COURSE"-ATTREGS-"ddmmyyy"

completed by training Facilitators

Pre Course Evaluation **HR-I-"COURSE"-PRCEVAL-"ddmmyyyy"** – completed by seminar participants

Post Course Evaluation **HR-I-"COURSE"-PSCEVAL-"ddmmyyyy"**— completed by seminar participants

Employee Training Record **HR-I-"TRAINREC"-"NAME"-"ddmmyyyy"**–modified and adjusted by HR Administrative Officer

Interested Party Training Record **EMS-I-TRAINREC-INPART-ddmmyyyy**This is an "UNCONTROLLED" DOCUMENT when PRINTED

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7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years

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1.0 PURPOSE

The purpose of this procedure is to:

- a) Document all relevant feedback from external interested parties for proper referencing.
- b) Prevent possible public relations crises from unresolved public sentiments
- c) Promote an image of JSIF which is socially responsible and responsive
- d) Reduce complaints and negative feedback from interested parties due to lack of information.
- e) Address staff concerns and comments as soon as possible
- f) Inform staff members of new and updated policies and procedures

2.0 SCOPE

The JSIF's communication procedure relates to communication with external parties and staff members. This procedure addresses how external and internal complaints and general comments, are received, documented, reviewed and responded to. It also addresses how new and updated policies and procedures are communicated to staff members.

3.0 REFERENCE DOCUMENTS

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None

4.0 REQUIREMENTS

General

The JSIF understand that strong communications with interested parties is key to the successful performance of the environmental management system. The organization will therefore establish procedures outlining the relevant information that will be communicated to interested parties, when these information will be communicated or what would trigger communication, with whom communications will take place and how the information will be communicated all with the aim of reducing risks.

The JSIF will ensure that the information communicated is accurate, timely and relevant to the performance of the environmental management system. The JSIF will make the necessary effort to respond to all relevant communications regarding the environmental management system. All communications relating the environmental management system including e-mails will be documented in a communications folder. A Complaint log will also be maintained to document complaints from interested parties and to outline the necessary mitigation measures applied to resolve the issues.

Internal Communication

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Communications	Officer –Human Resource	Manager	

- i. What will be Communicated? The JSIF staff are a primary interested party within the environmental management system. Therefore it is critical that all staff is aware of what the EMS is all about, what are their roles and responsibilities and what is to be achieved. Therefore, a number of a number of information will be communicated to staff at all levels. These include the environmental aspects and associated impacts, mitigations and compliance obligations; environmental objectives and targets; environmental policy; any significant changes to the environmental management system; date of audits; resources need; and training. Where there are sensitive information, only Top Management will be informed. Audit findings will also be communicated to staff.
- ii. When to Communicate? Communication relating to the EMS will be done internally on a continual basis. However, staff will be notified if there is a significant change to the EMS including updating of the environmental aspects; change in compliance obligations and/or environmental Policy; shift in roles and responsibilities; major non-conformity; and when there is a significant risk or opportunity that may impact the EMS. Staff will also be notified of training relevant to the EMS and also when there is an impending audit.
- iii. With Whom to Communicate? Pertinent information will be communicated to all staff. However, certain information will be confined to the EMS Team while confidential information will be communicated to Top Management. The Systems Operation and Environment Manager

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will be the point of communication for environmental matters within the JSIF. The Environmental Officer may also speak to environmental issues in the absence of the Systems Operation and Environment Manager. The GM for Technical Services will typically communicate on environmental issues on the behalf of Top Management.

iv. How to Communicate? – Internal communications is done through various media as indicated below.

Intranet - The JSIF uses its staff intranet service (Sharepoint) as one of the main points of information distribution. All units within the organisation (through designated persons) may post information relevant to staff. The Systems Operations and Environment Manager is designated to publish information related to the EMS on the Intranet and to make any necessary modification.

Staff use the intranet as their default internet homepage. The front page of the intranet contains several links to EMS related documents as well as a link to report environmental issues at project sites. Staff are encourage to access the Document Management System to obtain information on the EMS. The JSIF's Management Information System (MIS) team coordinates this service.

Outlook – A global email system which allows staff to communicate including dissemination of EMS related information has been established. The JSIF's MIS team coordinates this service.

Screen Savers – EMS information and instructions on EMS practices and procedures are occasionally communicated on all PC screen savers throughout

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the office. Information is displayed on the screensavers usually for 2 weeks but can go up to several months. The service is managed by the JSIF's MIS team.

Notice Board – The JSIF has a designated EMS notice board which is used specifically to communicate EMS related information to the staff. The service is managed by the JSIF's environmental team.

External Communication

- The Telephone Operator is the first point of contact and directs all project related calls to the Technical Services (TS) Department. The operator ensures that calls are directed to the appropriate officer with responsibility for the project.
- Where communication occurs face to face, staff must first consider whether they are capable of responding to the situation at hand. If the staff is capable of responding to the issues or queries in a fulsome and meaningful way, the officer is allowed to take the necessary decisions and document what was discussed.
- Where the staff is unable to respond adequately, the issue shall be referred to the relevant manager and/or the staff must record all appropriate details that will allow for follow up. In all other cases these are handled through our regular sub-project management systems i.e. via Consultants, Supervisors etc. Project related This is an "UNCONTROLLED" DOCUMENT when PRINTED

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correspondence are logged by the Admin Officer TS, and further uploaded to the Document Management System. The method of resolution is documented on project files.

- Where communications, (information, complaints, news etc.) that relate to JSIF are in the public domain by way of media reports, these must be directed to the Communications Unit. The only persons who may supersede the Communications Unit are General Managers who have the authority to speak with the media. The Managing Director ultimately has the final authority on who should communicate with the media on particular issue.
- i. What will be Communicated? Like JSIF's staff, external interested parties are critical to the success of the environmental management system. Therefore it is critical that interested parties are aware of what the EMS is all about, what are their roles and responsibilities in ensuring compliance and what is to be achieved. Therefore, a number of a number of information will be communicated to interested parties. These include the environmental aspects and associated impacts, context of the organization, mitigations and compliance obligations; environmental objectives and targets; environmental policy; any significant changes to the environmental management system; environmental management plan; scope of the EMS; and planned training. Audit findings may also be communicated to interested parties.

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Communications	Resource	manager	

- ii. When to Communicate? Communication on aspect of the EMS will be done annually, while others will be done on an as need basis. Interested parties may request EMS information from the JSIF at any time. However, interested parties will be notified if there is a significant change to the EMS including updating of the environmental aspects; change in compliance obligations and/or environmental Policy; major nonconformity; and when there is a significant risk or opportunity that may impact the EMS. Interested parties will also be notified of training relevant to the EMS in which they need to participate.
- iii. With Whom to Communicate? Information will only be communicated to the pertinent interested parties. The Systems Operation and Environment Manager will be the point of communication for environmental matters within the JSIF. The Environmental Officer may also speak to environmental issues in the absence of the Systems Operation and Environment Manager. The GM for Technical Services will typically communicate on environmental issues on the behalf of Top Management. External communications on environmental issues should to be directed by the Front Desk Attendant to the Systems Operation Manager or Environmental Officer. If necessary, the information should be logged.
- iv. *How to Communicate?* Certain relevant information will be communicated to interested parties through the following media:

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Internet

The JSIF's environmental management framework, the identified significant environmental aspects, the objectives and targets and signed environmental policy will be communicated to interested parties via the JSIF's website. These documents may also be provided in hard copies or via e-mail if requested.

The publications of these documents will be managed by the MIS Department. The Systems Operation and Environment Manager is responsible for ensuring that up-to-date information is sent through to the MIS Department for publications and to make changes or modifications where necessary in order to maintain reliability in the information being disseminated.

Social Media

The Communications unit also utilises the JSIF's official social media sites as indicated below to share information, encourage behavioural change and promote events.

Facebook – www.facebook.com/jsifja Instagram – www.instagram@jsifja Twitter – www.twitter@jsifja

E-mail

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Communications	Resource		

As it relates to the significant environmental aspects, objectives and targets and environmental policy, JSIF will communicate these to any interested party directly or upon request. These will be communicated through e-mail.

Contracts

The environmental policy, context of the organization and scope of the EMS will be included in contract document as a means of communication to individuals or entities to which work is outsourced.

The JSIF maintains a complaint log (COMM-I-COMMLOG-ddmmyyyy) in which all complaints made by the public concerning the EMS is recorded. The organization will respond to all relevant queries, comments or communications with respect to the EMS.

5.0 RESPONSIBILITIES

Communications Officer

The Communications Officer receives external communication relating to media and public requests and directs all project related questions and comments to the relevant Project Officer/Manager. The Communications Officer is responsible for dispersing the official response to the above enquiries. Also, it is the responsibility of the Communications Officer to ensure that relevant information is communicated to the various social media outlet.

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Project Officers

The Project Officer receives, reviews and responds to external communication (not within the public domain as defined above) directly to stakeholders as required.

Project Officers

The Project Officer receives, reviews and responds to external communication (not within the public domain as defined above) directly to stakeholders as required.

Project Managers

The Project Manager is responsible for the completion of the communication cycle, where issues are not resolved or continue to recur.

All members of staff

All members of staff directs external calls, emails, faxes, and in person inquiries, comments and complaints about JSIF's activities to the relevant Officers.

6.0 RECORDS

Correspondence Log Sheet (resides with the Admin Officer-TS)

Site Visit Reports - JSIF-I-SVR"- PROJECTNAME -"ddmmyyyy"

Consultant Reports - "DEPT"-I-REPS-SUPV-"PROJECTNAME"-"ddmmyyyy"

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 $Complaint\ Log-COMM-I-COMMLOG-ddmmyyyy$

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years.

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ISO 14001:2015 -7.5	Prepared by: Loy Malcolm, Environmental	Approved by: G. Antonio Blake, EMS Manager	Revision No: 0
Documented Information - General	Officer		

1.0 PURPOSE

The purpose of this procedure is to establish the general requirements for the structure of documents related to JSIF's Environmental Management System (EMS). The procedure covers:

- the format of all EMS documents
- the linkages among EMS documents

2.0 SCOPE

This procedure addresses all documents and data relating to JSIF's EMS, including documents of external origin as applicable and as outlined below:

- (a) EMS Manual
- (b) EMS Procedures
- (c) Work Instructions / Specifications Documents
- (d) Associated Forms and Records
- (e) Reference Documents

Documented information originally created for purposes other than the EMS, may be used as support for implementation of the EMS.

3.0 REFERENCE DOCUMENTS

ISO 14001:2015 – Environmental Management System **EMS-I-RD-ISOENV-10012005**

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ISO 14001:2015 -7.5	Prepared by: Loy Malcolm, Environmental	Approved by: G. Antonio Blake, EMS Manager	Revision No: 0
Documented Information - General	Officer		

4.0 REQUIREMENTS

The interaction of the JSIF's EMS with the organization's general operations is contained in the EMS Manual - EMS-I-MAN-01072008. This manual is maintained as an electronic document within JSIF's document management system. The JSIF's library contains a printed copy as reference; however the electronic version of the manual overrides all printed copies.

The EMS consists of four (4) levels of documentation a) EMS Manual - EMS-I-MAN-01072008 b) EMS Procedures Manual - EMS-I-PRMAN-01072008

c) Work Instructions & Specifications Documents and d) Records, Forms or Logs.

The EMS Manual outlines how the EMS operates, its maintenance and continual improvement. The documented procedures form part of the EMS manual and are located on the electronic system, which is uncontrolled when printed. Ensuring that the most up-to-date version is available will be as per Document Control - EMS-I-PR-DOCCTRL-24072008.

5.0 RESPONSIBILITIES

The structure of the management system is maintained as outlined in the Document Control - EMS-I-PR-DOCCTRL-24072008

6.0 RECORDS

EMS Manual - EMS-I-MAN-01072008

EMS Procedures Manual - EMS-I-PRMAN-01072008

7.0 ATTACHMENTS / APPENDICES

EMS Document Listing EMS-I-RD-DOCLIST-24072008

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Documented Information - General	Officer		

NB** ISO 140012015 – Environmental Management System EMS-I-RD-ISOENV-10012005 is a reference document for all procedures.

8.0 RECORD RETENTION TIME

Seven years, or for the life of the project, whichever is longer.

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ISO 14001:2015 – 7.5.2 - 7.5.3 Creating, Updating and Control of Documented Information	Prepared by: Loy Malcolm – Environmental Officer	Approved by: G. Antonio Blake – EMS Manager	Revision No: 1

1.0 PURPOSE

This procedure describes the system of preparing, reviewing, approving, distributing, publishing, revising and updating documents under JSIF's Environmental Management System (EMS). It will also cover how records are identified, collected, indexed and filed to allow for ready access and retrieval.

2.0 SCOPE

This procedure applies to all documents within JSIF's starting in the first instance with the EMS. Documents for the purpose of this procedure will include records.

3.0 REFERENCE DOCUMENTS

ISO 14001:2015 Standard, EMS-E-RD-ISOENV-ddmmyyyy

Documentation Procedure, EMS-I-PR-COMM-24072008

4.0 REQUIREMENTS

Document Format:

All EMS documents will be assigned a code by the person that produced the document or by a designated staff that is responsible for filing specific documents (see detail Document Coding System EMS-I-RD-DOCCODE-24072008); this will be the unique identifier for all documents. Note that documents are coded with the date of creation where this is known; where the date of creation is unknown documents will be assigned the date when it was added to the system or will be given a generic "ddmmyyyy" assignment.

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In the case of EMS procedures and Work Instructions, the format for these documents is as Document Templates EMS-I-RD-DOCTEMPL-24072008.

All documents included in the EMS are located on the JSIF Intranet or on Fund Manager.

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Creating, Updating and Control of Documented Information	Officer		

Document Management System Description / Structure

All documents (except those records applicable to the Waste Management procedure) related to the EMS will be available and accessible in PDF format to all members of staff through JSIF's Intranet or on Fund Manager. Documents will be available for viewing only. The review, editing and accessibility of all documents will be the responsibility of approved persons only. The creators, reviewers / approvers of documents will be allowed access to the document(s) by way of request to the MIS team. The newly revised and approved document will then replace the previous. Documents or their location (in the case of multiple documents of the same type) must be coded as a means of identification.

Document Identification and Record Generation

Documents including records are accessible via the Intranet; whenever records are generated the person responsible or the creator of that record as per the related EMS procedure must submit that record for inclusion in the document management system. Some records will be created and managed through Fund Manager, and as such these will be managed electronically.

Document Review and Approval

This will be carried out by persons having direct responsibility for the documents.

Review of EMS documents ensures that:

1) the procedures are in fulfillment of ISO 14001:2015

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- 2) procedures have been completed in accordance with Document Templates EMS-I-RD-DOCTEMPL-24072008
- 3) correct creators and approvers are recorded

Review of Records ensures that:

- 1) The record is complete and legible.
- 2) Signatures and initials are filled in where necessary.
- 3) The information contained in the record is correct and has not been improperly altered.
- 4) Any errors that have been made in the record have been properly corrected.

Distribution and Control of Documents

When documents require adjustments, the EO will release the document to the creator in a format that can be edited. The revised signed versions and revision sheet will then be uploaded by the EO to the system, and made available for viewing. Where the change is significant, this will then trigger a communication to relevant staff as per the Communications Procedure, EMS-I-PR-COMM-24072008.

All printed EMS documents are uncontrolled. There is however a controlled printed copy of the Manuals and key documents, in case the system goes is down.

Availability

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All documents related to the EMS will be available to all staff in read-only format, and electronically to creators when review is required.

**Note that records generated by Fund Manager, may or may not be available through the Document management system, as they may be accessed only via Fund Manager.

Storage and Retention

Documents will be retained for seven (7) years or for the life of the related project whichever is longer with the exception of site diaries which are maintained for the duration of the project. In the case of external resource documents (laws etc.) they will remain as long as they are relevant and up to date.

5.0 RESPONSIBILITIES

All staff has responsibility for passing documents and records to the designated Administration Officers, who then codes and uploads as required.

The EO has responsibility for release and upload of relevant (EMS) documents.

Document creators must review documents in a timely manner and note revisions to document. Submission to the Approvers will also be their responsibility.

Document Approvers must check and affix signatures to approved documents.

The Administration Officers have responsibility for checking legibility and completeness as well as assigning appropriate codes to documents.

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The MIS department must ensure that the document management system is maintained and functions as outlined in the structure.

The EMS team must check documents for adherence to the ISO 14001:2015 Standard.

6.0 RECORDS

The record of this procedure is the document management system.

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years except in the case of site diaries and waste management records.

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Operational Planning and Control	Carl McKenzie – Assistant Project Manager	Omar Sweeney – Operations Manager	10.100.1

1.0 PURPOSE

The procedure outlines how JSIF will identify, establish and maintain operational controls (OCs). The degree of control applied varies with the potential risk e.g. for activities identified as having potential significant negative environmental impacts, the controls established by JSIF will be more rigorous.

2.0 SCOPE

The JSIF has identified nine (9) significant environmental aspects for which operational procedures have been developed. These procedures apply to all the significant environmental aspects as established in the Aspects Sheet (EMS-I-REC-IDASPTS-06062007). The controls encompass those activities identified as having the potential to cause deviations from policies, objectives and targets, if adequate planning and controls are not maintained. These procedures are develop to ensure that JSIF operations are managed in a controlled manner to meet:

- Environmental Sustainability Policy commitments relevant to the aspects;
- Environmental Objectives an Targets; and
- Compliance Obligations

3.0 REFERENCE DOCUMENTS

ISO 14001:2004 Standard EMS-E-RD-ISOENV-10012005

Operations Manual JSIF-I-MAN-OPSMAN-28032006

Aspects Sheets EMS-I-REC-IDASPTS-06062007

EMS Review Schedule EMS-I-RD-EMSTREV-24072008

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Objectives & Targets Sheet EMS-I-RD-OBTP-24072008

Communications Procedure EMS-I-PR-COMM-24072008

Legal and Other Requirements Procedure EMS-I-PR-LEGAL-24072008

4.0 REQUIREMENTS

The JSIF through this EMS is required to minimize the impact of its operation on the environment or to improve environmental sustainability. Therefore, the organization will examine its activities in order to identify those that can have significant environmental impacts and will plan, establish and maintain operational controls (OCs) to mitigate against significant environmental impacts and to prevent breach of compliance. The aspects will be continually assessed for adequacy of controls with a high degree of rigor in order to identify and manage any risk.

Identifying Existing Operational Controls

- The Systems Operation and Environment Manager will continually examine JSIF's environmental aspects and identify existing procedures and documents designed to manage real or potential impact(s); to enable alignment with environmental policy; achieve objectives and targets; and to be compliant with regulatory and other requirements.
- These documents and procedures may be included or referenced in the EMS documentation as being a part of Operational Control, thereafter; the EMS team will review the EMS periodically for the purpose of determining the adequacy of established controls. These may include:
 - Site safety instructions

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- Construction and engineering guidelines
- Operations manual
- EMS manual
- JSIF's environmental management framework
- Environmental Management Plan
- Emergency response procedures
- Training programmes
- Environmental screening and monitoring programme
- Fund Manager
- Consultant's contracts
- Contractor's contract
- Social Reviews Process
- Technical Review Process
- Procurement Process
- Green Procurement Policy
- Onsite Safety guidelines
- Where applicable a life cycle approach will be adopted in the management of environmental aspects and impacts. The controls are outlined within the relevant procedures.

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- Records referred to within the environmental management operational procedures provide the documented evidence that processes have been carried out in line with the recommended standards and these are audited via the internal audit process (see 9.2).

Reviewing and Revising Existing OCs (Planned Changes)

- Existing documentation that outlines how activities should be carried out in order to avoid environmental incidents shall be reviewed annually by the EO to ensure that they continue to be relevant.
- Where changes are required, the EO shall make the necessary recommendations to the Systems Operation and Environment Manager.
- The changes will be communicated to the EMS Team. In the case where there are significant changes or where change may impact significantly on the organization, this will be communicated to Top Management for approval. Subsequently, the information will be communicated to staff and interest parties including consultants and contractors as per Communications Procedure EMS-I-PR-COMM-24072008.
- If there is a need for training, the EO will make recommendation to HR through the Systems Operation Manager or the General Manager for Technical Services. Training will proceed as per Training Procedure EMS-I-PR-TRAIN-24072008
- Corrective Action Report (EMS-I-REC-CAR-"ddmmyyyy"), communication logs COM-I-COMMLOG-"ddmmyyyy", Management Review minutes EMS-I-PR-MSR-24072008 among other things will be analyzed for trends or potential issues.

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Operational Planning and Control	Assistant Project Manager	Operations Manager	

- The EMS Team or Systems Operation and Environment Manager/Environmental Officer will assess the effectiveness of the EMS for example, assessing whether or not objectives and targets are being met, monitoring and evaluation is being done, and if CARs are being closed out, etc. This review will be done on a quarterly basis.
- Based on these reviews and assessments of CARs, communication logs, etc. the EMS Team will determine the adequacy of OCs and where there are deficiencies, make recommendations for improvement.

Developing Procedures and /or Work Instructions

- The EO and/or Systems Operation and Environment Manager are responsible for developing new OC procedures for initial review by the EMS Team.
- Functional Managers and the EMS Team may also make recommendations for changes or introduction of new OC procedures through the EO or Systems Operation and Environment Manager.
- The Systems Operation and Environment Manager shall update the OCs upon review and acceptance by the EMS Team.
- The Systems Operation and Environment Manager will inform the EMS Manager of any changes to the OCs procedures.
- The EMS Manager will collaborate with Functional Managers on the development of the procedures as per Document and Record Control Procedure EMS-I-PR-DOCCTRL-24072008 and communicated to relevant

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Sperational Flamming and Control			

staff and stakeholders as per Communications Procedure EMS-I-PR-COMM-24072008.

Management of Change Process

The JSIF recognized that internal and external factors can lead to changes that may have implications for the environmental management system or could impact the environment. This therefore necessitates the need for a change management process as outlined below.

A. Assessing Change

The EMS Team led by the Systems Operation and Environment Manager forms the change management team which will be responsible for assessing the organization in the event of planned or unplanned change. However, the team will evaluate the type of change and determine if Top Management is required to provide direction. The team will assess:

- 1. The scope of the change:
 - ✓ How significant is this change?
 - ✓ How many people will be affected?
 - ✓ Is it a gradual or radical change?
 - ✓ What are the potential environmental impacts of the change?
 - ✓ How significant is the impact?
 - ✓ Can the impacts be mitigated?
 - ✓ What resources are required to mitigate?
 - ✓ Is Top Management required to provide additional resources to effect or manage the change?
- 2. The readiness of the organization for the change:
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- ✓ Have the organization experienced similar changes?
- ✓ What is the background of the impacted groups?
- ✓ How are impacted persons responding?
- ✓ Are there existing changes occurring?
- ✓ What are the potential resistance expected?
- ✓ Is Top Management taking leadership in managing the change?
- 3. The strengths of the change management team and take appropriate actions to ensure that they are able to effectively lead the change process.

Once the assessment is completed, the change management team will complete a preliminary assessment report outlining any risks and the necessary mitigations required to effect the change with minimal impact.

B. Communicating Change

The change management team will seek to build awareness of staff and/or interested parties regarding the need for planned change or the occurrence of unplanned change to influence employees and to provide clarifications. Therefore, initial communications are typically designed to create awareness around the business reasons for change and the risk of not changing. A key focus of the communications strategy will be to share the right messages at the right time.

The team will therefore begin with a careful analysis of the audiences, key messages and the timing for those messages. The change management team will communicate the information to address the respective needs of staff, top management and stakeholders considering that each audience has particular needs for information based on their role in the implementation of the change.

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C. Change Management Training

There are occasions when the change is so significant that it may disrupt the operations of the organization. In the event of any such instances, the change management team may recommend training for those that will be impacted including managers with a view to encourage smooth transition and to reduce resistance.

Once on board, the managers have the responsibility to successfully coach their staff through the change with the support of the change management team. The change management team will ensure that impacted people receive the training they need at the right time which means training will only be delivered after steps have been taken to ensure impacted employees have the awareness of the need for change and desire to support the change.

D. Implement the Change and Mitigation Measures

An implementation plan to effect the change will be developed and executed by the person(s) with the assigned roles and responsibilities. The necessary mitigation measures will be put in place for any potential environmental issues that were identified during the assessment phase.

E. Feedback and Corrective Action

The change management team will solicit feedback from staff and stakeholders where necessary as the change is being implemented since this is a key element of the change management process. The team will analyse feedback and implement any required corrective action to ensure full adoption of the changes.

F. Recognizing Success

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Early adoption and successes of employees in the process will be recognized. This will be applicable to both individuals and groups within the organization. Continued adoption will be monitored to ensure things do not return to the status quo.

G. Monitoring and Evaluation

The final step in the change management process is the monitoring and evaluation. At this stage the team will evaluate the impact of the change and the successes or failures of mitigation measures implemented. This process forms part of the ongoing strategy for continual improvement of the organization's EMS.

Life Cycle Perspective

The JSIF is cognizant that goods and services provided by suppliers could have significant impact on the environment and therefore in the procurement of goods and services the JSIF will ensure that proper due diligence is carried out to minimize any potential impacts. The JSIF will seek to exert control over the procurement of goods and services and where that is not possible, will try to influence the process in any way possible. Where practicable and feasible, the JSIF will procure products that are environmentally sustainable, for example products with limited packaging; energy and water efficient; reduced toxicity; and made from recycled material with a view to control resource consumption, toxicity, waste generation and disposal, and pollution. The JSIF will continually review and update its "Green Elements" Policy to accommodate these changes to the advantage our staff and project beneficiaries.

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Operational Planning and Control	Manager Manager	

From an operational perspective, all projects will undergo environmental screening. Environmental mitigation measures will be developed for any issues identified during screening the screening process. The Technical Officers or Environment Officer will communicate these issues and mitigation measures to the Consultant to which formulation and supervision of the project is outsourced by JSIF. The consultant will formulate the mitigation measures in the project design and quantify the cost in the project bills of quantity. The Consultant must present the project design and bill of quantity to the JSIF's Technical Review Committee which assesses the design for completeness and environmental soundness.

Following approval, a contractor is procured through the bidding process to implement the project. An environmental management plan is included in the contract documents which outlines the environmental management requirements in the execution of the works. The contractor will implement the project under the supervision of the consultant who shall ensure that compliance with the environmental management plan and other requirements obtains at the site.

The Technical Officer and the Environmental Officer monitor the consultant to ensure site supervision is been done correctly. Site monitoring reports are prepared by both the consultants, environmental officer and the technical officer for documentation.

In the case of waste disposal, the consultant is required to make the necessary effort to ensure that the waste is disposed of at an approved disposal site (See EMS-I-PR-SOLID WASTE-ddmmyyyy). The solid waste management origin and

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disposal form will be used to give account for waste disposed of from project sites.

Communications to Consultants and Contractors

Direct communication of environmental requirements or changes thereof are usually communicated to consultants and/or contractors through various channels, including:

- Contract signing;
- Technical review meetings;
- Project information meeting; and
- Training sessions.

Information are also communicated to contractors and consultants through formal letters, e-mails and telephone calls. The environmental policy is also communicated to these stakeholders through the project contract.

5.0 RESPONSIBILITIES

Top Management will be responsible for making the necessary resources allowance available to implement operational controls where necessary.

The EMS Team must ensure that review meetings are held as scheduled, and that reports and outputs from the meetings are produced and given to the Functional Managers.

The EMS Manager will be responsible for the review and approval of the OCs that have been revised and developed.

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The Communications Manager or a designate will communicate any changes to the operational controls that will impact interested parties.

Functional Managers have the responsibility for analyzing results from data and reports received and making recommendations for changes as part of MSR. The relevant managers will also be responsible for assigning the relevant staff who will develop or amend procedures and documentation. See Management System Review Procedure EMS-I-PR-MSR-24072008.

6.0 RECORDS

EMS Team Meeting review report EMS-I-REC-EMSTREP-"ddmmyyy"

- generated by EMS Team Officer

Management Review Minutes EMS-I-REC-MINS-"ddmmyyyy"

– generated by Meeting Recorder

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years

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ISO 14001:2015 – 8.2 Emergency Preparedness and response	Prepared by: Rudolph Nelson Office Administrator	Approved by: Shirley McLean- Brown – Finance, Administration and Procurement Manager	Revision No: 2

1.0 PURPOSE

The purpose of this procedure is to establish and maintain plans and to identify the potential for, and responses to, incidents and emergency situations related to JSIF's operations, staff and the environment. The procedure is aimed at preventing and mitigating the down time of JSIF's operations, injury and environmental impacts that may be associated with them. The procedure also specifies the process utilized by the company to periodically review emergency preparedness and response procedures in light of operational changes, and following the occurrence of an unexpected incident or event.

2.0 SCOPE

The procedure considers all of JSIF's operations, those associated with the administrative activities as well as on site (operational). It covers the initial stage of an emergency and the plans developed to govern the process. It is designed to minimize initial impacts to employees, the public, and the environment.

3.0 REFERENCE DOCUMENTS

- Business Continuity Plan JSIF-I-MAN-BCP-10022008
- Communication Procedure EMS-I-PR-COMM-24072008
- ODPEM Publications JSIF-E-ODPEM-PUBS-ddmmyyyy
- Specifications and Other Requirements document PROC-I-SPECSGEN-10051999

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Emergency Preparedness and response	Administrator Administration and Procurement Manager	

- Factories Act Building Operations and Works of Engineering Construction (Safety, Health and Welfare) Regulations 1968 JSIF-E-OTHER-LEGAL-24072008
- JSIF Personnel Manual **HR-I-MAN-PERS-"ddmmyyyy**"
- JSIF Fleet User Manual ADMIN-I-MAN-FLEET-"ddmmyyyy"

4.0 REQUIREMENTS

The process by which potential emergencies were identified is detailed in the Business Continuity Plan.

In the event of an emergency, the following are the sequence of actions to be taken by JSIF in response to the event of:

(1) <u>Fire</u>

All staff

- Set off the alarm
- Exit the building using fire escape or emergency exits.
- Go to the designated assembly point as specified in the Business Continuity Plan JSIF-I-MAN-BCP-10022008
- DO NOT RE-ENTER THE BUILDING UNTIL ALL CLEAR IS GIVEN BY DESIGNATED OFFICIALS.

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Emergency Preparedness and response	Rudolph Nelson – Office Administrator	Shirley McLean- Brown – Finance, Administration and Procurement Manager	

Emergency Wardens/Officers

- Set off the alarm
- Call the Fire Brigade
- Assess severity of the fire
- Use extinguisher to out the fire (ONLY IF MANAGEABLE)
- Ensure that emergency exits are opened and clear
- Assist all occupants of JSIF Office to exit the building
- Go to designated assembly point as specified in the Business Continuity Plan JSIF-I-MAN-BCP-10022008
- Do roll call of all staff
- Give all clear signal when environment deemed safe

(2) **Bomb Threat**

- All bomb threats must be **immediately** reported to emergency wardens/officers
- The emergency warden/officer will set off the alarm
- The emergency warden/officer will assist all occupants of JSIF Office to exit the building using stairwells or fire escape/emergency exits.
- DO NOT USE THE ELEVATOR.

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Emergency Preparedness and response	Administrator Administration and	
	Procurement Manager	

- Go to designated assembly point as specified in the Business Continuity Plan JSIF-I-MAN-BCP-10022008
- Call the necessary authorities including the police and Fire Department.
- DO NOT RE-ENTER THE BUILDING UNTIL ALL CLEAR IS GIVEN BY DESIGNATED OFFICIAL.

(3) Natural Disasters

- Flood see Business Continuity Plan JSIF-I-MAN-BCP-10022008
- Earthquake see JSIF, Business Continuity Plan, JSIF-I-MAN-BCP-10022008 \ Emergency \ Earthquake
- Hurricane see JSIF, JSIF-I-MAN-BCP-10022008)\Emergency\
 Hurricane

(4) Hazardous Material Spill

- Spills on site are managed as outlined in Specifications and Requirements document PROC-I-SPECSGEN-10051999\Site Safety.
- All spills should be stopped if it can be done safely. This is commonly done by plugging a hole or up righting a container.
- Where a spill is headed for or may reach water bodies, this is an urgent matter and should be addressed immediately as outlined in Specifications and Requirements document PROC-I-SPECSGEN-10051999\Site Safety.

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- Where there are projects that involve the use of hazardous chemicals such as pesticides, the necessary environmental training will be provided. The training will detail how to respond to an environmental incident, containment, clean up and reporting requirements depending of the level of the incident.
- Spill kit including shovels, rubber or chemical resistant gloves, coveralls, desiccant (drying agent), absorbent material, buckets or drums, rubber boots, respirators and goggles should be present on applicable sites.
- Training for consultants and contractors will reinforce the need to report near-misses to prevent an incident happening in the first place or on a larger scale.
- Records of environmental incidents, near-misses and non-conformity with the environmental management operational procedures are documented on the Intranet and is available to all staff.
- In the event of an incident, non-conformity or near miss, members of staff involved or witnessing the incident are responsible for completing the near-miss or non-conformity report. The Manager for Systems Operation and Environment and the Project Manager should be notified of any near misses. The two managers or designates will be responsible for investigating these environmental incidents, near-misses and non-conformities and establish the root cause.

(5) Accidents

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Emergency Preparedness and response	Administrator Administration and Procurement Manager	

- Factories Act Building Operations and Works of Engineering Construction (Safety, Health and Welfare) Regulations 1968 JSIF-E-OTHER-LEGAL-24072008
- Traffic see JSIF, ADMIN-I-MAN-FLEET-"ddmmyyyy"/ Accidents

(6) Epidemic/ Outbreak

See JSIF, Personnel Manual HR-I-MAN-PERS-"ddmmyyyy" and Pandemic-Epidemic Response Plan

The Emergency Preparedness Plan procedure will be managed by the Office Administrator with coordinating assistance from an Emergency Response Team. Activities covered by this system procedure are addressed in the JSIF, Business Continuity Plan JSIF-I-MAN-BCP-10022008

Evaluation

The effectiveness of this procedure will be evaluated by conducting drills and other tests or checks. Where the procedure appears not to be working, it will be reviewed by the Admin Manager and the Manager for Systems Operation and Environment.

Frequency

Drills and tests will be carried out annually, note that where an emergency evacuation and / or event occurs during the natural course of operations, the incident will constitute a test and will be recorded.

Training

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Emergency Preparedness and response	Administrator Administration and Procurement Manager	

The JSIF will train and certify select staff including members of top management in cardio pulmonary resuscitation (CPR) and first aid. This will help in the provision of life saving attention to victims in the event of a serious emergency that resulted in injury to persons.

5.0 RESPONSIBILITIES

Top Management is responsible for ensuring that an Emergency Preparedness Plan is developed, approved, implemented and communicated to all staff.

All staff is required to follow the steps outlined in the procedures.

6.0 RECORDS

Evacuation Drill Report ADMIN-I-REPS-EVAC-"ddmmyyyy"

- completed by Office Administrator

Site Reports JSIF-I-SVR- "PROJECTNAME" -"ddmmyyyy" – Technical Officer

Training Records **HR-I-TRAINREC-"NAME-"ddmmyyyy"** – HR Manager

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven Years

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ISO 14001:2015 – 9.1	Prepared by: Michelle Moses – Monitoring and Evaluation	Approved by: Dunstan Bryan – Social Development	Revision No: 0
Monitoring, Measurement, Analysis and Evaluation	Officer	Manager	

1.0 PURPOSE

This procedure outlines how JSIF will monitor, measure, analyzed and evaluate compliance of all (including those by persons working on their behalf) its activities on site and those EMS related activities within the office. Specific attention will be placed on achievements of objectives and targets specific to significant environmental aspects, compliance obligations and the organization's environmental policy.

2.0 SCOPE

The scope of this procedure is limited to operational activities across Jamaica as well as JSIF administrative activities. Certain activities which requires the use of specialized equipment for measurement and quantification of environmental pollution for example noise and dust are outsourced but will be covered within the scope of the EMS.

3.0 REFERENCE DOCUMENTS

Environmental Screening Sheets EMS-I-REC-ESS-"ddmmyyyy"

Environmental Management Plans EMS-I-REC-EMP-"ddmmyyyy"

Environmental Monitoring Sheet - EMS-I-REC-EMNS-"ddmmyyyy"

Specifications and Requirements Document - PROC-I-SPECSGEN-10051999

Waste Management Records (Recycling Receipt Log Sheet – EMS-I-REC-RCYLOG-"ddmmyyyy"; Recycling Programme Daily Log – EMS-I-REC-RCYDLOG-"ddmmyyyy"; MIS Print Report – EMS-I-REC-MISPRT-"ddmmyyyy"; Paper Control Log – EMS-I-REC-PCLOG-"ddmmyyyy")

Contract - PROC-I-CON-"PROJECTNAME"-"ddmmyyyy"

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Monitoring, Measurement, Analysis and Evaluation	Officer	Manager	

4.0 REQUIREMENTS

JSIF's system of **monitoring and measuring** environmental performance is based on:

I. Establishing Environmental Management Structure

The JSIF has established multi-faceted environmental monitoring system to assess and report on environmental performance and to manage its significant environmental aspects with a view to facilitate continual improvements. The monitoring system comprises the external supervisors or consultants, technical officers, environmental officers, Technical Review Committee, Environment and Safety Committee and internal auditors. Each of these group of monitors has distinctive roles, however functions sometimes coincide or overlaps.

II. Assessing Progress against Environmental Objectives

A summary of progress to meet the Environmental objectives and targets will be reported annually at the Management System Review meeting by the Systems Operation and Environment Manager. The Document will be recorded as EMS-I-REC-ACCOMPLISHMENTS-ddmmyyyy.

What will be monitored and measured?

The JSIF will perform constant monitoring and measurement of relevant administrative and operational activities to ensure that the organization is performing in accordance with:

- Legal and other Requirements Procedure EMS-I-PR-LEGAL-24072008
- Designs/Drawings (JSIF-E-DR-"PROJECTNAME"-ddmmyyyy") with

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- EMS procedures
- objectives and targets
- Engineering standards
- JSIF policies and requirements
- Relevant requirements of interested parties

The JSIF **measures** environmental performance in the following ways:

Environmental Management Operational Process

The records to be kept with respect to the significant environmental aspects are identified in the EMS Operational Procedures. However, additional records related to environmental sustainability or non-significant environmental aspects are also measured and documented to ensure data is available to evaluate compliance obligations and to report on progress against the environmental objectives. In particular the following data shall be collected, documented and reported in the Management Reviews:

Waste Management–Type and quantity (in lbs) of waste collected from the JSIF's office for recycling using data supplied by recyclers and recorded by the Environmental Officer in the Paper Waste Control Log (EMS-I-REC-PWCLOG-ddmmyyyyy) and Plastic Bottle Control Log (PBCLOG-ddmmyyyy). These documents will be updated monthly.

The quantity (truckloads) of construction and demolition waste carted away from project sites will be collected by the external supervisor/consultant and

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reported to the environmental officer who will record the information in EMS-I-REC-C&DWASTE-ddmmyyyy monthly.

The quantity (lbs) of plastic bottles recycled by project communities using payment invoice from community based organization and recorded by the Environmental Officer in Community Plastic Bottle Recycling Log (EMS-I-REC-COMRECYCLOG-ddmmyyyy) monthly.

The quantity (lbs) of organic waste composted by project communities using data from community based organization and recorded by the Environmental Officer in Community Composting Log (EMS-I-REC-COMPLOG-ddmmyyyy) monthly.

Noise and Dust – The results from qualitative assessment of noise and dust at project sites will be done and inputted into Fund Manager (MIS software) by the Technical Officers. Fund Manager will generate a contractors' environmental compliance report. Quantitative noise and dust assessment will be done by consultants hired to monitor specific project sites. Reports will be done monthly and the data recorded in EMS-I-REC-NOISE-ddmmyyyy and EMS-I-REC-DUST-ddmmyyyy by the environmental officer for noise and dust, respectively.

Water Pollution – Fertilizer and pesticide use at project sites will be monitored and recorded by the environmental officer using the Fertilizer Use Log (EMS-I-REC-FERTILOG-ddmmyyyy) and the Pesticide Use Log (EMS-I-REC-PESTILOG-ddmmyyyy).

The number of sanitation systems implemented with secondary or tertiary sewage treatment systems will be recorded monthly by the environmental officer in the Sanitation System Log, EMS-I-REC-SANILOG-ddmmyyyy.

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Disaster Risk Reduction and Climate Change – The number of rainwater harvesting systems constructed by JSIF will be recorded by the environmental officer in the Rainwater Harvesting Log EMS-I-REC-RWHLOG-ddmmyyyy.

The number and extent (km) of drainage systems constructed by JSIF will be recorded in the Drainage System Log EMS-I-REC-DRAINAGELOG-ddmmyyyy by the environmental officer monthly.

The number of projects including slope stabilization, river training and coastal protection will be recorded by the environmental officer in the Slope Stabilization and River Training Log (EMS-I-REC-SLOPERIVER-ddmmyyyy and the Coastal Protection Log EMS-I-REC-COASTALLOG-ddmmyyy, respectively.

Training – The number of stakeholders or interested parties that received environmental training by JSIF or through JSIF will be recorded in the Environmental Training Log EMS-I-TRAINREC-INPART-ddmmyyyy by the training coordinator or a designate. A copy of the log shall be submitted to HR as record.

Energy and Water – Data for the administrative office energy and water consumption obtained from monthly utility bills will be recorded by the environmental officer in the Energy Consumption Log (EMS-I-REC-ENERGYCONLOG-ddmmyyyy and Water Consumption Log (EMS-I-REC-WATERCONLOG-ddmmyyyy.

The number of projects implemented with alternative energy systems will be recorded by the environmental officer in the Alternative Energy Log EMS-I-REC-ALTENERGYLOG-ddmmyyyy.

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The number of projects implemented with energy conservation and efficiency systems will be recorded by the environmental officer in the Energy Efficiency Log EMS-I-REC-ENERYEFFICIENCY-ddmmyyyy.

The number of projects implemented with water conservation and efficiency systems will be recorded by the environmental officer in the Water Efficiency Log EMS-I-REC-WATEREFFICIENCYLOG-ddmmyyyy.

Calibration of Equipment

Noise and Dust – The monitoring and measurement of noise and dust pollution at some project sites is outsourced to an environmental consultant. The consultant is responsible for the calibration or replacement of the measuring instruments on schedule. The JSIF may conduct random checks of the instrument to determine and record if they are properly calibrated.

Compliance Obligations- Compliance with applicable Laws or interested party requirements.

How will monitoring and evaluation occur?

Monitoring and Evaluation will take the form of:

- Site visits
- Internal audits
- Reports e.g. Fund Manager (including site visit reports)

Site Visits

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Site visits are a main feature of JSIF's M&E as far as on site activities are concerned. This process forms part of preliminary assessments, ongoing as well as post project evaluations.

Type and nature of site visits

There are three (3) different types of site visit:

- a. <u>Appraisal stage</u> (JSIF, Operations Manual, 2004 (Revised 2006)\ Community Project Cycle)
- b. <u>Supervision</u>: all projects are assigned a Technical and Social Officer and supervisor who will monitor project implementation.
- c. <u>Project Monitoring & Evaluation</u>: at the completion of a Donor-Project, a post completion evaluation may be done. This evaluation will comprise, among other things, an environmental analysis which will include a sample group of projects.

Site visits are to ensure that works are carried out in accordance with the following:

- a. Approved designs
- b. JSIF Operations Manual
- c. Engineering standards as specified in contract)
- d. Jamaican laws
- e. Works contracts

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- f. Permits and Approvals
- g. Policies and guidelines
- h. JSIF's Objectives and targets
- i. Good industrial practices
- j. Interested Parties Guidelines

Frequency

Sites shall be visited at least twice per month by JSIF Technical Officer or Supervisor. In addition to this two weekly visit, visits must be carried out when critical works are to be done or when emergency situations occur. These critical works may include foundation works, retaining walls, pouring of slab roofs, chemical applications etc. Unless absolutely critical, the responsible JSIF Technical Officer or Supervisor is NOT required to visit the site during periods of inactivity or work seizure, however the Officer must complete a Site Visit Report to account for the duration of project inactivity as indicated in the Report/Output section below.

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Site Issues and Responses

Issues / Non-conformance	Response
Health & Safety (poor construction practices / engineering)	JSIF Officer / Supervisor MUST instruct the Site Manager or designate that all works MUST cease. Such an incident will require a written notification to the Contractor. Corrections must then be made before works can proceed.
Contamination of ground and surface waters	JSIF Officer / Supervisor MUST instruct the Site Manager or designate that all works MUST cease. Remediation works must then be started as outlined in the Specifications and Requirements Document - PROC-I-SPECSGEN-10051999 documents and on further instructions of the Supervisor. Controls must be verified in place and functioning before work can recommence.
Health & Safety (protective gear)	JSIF Officer / Supervisor must always point out the shortcomings to the Site Manager or designate. If the practice

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	(in the considered opinion of the Supervisor or Officer) is not systemic (i.e. more workers than not and on more occasions than not) then a recommendation must be made. Where the practice is common place, the Contractor must be advised in writing of the non-conformance with Jamaican laws/ regulations and JSIF policies. Specifications and Requirements Document - PROC-I-SPECSGEN-10051999
Release of Dust	Once a JSIF Officer is made aware, the Officer must instruct/make note to supervisor to instruct contractor to correct the situation. Where the dust levels have been quantified and are in breach of NEPA guidelines, written notification must be sent for mitigations to be effected.
Unplanned removal of trees	Where a JSIF Officer or Supervisor observes this, or verifies reports, a record must be made and the Site Manager / designate notified. Thereafter a further review must be made of the drawings and the trees to

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	be replaced. The JSIF Officer and Supervisor must then check to ensure that the trees are replaced as per Tree procedure - EMS-I-PR-TREES-24072008 and Communications Procedure EMS-I-PR-COMM-24072008
Social disruption (access, conflict)	Where this occurs, a report (by the contractor/site supervisor) must be made no later than two days after identification of the event to the assigned JSIF Officer and included in the site diary. A detailed report must then be made to the assigned Social Officer who will respond as per JSIF conflict resolution practices. If the issue is one of access, the JSIF Officer must instruct the contractor or designate to correct the problem. If not resolved, the Contractor must be notified in writing. Ref. Communications Procedure EMS-I-PR-COMM-24072008.
Other	Where observations are made contrary to those outlined in the Specifications and Performance

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Requirements, the JSIF Officer must	
take steps as per NCPA Procedure -	
EMS-I-PR-NCPA-24072008	

Report/Outputs

- 1. Site visit report: generated in Fund Manager by way of Technical Officer completing it or uploading what the Supervisor has submitted. A site visit report must be completed for each field visit. The number of visits will depend on the project duration and level of risk. Also, a site visit report must be completed in Fund Manager by the Technical Officer to indicate any period of project inactivity two weeks or greater in duration. The report must state clearly, the date and reason(s) for the project inactivity and the projected resumption date. The field visit log in Fund Manager must cover the project lifespan.
- 2. Photographs: taken on site and stored on JSIF system
- 3. Site diary: collected at project completion or final walk through

Internal audits

See Internal Audit Procedure EMS-I-PR-IA-24072008.

Environmental monitoring / auditing will be conducted on randomly selected project by the Internal Audit Department and the draft report submitted to the General Manager of Technical Services for consultation. The General Manager for Technical Services will seek clarity from the Systems Operation and

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Environment Manager on issues or findings reported by the Audit Department. The final report will be submitted to the Managing Director by the manager of the Audit Department. Findings outlined in the report will be discussed at the EMS Team meetings where corrective actions will be finalized.

Reports

Compliance and conformance reports can be generated by the Fund Manager when completed and data analyzed, and fed into NCPA Procedure - EMS-I-PR-NCPA-24072008, Internal Audit Procedure EMS-I-PR-IA-24072008 and Management System Review Procedure EMS-I-PR-MSR-24072008.

5.0 RESPONSIBILITIES

Technical Officers and Supervisors must conduct site visits as prescribed to monitor project activities. They must also complete and upload applicable reports.

Environmental Officer: The EO ensures that the environmental screening, technical review process and reporting are placed on the Fund Manager. The EO further checks to ensure that Management Plans and monitoring are carried out during implementation.

Monitoring and Evaluation Officer is responsible for monitoring project deliverables including consultancies, contractor and supervisor responsibilities.

6.0 RECORDS

Site Visit Reports - JSIF-E-"STV"- PROJECTNAME -"ddmmyyyy"

- Completed by Technical Officer

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Environmental Management Plan **EMS-I-REC-EMP-"ddmmyyyy"**- Generated by Fund Manager

Environmental Monitoring Sheets EMS-I-REC-EMNS-"ddmmyyyy"

Completed by Supervisors

Monitoring & Evaluation Reports **JSIF-I-REPS-ME-"PROJECTNAME"- "ddmmyyyy"-** Completed by Monitoring & Evaluation Officer

Waste Management Records Waste Management Records (Recycling Receipt Log Sheet – EMS-I-REC-RCYLOG-"ddmmyyyy"; Recycling Programme Daily Log – EMS-I-REC-RCYDLOG-"ddmmyyyy"; MIS Print Report – EMS-I-REC-MISPRT-"ddmmyyyy"; Paper Control Log – EMS-I-REC-PCLOG-"ddmmyyyy")

- Completed by Monitoring Officer)

Site Diary **JSIF-E-"SITEDRY"- PROJECTNAME -"ddmmyyyy"** – Completed by Site Personnel

Photographs "DEPT"-I-PHOTO-"PROJECTNAME"-"ddmmyyyy"- Taken by JSIF Officers and Supervisors

Fund Manager Reports – Generated by Fund Manager

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years or for the life of the project whichever is longer.

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ISO 14001: 2015 – 9.1.2	Prepared by: Dale Colquhoun - Project	Approved by: Gene Shaw – Project Manager, ICBSP	Revision No: 2
Compliance Evaluation	Engineer		

1.0 PURPOSE

This procedure outlines how environmental compliance will be assessed and documented and the process to follow to correct non-conformity (ies).

2.0 SCOPE

The procedure covers all operational and administrative activities and services related to the JSIF's Environmental Management System over which we have control or influence.

3.0 REFERENCE DOCUMENTS

JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006

JSIF Project Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME""ddmmyyyy"

EMS Procedures Manual - EMS-I-PRMAN-01072008

Zip Law

4.0 REQUIREMENTS

In order to determine if the compliance obligations of interested parties are being met, and to ascertain the performance of the EMS, JSIF is required to and shall conduct compliance evaluation. Compliance evaluation is done through a number of mechanisms as indicated below.

Checking Compliance

The External Supervisor (Consultant), Technical Officers and Environmental Officer all form part of the compliance monitoring process. They all visited project sites to monitor the environmental management performance of the

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Compliance Evaluation	Engineer		

contractor in relation to compliance obligations in contract documents. The monitors are required to document and report on any non-compliances observed. They are also responsible for taking corrective actions to mitigate the problem or prevent the issue from reoccurring. The Technical Officer and Environmental Officer are required to complete corrective action report (CAR) for any non-compliances.

Trained EMS auditors will undertake internal compliance audits (See Procedure EMS-I-PR-IA-24072008) as part of the internal audit programme (see section 9.2). The Ziplaw update service and the (EMS-I-REC-COMPLIANCEEVAL-ddmmyyyy) should be referred to in order to guide the audit.

It is the responsibility of the auditors or persons that observed the non-conformity, near miss or incident identified to report or document the information. The Systems Operation and Environment Manager should be notified of the non-compliance. Both the Systems Operation and Environment Manager and the Environmental Officer will determine the necessary course of action to be taken to correct the issue or non-conformity. The Environmental Officer will ensure that the actions are completed within the agreed timeline and that evaluation of corrective action is done.

The system to evaluate the effectiveness of corrective actions in response to an identified incident/near miss or non-conformity or following an audit conducted either internally or by an external party will be established as part of the Corrective Action Report. The environmental Officer will track the progress of corrective action monthly for three months or to the end of the project whichever is shorter. The Officer will track progress by conducting monthly site visits or by assessment of site visit reports in Fund Manager.

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Compliance Evaluation	Engineer		

The LO will assess compliance obligations annually as part of the JSIF, Internal Audits Procedure EMS-I-PR-IA-24072008, using the following steps:

- 1. Review the list of environmental aspects and the associated compliance obligations.
- 2. Review the specific conditions of each applicable compliance obligations.
- 3. Randomly select a sample of projects from Fund Manager to be evaluated.
- 4. The site and/or records of the selected project will be checked for compliance with applicable laws/requirements
- 5. Each selected project shall be assessed for compliance against all Compliance Obligations applicable to the EMS.
- 6. The Legal Officer will document the information in EMS-I-REC-COMPLIANCEVAL-ddmmyyyy.
- 7. Where there are non-compliance, remedial actions will be taken as per non-conformance and corrective action EMS-I-PR-NCCA-24072008. A corrective Action Report (CAR) is completed for each non-conformity and corrective action implemented.
- 8. A CAR will be prepared when there is a major non-conformity (non-conformities that had or have the potential to cause significant environmental impacts in the short or long term). A major non-conformity could also be a breakdown in conformance to EMS procedures.
- 9. A CAR will also be prepared if the same minor non-conformity (non-conformances that will not result in a significant environmental impact in

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Compliance Evaluation	Engineer		

the short or long term) occurred at the same project site for a third time or at three different project sites.

10. The environmental Officer will track the progress of corrective action monthly for three months or to the end of the project whichever is shorter. The Officer will track progress by conducting monthly site visits or by assessment of site visit reports in Fund Manager.

5.0 RESPONSIBILITIES

All Staff – Report all instances of non-conformity to Environmental Officer, Systems Operation and Environment Manager or the Project Manager.

Functional Managers: Ensure that all staff conforms to procedures and that non-conformities are dealt with in a timely manner. They will also ensure that corrective and preventive actions are periodically followed up and CARs closed out.

Responsible Officers: Report non-conformity, practice corrective and preventive actions, maintain records, conduct root cause analysis and close out CARs.

Environmental Officer: Conduct site monitoring and assessment activities to determine compliance of contractors and consultants with EMS procedures. The Environmental Officer shall ensure that observed non-conformances are recorded and reported and are indeed corrected within reasonable timeline.

Interested Parties: Interested parties are required to report non-conformities to the Responsible Officer or Environmental Officer and where necessary,

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Compliance Evaluation	Engineer	

take corrective actions. Interested parties are also expected to determine and express if their needs and expectations with respect to the EMS are met.

Top Management: Conduct annual Management System Review to evaluate the effectiveness of the EMS.

EMS Team: Conduct quarterly EMS reviews.

6.0 RECORDS

EMS Review Report **EMS-I-REC-EMSTREP-"ddmmyyy"** – produced by EMS Team

Corrective Action Forms – EMS-I-REC-CAR-"ddmmyyyy" – completed by responsible officer

Management Review Minutes **EMS-I-REC-MINS-"ddmmyyyy"** – produced by Management Team

Internal Audit Reports **AUD-I-REPS-EMS-"ddmmyyyy"**– produced by Internal Auditor

7.0 ATTACHMENTS / APPENDICES

Corrective Action Report (CAR) EMS-I-REC-CAR-"ddmmyyyy"

8.0 RECORD RETENTION TIME

Seven years

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ISO 14001:2015 – 9.2 Internal Audit	Prepared by: Nadia Dobson – Administrative Officer	Approved by: G. Antonio Blake – EMS Manager	Revision No: 0

1.0 PURPOSE

A key component of checking compliance with both EMS operational procedures and the requirements of ISO14001:2015 is through an internal audit programme.

This procedure outlines the minimum requirements needed for the scheduling, conducting and reporting on JSIF internal audits including audits and reviews of the EMS.

2.0 SCOPE

The procedure applies to all JSIF activities related to the EMS. These audits will allow for a determination of JSIF's compliance with laws, regulations, other requirements including those specific to JSIF.

3.0 REFERENCE DOCUMENTS

EMS Audit Guidelines / Protocol EMS-E-WI-IA-"ddmmyyyy"

Audit Schedule EMS-I-AUDSCH-"ddmmyyyy"

JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006

EMS Manual EMS-I-MAN-01072008

ISO 19011:2002 EMS-E-RD-ISOAUD-"10012002"

Previous Audit Report AUD-I-REPS-EMS-"ddmmyyyy"

4.0 REQUIREMENTS

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The JSIF will conduct annual internal audits and quarterly EMS system review to ensure that activities are being carried out in accordance with the organization's plans, policies, procedures, objectives and targets. JSIF may also conduct a number of supporting audits throughout the year to promote awareness and continued environmental compliance. These audits may relate to among others, audits of different functional areas, specific procedures, specific systems e.g. EMS

These audits will form part of JSIF's standard operating procedure and programmes to be carried out by JSIF's Internal Auditors as per international auditing guidelines and practices. As referenced in the Operations Manual, Financial Management and Audit Procedures will now include EMS Audits.

In addition, JSIF's EMS Team will conduct system audits or reviews of the EMS as per ISO 19011. This procedure is outlined below.

Scheduling an Audit

The Systems Operation and Environment Manager will prepare the internal Audit Schedule at the start of each year. The existence of an audit schedule will serve as a guide to relevant persons on the timing of audits. The EMS Review Schedule will be established and updated by the EO, while the official Internal Audit will be carried out by the Internal Auditors. The EMS Team will conduct the EMS review. An auditor must not audit work they conduct themselves to ensure objectivity and impartiality.

Audit Notification

The Systems Operation and Environment Manager shall issue the Audit Schedule to the Managers with responsibility for the different functional areas. The Managers must notify the relevant members of staff referred to on the

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Schedule. The Systems Operation and Environment Manager may also send the Audit Schedule directly to the EMS Audit Team.

EMS Audit Team

The composition of the Audit Team will be decided by the Systems Operation and Environment Manager. All internal audits will be conducted by suitably qualified internal and/or external individuals which have undertaken Internal Auditor' training as a minimum. The team will consist of a Lead Auditor, who will be selected based on auditing competence and experience specific to the nature of the audit. The Lead Auditor must have either undertaken 'Lead Auditor' training or have at least five (5) years of EMS auditing experience. Non-EMS auditors, for example members of the JSIF's Internal Audit Department should have at least three years of auditing experience and received the JSIF's EMS sensitization training in order to conduct independent audit of the EMS. In other words, all Audit Team members must be competent in auditing and therefore are aware of the benefits of building their own scope for each audit by referring to the EMS Practices and procedures, and policies; environmental aspects; objectives and targets; previous non-conformities or opportunities for improvement; and ISO 14001:2015 clauses. The internal auditors will be provided sensitization training on the Laws applicable to the EMS in order to improve competence on auditing compliance obligations.

Nature of Audits

JSIF's EMS Audit Team may choose to audit the entire system, elements thereof, functional areas or processes. This will ensure that all facets of the system are checked to ensure compliance with legal and other requirements as well as conformance with the policies and objectives as set in the EMS.

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Internal Audit	Officer	

Conducting the Audit

The EMS audit will be conducted in accordance with EMS Audit Guidelines / Protocol EMS-E-WI-IA-"ddmmyyyy" and ISO 19011:2002 EMS-E-RD-ISOAUD-"10012002". As indicated earlier, an auditor must not audit work they conduct themselves to ensure objectivity and impartiality. The auditors shall develop a define set of criteria against which the audit will be done.

Reporting

The Lead Auditor will prepare the audit report. Reports generated from an audit will be sent to the Functional Managers and passed to relevant Officers for action. In the case of EMS audits, issues identified will be addressed as per NCPA Procedure - EMS-I-PR-NCPA-24072008. The results of the audit will be presented to the Management System Review Committee once per year.

Actions Related to Findings

The findings reported by the Audit Team will be communicated to the Functional Managers. The Managers are responsible for ensuring that identified issues are addressed within specified time frame. Corrective Action Report will be developed for non-conformities identified during the audit. A root cause analysis will be conducted for the non-conformities by the auditors, environmental officer or the Systems Operation and Environment Manager (SOEM). The EO or the SOEM will make recommendations for corrective actions.

A monthly evaluation of the effectiveness of the corrective actions will be carried out by the EO and the necessary report prepared and submitted to the SOEM.

5.0 RESPONSIBILITIES

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The Lead Auditor: has the responsibility for coordinating the Audit Team in the execution of the audit. The Lead Auditor will collate the audit report and submit the document to the Systems Operation and Environment Manager.

The Internal Auditor: has responsibility for conducting all JSIF's audits including EMS Internal audits in accordance with international auditing principles. The auditor will notify the relevant persons of the details of his/her internal audits and schedule the time of the audit. The internal auditor must submit audit findings in the prescribed report format to the Lead Auditor for collation.

The Systems Operation and Environment Manager: has responsibility for scheduling and notifying functional managers and internal auditors the scheduled audits. S/He is also responsible for updating the EMS Action Tracking System.

The Environmental Officer: has the responsibility for scheduling EMS reviews.

The EMS Team: has responsibility for EMS Team Reviews.

The Functional Managers: are responsible for acting on the findings of the audit and communicating as per Communication Procedure **EMS-I-PR-COMM-24072008.**

6.0 RECORDS

Audit Report AUD-I-REPS-EMS-"ddmmyyyy" incl. CARs (EMS)

7.0 ATTACHMENTS / APPENDICES

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None

8.0 RECORD RETENTION TIME

Seven years

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Management System Review			

1.0 PURPOSE

The purpose of this procedure is to define the minimum requirements for conducting management reviews of JSIF's EMS. This review will be conducted in order to ensure effectiveness, sustainability and adequacy of EMS with a view to guide the process of continual improvement.

2.0 SCOPE

This procedure encompasses all meetings conducted by Top Management to partially or wholly assess the performance of the Environmental Management System (EMS), analyze trends and to revise or establish new policies, programmes and procedures to facilitate continual improvement.

3.0 REFERENCE DOCUMENTS

Minutes from previous Management System Review Meeting EMS-I-REC-MINS-"ddmmyyyy"

EMS Procedures Manual - EMS-I-PRMAN-01072008

ISO 14001:2004 Standard EMS-E-RD-ISOENV-10012005

JSIF'S Environmental Policy EMS-I-RD-ENVPOL-24072008

4.0 REQUIREMENTS

Top management must periodically review the management system, to ensure its continued suitability, adequacy and effectiveness. The review process must ensure that the necessary information is collected including communications from interested parties to allow top management to carry out this evaluation and assess opportunities for improvement. This review shall be documented.

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Top Management must address the possible need for changes to direction, policy, objectives and other elements of the EMS taking into consideration: status of actions from previous MSRs, environmental performance, audit results, changing internal and external circumstances, compliance obligations, environmental aspects and risks associated with threats and opportunities, communication from external parties, adequacy of resources required, and the opportunities for continual improvement.

Outputs from the management system review shall be clearly defined and shall include conclusion of the suitability, adequacy and effectiveness of the EMS; decision on continual improvement; any need for changes to the EMS; actions if needed, when objectives are not met; and any implications for the strategic direction of the organization.

The Organization shall retain documented evidence of the results of the MSR.

Management System Review Meeting (MSRM) Participants, Quorum and

Frequency

The Managing Director or a Designate will chair the MSRM. The MSRM will be convened only when there is a quorum. A minimum of three (3) members of Top Management are required for a quorum. If members of the quorum are called out of the meeting for urgent business, a decision related to the continuation of the meeting will be made by the chair.

An MSRM will be held annually, to review the suitability, adequacy, and effectiveness of the EMS relative to targets and objectives and the other factors mentioned in the Requirements Section of this Chapter. Aspects of the management system review may be incorporated as agenda items in routine

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meetings, and reinforced in MSRM. All elements of the EMS must be covered during the course of the year.

The EMS Manager shall provide an information package to each of the management review participants at least one week in advance of the scheduled meetings.

The following list outlines the scope of the review requirements (inputs):

(a) Review the status of actions from the prior meeting

(1) **Direction from the Top**

Review the environmental policy for continued relevance to current activities and business environment. Identify any gaps, concerns and recommendations.

(2) Performance

Review the JSIF performance metrics in terms of results and adequacy.

(3) Commitments and Requirements

List and discuss any significant changes to regulatory or other requirements that are relevant to the business.

(4) Review Business Priorities and Risks

Confirm that a review of changes to systems, processes, activities, regulations, or procedures that could result in a change to business risks and priorities has been completed. Review the results.

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- (i) Present the results of a review of the ranking of business risks.
- (ii) Review the significant business risks heat map.
- (iii) Discuss any emerging risks/business priorities.

 Document same.

(5) Review Progress Towards Achieving Objectives and Targets

- (i) Evaluate the success of programs that are underway to achieve objectives and targets.
- (ii) Review progress relative to the target.
- (iii) Review program milestones.
- (iv) Review corrective actions for programs that fail to meet target.
- (v) Take into account the legal and other requirements and relative business risks and priorities when setting objectives and targets.

(6) Operational Controls

Conclude whether operational controls are effective in achieving desired performance, and the broad expectations set forth in the policy.

(7) Compliance Audits/Assessments and reviews

- (i) Discuss a summary of the results of compliance audits completed since last addressed at a management review meeting.
- (ii) Discuss the status of the audits and associated corrective actions.
- (8) Management System Audits

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- (i) Discuss the results of any internal EMS audit/assessment/review conducted.
- (ii) Discuss the results of any external EMS audit/assessment/review conducted.
- (iii) Did the audits identify any trends in non-conformance? If so, discuss.
- (iv) Discuss any preventative actions that have been taken.
- (v) Discuss the status of the audits corrective actions.
- (vi) Review overall status of audit program, is it onschedule?

(9) Communication from Interested Parties

- (i) Discuss customer feedback & satisfaction.
- (ii) Discuss any concerns or complaints raised by stakeholders since last management review meeting. Discuss actions.
- (iii) Summarize any significant events, charges, orders etc. that have arisen since the last management review meeting.
- (iv) Determine whether there are any trends in the stakeholder concerns or significant events.
- (v) Discuss how the concerns/issues have been addressed and the current status.

(10) Status of Competence Awareness and Training

- (i) Discuss the current status of training initiatives that could impact on core competencies.
- (ii) Discuss the percentage of staff that are up to date on all relevant training. Discuss corrective actions associated

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with ensuring that the rate of training completion is improved to target levels.

(11) Status of Corrective and Preventive Actions

Summarize the status of the corrective action program in terms of trends, preventive actions, corrective action effectiveness, number of Non Conformities related to focal areas of the business (specifically ones related to systemic deficiencies, core business priorities etc), and the status of EMS related deficiencies. Discuss any outstanding issues.

(12) Emergency Preparedness and Response Plan

- (i) Review any nonconformities related to emergency response that were identified during audits or otherwise.
- (ii) Review the status of associated corrective actions.
- (iii) Have drills been conducted? Have drill results been reviewed with relevant staff?

(13) Checking

- (i) Has monitoring and measuring equipment been calibrated, verified and records maintained?
- (ii) Are there procedures to measure and monitor key characteristics of JSIF operations that could have significant impact on the business?

(14) Overall Effectiveness of JSIF Management System

Review any recommendations for improvement provided by the Management Representative.

Consider the effectiveness of the Management System in managing performance. Specifically consider;

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- (i) Is the system, as implemented, suitable for the JSIF business?
- (ii) Is there a need to change accountabilities and resource allocations?
- (iii) Are adequate resources available to implement maintain and improve the management system?
- (iv) Are there any recommendations to change the management system?

(15) Future Considerations

Discuss any opportunities for continual improvement of the management system. Consider future activities, pending changes to stakeholder need, regulatory and business climate.

The outputs from the management review shall include any decisions and actions related to:

- Changes to direction from top management, objectives and targets, resource needs and other EMS elements consistent with continual improvement.
- Improvement of the effectiveness of the management system and its processes.
- Improvement of activities related to good environmental management.

Management System Review Meeting - Follow-up

The Chair of MSRM shall assign responsibility for recording the minutes. This report along with the agenda and minutes of meeting, and the review package constitute the record of the review. The EMS Manager shall be responsible for ensuring that actions are followed up in a timely manner. Functional Managers

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shall communicate to the appropriate staff the decisions or changes that will impact on their job functions.

5.0 RESPONSIBILITIES

Managing Director: To ensure that MSRM is held as scheduled.

Top Management: Evaluate EMS and form conclusions related to suitability, adequacy and effectiveness. Make recommendations for improvement and provide resources to enable continual improvement.

Systems Operation and Environment Manager: Designated to present the performance of the EMS to Top Management.

EMS Manager: Ensures that information packages are prepared and circulated, and follows up on action items.

Functional Managers: Appoint delegates based on issues to be discussed at the MSRM.

6.0 RECORDS

Minutes of MSRM **EMS-I-REC-MINS-"ddmmyyyy"** – Produced by Convener/Chair

7.0 ATTACHMENTS / APPENDICES

None

8.0 RECORD RETENTION TIME

Seven years

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Non-Conformity and Corrective Action			

1.0 PURPOSE

This procedure deals with identification of actual and potential non-conformity (ies) and the process for taking corrective actions.

2.0 SCOPE

The procedure covers non-conformities and corrective actions related to all JSIF administrative and operational activities.

3.0 REFERENCE DOCUMENTS

JSIF Operations Manual JSIF-I-MAN-OPSMAN-28032006

JSIF Project Appraisal Reports "DEPT"-I-REPS-APP-"PROJECTNAME""ddmmyyyy"

EMS Procedures Manual - EMS-I-PRMAN-01072008

4.0 REQUIREMENTS

Non-conformity

- Non-conformities will be identified through EMS team reviews and audits as well as through site assessments.
- When a non-conformity with the EMS procedures and the requirements of ISO 14001:2015 is identified, the person that identified the non-conformity is required to report it to the Systems Operation

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and Environment Manager or Environmental Officer for logging and corrective action. The non-conformity may also be reported to the project manager.

- Where a non-conformity is identified, actions will be taken immediately to mitigate against any or further environmental impacts.
- Where there are environmental consequence as a result of nonconformities, appropriate measures will be identified and implemented to remedy the situation. The extent of the damages will be assessed where applicable and the appropriate compensation provided to restore conditions to its existing state or better.

Evaluation of Non-Conformity

- When a non-conformity is identified, the Systems Operation and Environment Manager or the EO will conduct a review of the nonconformity to determine the root cause and to consider the need for action to eliminate the cause(s).
- Where a non-conformity results in or has the potential to cause a significant negative impact on the environment, a root cause analysis will be done. Where any non-conformity is recorded repeatedly, a root cause analysis will be done.
- An assessment of all non-conformities for the period under review will also be done to determine if the particular non-conformity is pervasive

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across the JSIF's project or if there is potential for the non-conformity to reoccur.

• The JSIF will also conduct a trend analysis for all non-conformities and a root cause analysis will be done if any of the areas is showing a disproportionately high level of non-conformity.

Corrective Action

- Corrective actions will be proportionate to the significance or severity of the non-conformity.
- A 'quick fix' solution will be applied to non-conformities that do not result in a significant negative impact on the environment or do not represent a trend.
- A Corrective Action Report (CAR) is completed by the responsible officer for each identified non-conformity in accordance with the procedures within the scope of the EMS.
- A CAR will only be prepared for non-conformities that may result in immediate and/or significant environmental impact or impact the EMS significantly. Also, if a minor non-conformity is detected on three consecutive inspections, then a CAR will be recorded.
- Any breach of the ISO 14001:2015 standard will be considered a major non-conformity requiring the preparation of a CAR.

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- A root cause analysis will be conducted for each non-conformity that requires a CAR.
- Where the same non-conformity is common across projects, a system analysis will be conducted and corrective actions taken where necessary.
- Non conformities that require a root cause analysis must be closed out within one month. All other non-conformities will be closed out within a week.
- In extra-ordinary circumstances where investigations or efforts to correct the situation require more than one month, the responsible manager in consultation with his team may apply a longer time frame for correction.
- The Functional Manager shall verify the contents of the CAR.
- Where the CAR requires change(s) to a procedure or work instruction, the responsible officer will make the adjustment (s) in accordance with the Document and Record Control Procedure EMS-I-PR-DOCCTRL-24072008.
- The modified documents will be signed off by the Functional Manager.
- A review of the effectiveness of the corrective actions will be done for at least two months. However, this period may be shorter depending

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on the non-conformity. The evaluation of effectiveness will be recorded as part of the CAR, (EMS-I-REC-CAR-ddmmyyyy).

5.0 RESPONSIBILITIES

All Staff – Report all instances of non-conformity to Responsible Officer.

Functional Managers: Ensure that all staff conforms to procedures and that non-conformities are dealt with in a timely manner. They will also ensure that corrective and preventive actions are periodically followed up and CARs closed out.

Responsible Officers - Report non-conformity, practice corrective and preventive actions, maintain records, conduct root cause analysis and close out CARs.

Environmental Officer – Conduct monitoring of corrective action effectiveness and update the records. Perform system analysis.

Systems Operation and Environment Manager – Ensure that root cause and system analyses are conducted.

Senior Management- Conduct annual Management Review. Make resources available to take corrective actions for applicable non-conformities and to remedy any consequences as a result of the non-conformities.

EMS Team- Conduct quarterly EMS reviews

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6.0 RECORDS

EMS Review Report **EMS-I-REC-EMSTREP-"ddmmyyy"** – produced by EMS Team

Corrective Action Forms – EMS-I-REC-CAR-"ddmmyyyy" – completed by responsible officer

Management Review Minutes **EMS-I-REC-MINS-"ddmmyyyy"** – produced by Management Team

Internal Audit Reports **AUD-I-REPS-EMS-"ddmmyyyy"**– produced by Internal Auditor

7.0 ATTACHMENTS / APPENDICES

Corrective Action Report (CAR) EMS-I-REC-CAR-"ddmmyyyy"

8.0 RECORD RETENTION TIME

Seven years

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Date of Audit: 00 / 00 / 0000 (dd/mm/yyyy)	Type of Audit: External Audit (Observation, Schedu	led Audit etc.)				
Auditor: Name of Auditor Department / Functional Area: Name of Department Non-conformity / Opportunity for Improvement:						
Description of identified non-conformity or oppor	rtunity for improvement					
Name of Auditee: Name of Auditee or projects						
Signature of Auditor:	Department: Name of Departmen	nt				
Analysis Conducted by:	Department:					
Corrective Action: What should be done to remady or correct the not	appropriety					
What should be done to remedy or correct the nor	1-Comorning					
Date Completed: St	upervisor / Manager:					
Evaluation of Effectiveness of corrective Actio						

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	Evaluation Questions	Y/N/NA	Evaluator's Comments	
	Is the corrective action			
	implemented fully?			
	Did the action address the root			
	cause of the issue?			
	Is there evidence to show that the			
	cause of the issue is removed or			
	significantly reduced?			
	Based on observation or record			
_	have there been improvement in			
Date:	environmental performance since			Evaluator:
	taking the corrective action?			
	Have all the applicable persons			
	aware of the corrective actions			
	and how to maintain them?			
	Are there any environmental			
	issues or otherwise developed as a			
	result of implementation of the			
	corrective actions?			
	Has the problem reoccurred?			
	Forbation Operations		D d	
	Evaluation Questions Is the corrective action	Y/N/NA	Evaluator's Comments	
	1 1 1 1 1 0			
	Did the action address the root		The state of the s	
	cause of the issue?			
	Is there evidence to show that the			
	cause of the issue is removed or			
	significantly reduced?			
	Based on observation or record		//	
	have there been improvement in			
	environmental performance since			
				Evaluator:
Date:	taking the corrective action?			E variation .
Date:	Have all the applicable persons			Evaluator:
Date:				D'unautori

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	Are there any environmental issues or otherwise developed as a result of implementation of the corrective actions? Has the problem reoccurred?				
	Evaluation Questions	Y/N/NA	Evaluator's Co	mments	
Date:	Is the corrective action implemented fully? Did the action address the root cause of the issue? Is there evidence to show that the cause of the issue is removed or significantly reduced? Based on observation or record have there been improvement in environmental performance since taking the corrective action? Have all the applicable persons aware of the corrective actions and how to maintain them? Are there any environmental issues or otherwise developed as a result of implementation of the corrective actions?	VIR (Evaluator:
Date of Clo Evaluator: Signature o		5			
Confirmed Signature o	l by Auditor f Auditor:				

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Jamaica Social Investment Fund			No. EMS-
OUR RESPONSIBILITY			I-PR-
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10.3 Continual Improvement

The JSIF will take all necessary measures within its control to ensure that the EMS is sustainable in its suitability, adequacy and effectiveness in protecting and preserving the environment for existing and future generations. The JSIF will continue to improve environmental performance by reviewing and updating environmental procedures, adapting new environmentally sustainable technologies, train and employ qualified staff, continually engage and partner with interested parties, identify and seek to meet the needs of interested parties and by implementing environmental interventions in targeted poor and underserved communities to positively impact the lives of the less fortunate. The JSIF will continue to set new objectives and targets and establish the required strategies to accomplish success. We will continue to subject our environmental management procedures and practices to assessment by our funding partners and where there are sound recommendations for improvement we will adopt them. The JSIF is committed to change the poor living conditions in underserved communities and therefore, we will seek to channel applicable environmental information to our citizens through school and community programmes with a view to change knowledge, attitude, perception and behaviour with respect to the environment.

SUSTAINABILITY

THE FOLLOWING LINK LEADS
TO THE LIST OF DOCUMENTS
THAT FORM PART OF JSIF'S
ENVIRONMENTAL
MANAGEMENT SYSTEM



This is an "UNCONTROLLED" DOCUMENT when PRINTED

OUR RESPONSIBILITY