SITE WASTE MANAGEMENT PLAN

A.1 PESTCIDES

Pesticides include herbicides, insecticides, fungicides rodenticides, and pesticides, surface disinfectants, animal repellent and insect repellent. Should the Contractor find it necessary to use pesticides in work areas of this contract, he shall submit his plan for such use to UNDP through its named focal point for written approval. The Contractor shall read and comply with all labelling requirements when using pesticides. Use of pesticides shall be in accordance with internationally approved pesticides and use of any prohibited pesticides shall not be allowed under this contract. All containers of the pesticides shall be properly disposed of after use, in accordance with manufacturer's disposal instructions.

A.2 CLEAN-UP AND DISPOSAL OF WASTE MATERIALS

A.2.1 Clean – Up

The Contractor shall, at all times keep the construction area, including storage areas used free from accumulation of waste material or rubbish. All waste water and sewerage from office, residential and mobile camps shall be piped to soak pits or other disposal areas constructed in accordance with local government regulations, and where and when regulations require it the Contractor shall obtain a permit or other appropriate documentation approving the disposal methods used. All used fuels, oils, other plant or vehicle fluids, and old tyres and tubes shall be collected to a central disposal area on a daily basis and disposed of in a manner approved by the Project Engineer.

Servicing of plant equipment and vehicles shall whenever possible be carried out at a workshop area. This workshop area shall be equipped with secure storage areas for fuels, oils and other fluids and constructed in such a way as to contain any spillage, which may occur, and similar storage where fluids can be stored securely prior to their disposal. When servicing of plant, equipment and vehicles is carried out away from the workshop area it shall be done at locations and in such a manner as to avoid spillage and contamination of streams and other drainage courses. Any spillage shall be cleaned up by either burning in place or collecting the contaminated soils and burning them at the central disposal area, all to the satisfaction of the Project Engineer.

Prior to the completion of the work, the Contractor shall remove from the vicinity of the work all facilities, buildings, rubbish, unused materials, concrete forms and other like material, belonging to him or used under his directions during construction. All work areas shall be graded and left in a neat manner conforming to the natural appearance of the landscape as it was before disturbance. Any residue deposited on the ground from washing out truck mixers,

agitating trucks or any other similar concrete operations shall be buried or cleaned up in a manner acceptable to the Project Engineer.

In the event of the Contractor's failure to perform the above work, the work may be performed by the Employer at the expense of the Contractor, and his surety or sureties shall be liable therefore.

A.2.2 Disposal of Waste Material

(i) General

Waste materials including, but not restricted to refuse, garbage, sanitary wastes industrial wastes and oil and other petroleum products, shall be disposed of by the Contractor. Disposal of combustible materials shall be by burying, where burial of such materials is approved by the Project Engineer by burning, where burning of approved materials is permitted; or by removal from the construction area. Disposal of non-combustible materials shall be by burying where burial of such materials is approved by the Project Engineer or by removal from the construction area. Waste materials removed from the construction area shall be dumped at an approved dump

ii. Disposal of Material by Burying

Only materials approved by the Project Engineer may be buried. Burial shall be in pits and the location, size and depth of which shall be approved by the Project Engineer. The pits shall be covered by at least 0.6 metre of earth material prior to abandonment.

ii. Disposal of Material by Burning

All materials to be burned shall be piled in designated burning areas in such a manner as will cause the least fire hazards. Burning shall be through and complete and all charred pieces remaining after burning, except for scattered small pieces, shall be removed from the construction area and disposed of as otherwise provided in this Clause.

The Contractor shall at all times, take special precautions to prevent fire from spreading beyond the piles being burned and shall be liable for any damage caused by this burning operations. The Contractor shall have available, at all times, suitable equipment and supplies for use in preventing and suppressing fires and shall be subject to all laws and regulations locally applicable for pre-suppression, suppression and prevention of fires

iii. Disposal of Material by Removal

Material to be disposed of by removal from the construction area shall be removed from the area prior to the completion of the work under these specifications. All materials removed shall become the property of the Contractor.

Materials to be disposed of by dumping shall be hauled to an approved dump. It shall be the responsibility of the Contractor to make any arrangements of such dumping. Any fees for charges required to be paid for dumping of materials shall be paid by the Contractor and shall be included in the prices tendered in the Bill of Quantities for other work.

A.2.3 Water Pollution

The Contractor shall observe the requirements to avoid the pollution of watercourses and ground water. Sanitary facilities for all site workers convenient to the working sites shall be provided to enable environmentally sensitive disposal of the waste. The storage of fuel and oil for the works operations shall be arranged in working sites, refuelling of all plant and equipment and servicing practices shall be arranged to prevent the uncontrolled spilling of any oil based products.

Mitigation measures shall include drip trays, working on paved surfaces with waste collection arrangements and the provision of oil absorbing material for spills that can be subsequently disposed safely by burning.

SITE WASTE MANAGEMENT PLAN TABLE

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means: (c) = Construction (o) = operation	Recommended frequency of monitoring
Water pollution	• Proper disposal of construction debris • Proper handling, storage and disposal of oil and oil wastes • Proper disposal of wastewater /sewerage at Contractor's workmen's camps	District Council Supervising Engineer and Contractor	Contractor	(c) inspection	(c) daily
Oil pollution	Construct parking bays at larger trading centers for heavy vehicles. • Proper storage, handling and disposal of oil and oil wastes • Maintain plant and equipment • Maintenance of construction vehicles should be carried out in the Contractor's camp	Design Consultant Supervising Engineer and Contractor Supervising Engineer and Contractor	Contractor	(c) Inspection (o) routine maintenance	(c) during construction and on completion (o) once in every month (c) daily
Workmanship	• locate camp in terminal town • provide proper sanitation facilities on site • Provide proper	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) daily

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means: (c) = Construction (o) = operation	Recommended frequency of monitoring
	solid waste disposal facilities				
Construction waste	• Proper disposal of construction wastes including oil, solid wastes and debris	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) weekly
Demobilisation	• Clean up site • Remove all debris • Remove to original condition	Supervising Engineer and Contractor	Contractor	(c) inspection and certificate of completion	(c) on completion of road construction works
Public Health and Occupational safety	• Proper disposal of solid and sanitary waste at camps • Design and locate pit latrines prudently • Have communal ablution facilities	Supervising Engineer and Contractor District Council/Ministry of Health	Contractor District Council/ Ministry of Health	(c) Inspection (o) Independent study	(c) daily (o) once in 6 months

Site Waste Management Plan (SWMP)

[Insert Company Logo Here]

1. Project Details

Project Name:				
Site Address:				
Project Type:	☐	New Construction	☐	Renovation
	☐	Other (Specify):		
Project Scope:				
Project Start:		Project Finish:		
Contact Details (Waste Management Champion)				
Contact Name:				
Company Name:				
Phone:				
Email:				

2. The Purpose of this Site Waste Management Plan

✓To encourage sustainable use of materials
✓To protection the environment and society
✓To reduce waste and disposal costs
✓To be more efficient and cost-effective with materials
✓Improved workplace and public safety
✓Reduced legal and financial liability
✓Improved community trust and relations

3. Applicable Site Waste Management Hierarchy

Site waste management practices to be prioritised in the following order:

✓Reduction
✓Re-use
✓Recycling
✓Recovery (use as fuel source)
✓Residual Disposal (Clean-fill/Landfill/Hazardous Waste)

4. SWMP Targets:
(enter as applicable)

Waste Measure	**Target**	**Actual**
Project waste by weight (kg) less than:	(kg)	(kg)
Project waste by volume (m^3) less than:	(m^3)	(m^3)
Project waste per sq. meter of floor area less than:	(kg)	(kg)
	(m^3)	(m^3)
Project Recycling Rate by Volume (%):		
Other:		

5. Estimated Types and Amounts of Waste Generated

(enter approximations as applicable)

Type of Waste Material	Estimated Volume (m^3)	% Volume	Estimated Weight (kg)	% Weight
Plasterboard				
Timber – Treated or Engineered				
Timber – Untreated				
Packaging				
Insulation				
Metals				
Concrete & Masonry				
Hazardous				
Other				
TOTAL				

Notes:

For guidance on waste composition refer to the '**ITM Building Guide: How to Minimise Construction Waste**'

6. Waste Types and Minimization Actions

Waste Source	Actions to Minimize Waste	Tick as applicable
Design	Designers and customers encouraged to use standard product dimensions (e.g. 600 or 1200mm increments, standard door and window sizes and prefabricated products)	
	Prefabricated products used as much as possible to reduce onsite handling, reworking and offcuts.	
	Untreated timber specified in all applications where this is allowed to encourage future recycling and lower environmental impact	
	Detailed plans and instructions provided to estimators, workers and contractors to improve accuracy of material take-offs and avoid reworking.	
Material Selection	Materials are selected based on affordability, durability, low maintenance and low environmental impact (including being recyclable or including recycled content)	
Material Estimates	Waste allowances for material quantities reviewed and minimised	
	Credits requested from suppliers for unused products in good condition.	
Delivery & Storage	Deliveries scheduled on a 'just in time' (JIT) basis where practical to avoid onsite storage and damage	
	Products susceptible to onsite damage to be stored securely and covered where necessary	
Unauthorised Dumping	Skips on site only when absolutely necessary	
	Waste bins kept away from public view and access whenever possible	
	Lockable skip bins used on site	
	Recycling sign prominently displayed on site using recycling symbol and stating 'We are recycling on this site. NO UNAUTHORISED DUMPING' or similar	
General Waste	Incentives in place for workers and subcontractors to achieve SWMP targets	
	Excess materials stored for re-use on future projects	
	Valuable or useful excess materials such as paint, floor coverings, fixtures and fittings neatly stored for the homeowner's future use.	
	Excess re-usable product can be sold	

	Excess re-usable materials can be given away to others, offered 'FREE' kerbside or donated to non-profit organisations, such as Habitat for Humanity Restorers	
	A dedicated rubbish bin or bag is provided for workers lunch wrappers, food scraps etc. to avoid skip contamination and a domestic recycling bin for bottles, cans, newspapers, magazines etc.	
	Waste is compacted, flat stacked as much as possible to reduce volume in waste skips.	
	Waste materials sorted onsite for possible re-use and recycling using a fenced off designated waste storage area. This avoids a skip on site until absolutely necessary. Suggested re-use and recycling piles in the order they normally occur are: concrete & masonry, steel, timber products, plastics, insulation, plasterboard, paint tins and cardboard.	
Waste Management Knowledge	Site waste management plan distributed to all workers and subcontractors as part of tender document, contracts and site induction prior to commencing work onsite.	
	Progress towards SWMP targets communicated to relevant site visitors, workers and subcontractors.	
Waste Disposal Services	Only preferred waste collection and recycling operators to be used for project waste disposal services (Preferred waste operators to be jointly approved)	
Plasterboard	Plasterboard waste must be sorted, covered or stored in a sheltered place such as the garage until collection.	
	Onsite recycling - For onsite disposal use clean unpainted standard plasterboard only (excluding wet area board and bracing board which may contain wax or fiberglass additives). Pulverize to pieces smaller than 2cm diameter and place below topsoil to accelerate the breakdown of the product. Spread evenly and apply at a rate of up to 5kg per square metre (standard sheet is approx. 20kg). Avoid wet areas as prolonged anaerobic conditions can cause possible sulphide gas formation. Check compliance with the local territorial authority beforehand.	
	Waste deferral - Clean offcuts can be placed within internal wall spaces, providing the opportunity to recycle them at the end of the homes useful life and also some noise dampening qualities. Offcuts should be cut down or scored and folded 'concertina' style up to four sheets maximum to allow for future wiring. Care must be taken to select wall cavities without insulation, wiring, plumbing or HVAC ducts such as wardrobes, hot water cupboards, stairwells or garages. Place pieces securely to avoid rattling and consider the sequence of lining rooms to ensure vacant walls are available as each room is completed.	
Timber – Untreated	Sorted onsite and re-used where possible	
	Sorted offsite and recycled where possible	

Timber – Treated or Engineered	Sorted onsite and re-used where possible	
Concrete & Masonry	Small quantities of inert concrete & masonry waste to be used on site for landscaping, backfill, under walkways or driveways.	
	A hard-fill skip is to be used so concrete & masonry can be recycled	
Packaging	Suppliers asked to limit packaging.	
	Suppliers to unpack materials and take back as much packaging as possible for recycling.	
	Where domestic recycling operates in the area, cardboard is stacked on the kerbside ready for collection or dropped off at local recycling depots.	
Metals	If quantities sufficient, metal waste is to be sorted on site and sold to a local scrap metal operation.	
	Skip company to collect mixed waste skip and sort any metal offsite for recycling.	
Insulation	Excess insulation to be carefully placed in the ceiling space, especially at perimeters or any vacant wall cavities or gaps.	
	Larger polystyrene sheets to be used under concrete floors and driveways or as a protective lining behind retaining walls or underground walls.	
	Installers are to remove all surplus insulation for re-use and/or recycling.	
Hazardous	Paints, stains, solvents, adhesives, sealants, treatments etc. are to be collected for re-use on further projects	
	Excess paint and stain can be recycled. Contact supplier for options.	
	Water runoff from sediment, unset concrete etc. should be diverted from waterways and stormwater drains and allowed to settle onsite (if necessary, use channels or collection ponds, hay bales, filter fabrics etc. to help filter and settle any runoff).	
	Hazardous substances such as liquid paints, stains, timber treatments, and solvents contained carefully onsite and disposed of correctly.	
	Paint contractors to provide proof of proper waste disposal.	
	Paints, stains, caulks and solvents used where possible to minimise hazardous wastes.	
	Hazardous waste disposal operators listed on this SWMP.	

Waste Source	Actions to Minimize Waste	Tick as applicable
Other (Add as required):		

7. Preferred Waste Disposal and Recycling Operations

Name	Address	Phone	Contact Name
Waste Collection (Skip Bin) Companies			
Material Recovery Facilities (MRF's)			
Local Recycling Depots/Transfer Stations			

Landfill & Clean-fill Operations			
Hazardous Waste Disposal			

8. SITE WASTE MANAGEMENT PLAN ENDORSEMENT

Document author	Print Name: …… Signature: …… Date: ……
Engineer / Waste Manager	Print Name: …… Signature: …… Date: ……
Declaration	
The Project Manager will take all reasonable steps to ensure that: a. All waste from the project is dealt with in accordance with Section 7 & 8. b. All relevant persons (contractors, site engineers, etc.) are made aware of the location and requirements of this PWMP and any supporting documentation.	
Project Manager	Print Name: …… Signature: …… Date: ……

9. WASTE FORECAST

Project Manager to complete				*Waste Engineer to complete*				
Waste description	**Waste origin**	**Volume-total for project (m3)**	**Mass – total for project (te)**	**Classification (rad & non-rad)**	**Characterisation complete (rad & non-rad)**	**Waste route**	**Clearance required Yes/No/ Comment)**	**Issues**
The material(s). Unless obvious, state if not a solid.	*What or where it came from.*	*Initial best estimate & updated as info improves.*	*Initial best estimate & updated as info improves.*	*Include both the rad & non-rad classification.*	*Status of characterisation activity & sampling undertaken.*	*Specify the route or possible routes.*	*Yes/No. Or commentary, especially where uncertainty exists.*	*Identify any actions, issues, opportunities, warnings or other helpful information.*
< For larger projects, use these heading bars to divide the table by specific locations e.g. the maintenance bay >								
< For larger projects, use these heading bars to divide the table by specific locations e.g. the sub-change >								
< For larger projects, use these heading bars to divide the table by specific locations >								
< For larger projects, use these heading bars to divide the table by specific locations >								

10. WASTE ACCEPTANCE CRITERIA

NB: If anything falls outside of the SWMP scope, work should be temporarily halted and the SWMP revised.

Waste route	**Reduce, Reuse, Recycle or Dispose**	**Waste classification (rad & non-rad)**	**Sort, size reduction & segregation requirements**	**Packaging** (size, type, other requirements)	**Labelling**	**Storage**	**Special instructions**
These are the routes identified in the waste route column of the previous table	*Identify which option in the Waste Hierarchy has been adopted.*	*The broad rad and non-rad capabilities of the route.*	*Describe any specific requirements (e.g. size required to fit packaging or treatment route).*	*Packaging suitable for the route and type of waste (including any specific requirements).*	*Any specific labelling required for the route and waste type.*	*Any specific storage requirements for the route and waste type.*	*Accessing / ordering packaging or labels, hold points, repackaging, waste conditioning or particular aspects of WAC for the route.*
e.g. Metal Treatment	e.g. Recycle	e.g. LLW					
e.g. Compactable LLW to LLWR	e.g. Volume reduce/ Dispose	e.g. LLW					
e.g. Combustible - solids	e.g. Volume reduce/ Dispose	e.g. LLW					
e.g. Combustible - liquids	e.g. Volume reduce/ Dispose	e.g. LLW					
e.g. Hazardous VLLW landfill - asbestos	e.g. Dispose	e.g. VLLW					

Waste route	Reduce, Reuse, Recycle or Dispose	Waste classification (rad & non-rad)	Sort, size reduction & segregation requirements	Packaging (size, type, other requirements)	Labelling	Storage	Special instructions
e.g. Non-rad waste contractor (metal recycling)	e.g. recycle	e.g. Out of scope					
e.g. Non-rad waste contractor (combustible liquids)	e.g. Volume reduce/ Dispose	e.g. Out of scope					
e.g. Non-rad waste contractor – non-hazardous landfill	e.g. Dispose	e.g. Out of scope					

Other requirements
E.g. monitoring (sampling frequency, activity limits, probe type, etc.), maximum storage times or details of handover and location of handover point between project and waste personnel.

Note: LLW – Low Level Radioactive Waste
VLLW – Very Low Level Radioactive Waste

11. SWMP COMPLETION AND SIGN-OFF

Document author	Print Name: …… Signature: … …… Date: ……
Waste manager	Print Name: …… Signature: … …… Date: ……
Declaration	
The Project Manager can confirm that: a. All waste identified in this SWMP has been disposed/transferred in accordance with the waste acceptance criteria and in accordance with the relevant standards/directions in force at the time and **< *insert the name of your organisation* >**'s environmental permit and/or safety case. b. Actual waste disposals/transfers of waste identified in this SWMP can be demonstrated via the **< *insert the details of your waste tracking system or process* >** C……Key parts of Rad and Non-Rad waste processing have been carried out under the direction of a Environmental Affairs Department (EAD) for Waste Management.	
Project Manager	Print Name: …… Signature: … …… Date: ……