Utility Regulatory Authority

Republic of Maldives

DESALINATION PLANT REGISTRATION APPLICATION

Name of the Applicant:		**Date of Application:**		
Surveyed by:		**Surveyed Date:**		
1.0	**General Information**			
1.1	Location of the plant (Island/Resort Name)	Name of owner		
1.2	Area of plant site/building	Name of operator		
1.3	Number of consumers of desalinated water	Tel:	Fax:	Mobile:
1.4	No.of households: Population:	E-mail		
2.0	**Purpose of Desalination**			
2.1	For free distribution (for locals/staff)			
2.2	For free distribution (For tourists, expatriates,etc.)			
2.3	For selling water to Locals			
2.4	For selling water to Tourists, expatriates,etc..			
2.5	For industrial use			
2.6	For own use			
3.0	**Desalination Plant Information**			
3-1	Type of plant			
3-2	Manufactured Country			
3-3	Date of manufacture			
3-4	Plant Serial No:			
3-5	Plant Model No.			
3-6	Number of plants			
3-7	Total capacity (m3)			
3-8	Plant installed by			
3-9	Plant operated by			
3-10	Are the operators technically capable of operating the plant			
3-11	Chemicals used for disinfections			
3-12	Chemicals used for cleaning/maintenance			
3-13	How much chemicals are used			
3-14	How often chemicals are used			
4.0	**Water Intake and Brine Discharge (to be filled by registered permanent EIA consultant)**			
4-1	Type of intake (borehole or open sea)			
4-2	Type of water			
4-3	Location of intake (show on a scaled map)			
4-4	Location of the brine discharge (show on a scaled map)			
4-5	Capacity of the raw water collection tank (m3)			
4-6	Boreholes			
4-7	Depth of borehole			
4-8	Diameter of borehole			
4-9	Type of housing of the borehole			
5.0	**Type of filter**	**Number of filters**	**Micron Size**	
5.1	Sand Filters			
5.2	Cartridge Filters			
5.3	Bag Filters			

6.0	**Product Water Storage**				
6.1	Number of tanks				
6.2	Total Capacity				
6.3	Type of tank				
6.4	Type of disinfectant if any				
6.5	What are the parameters displayed in the plant meters				
6.6	Has there been any regular testing of water from laboratories				
6.7	In emergencies for how many days stored water can be used				
6.8	Has there been any cross connection in the plumbing				
7.0	**Groundwater Quality (to be filled by registered permanent EIA consultant)**				
7.1.0	**Ground water quality (from a certified laboratory)**	**Within RO plant facility**			
		Location -1	**Location -2**	**Location -3**	**Location - 4**
7.1.1	GPS coordinates				
7.1.2	Electrical Conductivity (µS/cm)				
7.1.3	Salinity (%)				
7.1.4	pH				
7.1.5	Temperature (˚C)				
7.1.6	Oil (Total Hydro Carbon) (mg/l)				
		For community and industrial needs			
7.2.0	**Product Water (from a certified laboratory)**	**Reference**	**Storage tank**	**Main kitchen**	**Staff room**
7.2.1	pH	6.5-8.5			
7.2.2	Temperature	25-30 ˚C			
7.2.3	Turbidity	0.0NTU			
7.2.4	Electrical Conductivity	<1000µS/cm			
7.2.5	Total Dissolved Solids (TDS)	<500mg/l			
7.2.6	Free Chlorine (if applicable)	0.2-0.5 mg/l			
7.2.7	Chloride	<200mg/l			
7.2.8	Boron	<0.3mg/l			
7.2.9	Copper	<1mg/l			
7.2.10	Flouride	0.1-1.5mg/l			
7.2.11	Iron	0.01-0.3mg/l			
7.2.12	Total hardness (Ca and Mg)	<150mg/l			
7.2.13	Iodine	0.01-0.3mg/l			
7.2.14	Nitrates	0.0 mg/l			
7.2.15	Nitrite	0.0 mg/l			
7.2.16	Ammonia	0.0 mg/l			
7.2.17	Phosphate	0.0 mg/l			
7.2.18	Sulphate	0.0 mg/l			
7.2.19	Sulphite	0.0 mg/l			
7.2.20	Total Coliform (cfu/100ml)	0/100ml			
7.2.21	Faecal Coliform (cfu/100ml)	0/100ml			
7.3.0	**Brine discharge location (from a certified laboratory)**	**Reference**	**Sample 1**	**Sample 2**	**Sample 3**
7.3.1	GPS coordinates				
7.3.2	pH	7.5-8.5			
7.3.3	Temperature(˚C)	25-30			
7.3.4	Electrical Conductivity (µS/cm)	35000 - 60000			
7.3.5	Salinity (%)	30-35%			
7.3.6	Dissolved Oxygen (mg/l)	4-6mg/l			
7.3.7	TDS (mg/l)	15000-26000			
7.3.8	Biological Oxygen Demand(mg/l)	<20			
7.3.9	Chemical Oxygen Demand(mg/l)	<20			

7.4.0	Intake Location (Borehole/Sea) (from a certified laboratory)	Reference	Sample 1	Sample 2	Sample 3
	Borehole Open Sea Lagoon				
7.4.1	GPS coordinates				
7.4.2	pH	7.5-8.5			
7.4.3	Temperature(˚C)	25-30			
7.4.4	Electrical Conductivity (µS/cm)	35000 - 60000			
7.4.5	Salinity (%)	30-35%			
7.4.6	Dissolved Oxygen (mg/l)	4-6mg/l			
7.4.7	TDS (mg/l)	15000-26000			
7.4.8	Total Coliform (cfu/100ml)	0/100ml			
7.4.9	Feacal Coliform(cfu/100ml)	0/100ml			
8.0	**Physical Parameters (to be filled by registered permanent EIA consultant)**	**Reference**	**Inside plant hous**	**Outside (within 1m**	**Outside (within 5m)**
8.1	Noise (dB)	<85dB			
8.2	Ocean surface currents at brine discharge location (attach map showing currents)				
9.0	**Water Quality Monitoring (to be filled by registered permanent EIA consultant)**	**YES**	**NO**	**Comments (if any)**	
9.1	Does the plant facility maintain RO plant operational and maintenance manuals?				
9.2	Is there in-house water quality testing facility?				
9.3	Is there any monitoring plan?				
9.4	Are there documented previous water quality reports?(attach copy of reports)				

CONSULTANT'S DECLARATION	
Here by I declare that all the information and data I have provided in this checklist is true and accurate to best of my ability and I take full responsibility. In case if EPA finds the information and data provided is false or inaccurate, EPA has the right to take actions against me under Environmental Impact Assessment Regulation 2007	
Name of EIA Consultant (permanent):	Consultant's Registration No:
Signature:	Date

PROPONENT'S DECLARATION	
I hereby declare that the information and data given in the checklist is true and accurate. In case if EPA finds the information in this checklist is false or inaccurate EPA has the right to reject the application. In case if EPA requires to inspect the facility, i will bear all the cost of inspection for a maximum of two inspectors from EPA, not exceeding two inspections in a year.	
Name of Developer:	Applicant's Name:
Date and Signature:	Date and Signature:

Note: GPS coordinates of all sampling locations and original test result sheets from a certified laboratory must be provided with the checklist. Absence of facility in the country will not exempt the proponent from providing the required water quality information. EIA decision statement is required only for NEW

	List of items to be submitted with the application form	Tick SR
1	Location map (Minimum A-3 size map showing locations of the plant, brine discharge location, intake location and sewage outfall locations)	
2	Photo representation along the brine discharge line and discharge zone within 5m from point of discharge	
3	Photo representation at the point of intake within 3 meter radius	
4	Photo representation of desalination plant facility	
5	Originals of all laboratory test reports	
6	Site specific scaled process flow diagram	
7	Proponents commitment letter for future monitoring	
8	Copy of resort operating license (Resorts/City hotels)	
9	Copy of Company Registration (Companies)	
	EIA decision statement (applicable only for new installations)	
10	Copy of Identity Card (Individuals)	
11	Administrative fee of MRF1000/- (non-refundable even if the application is being cancelled)	

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Received by: …… **Date of Registration: ……**

Received date: ……. **Registration No:. …….**