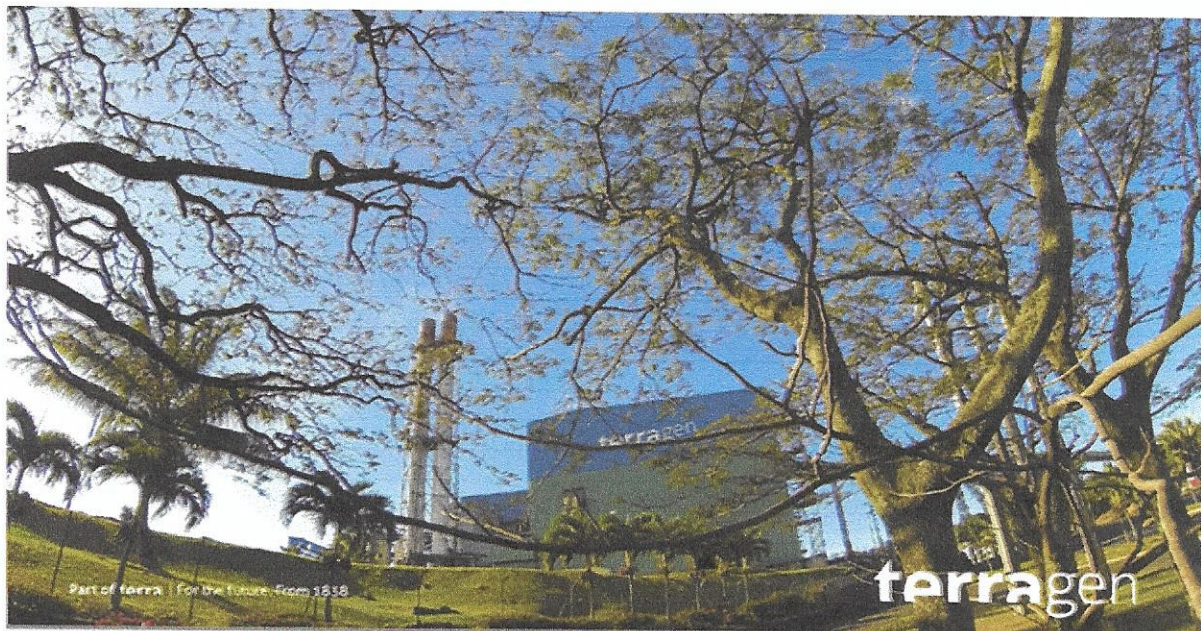


Waste Management Plan

terrigen



	NAME	POSITION	DATE	SIGNATURE
Prepared by	Dipeeka RAMGOOLAM	QSE Coordinator	30/10/2013	
Reviewed by	Adish SEWLALL	QSE Coordinator	29/07/2020	
Approved by	Jean Marc IWEINS	Power Plant Manager	29/07/2020	

Jean-Marc Iweins
Power Plant Manager
terrigen

1. DOCUMENT CONTROL

AMENDMENT RECORD		
Page No.	Date of amendment	Revision history
3 to 13	21/10/2014	Document column replaced by final destination of waste
1	21/10/2014	9 has been removed from Farook & Son mobile number
6	21/10/2014	Barbara Lopez has been removed
3	05/07/2015	Mr. Farook for paper and cardboard recycling was removed and replaced by ATICS Ltd
5	23/10/2015	Recycler for fluorescent tubes have been modified
9-13	23/10/2015	Rows 16,20,21 and 25 has been modified
13 & 14	23/10/2015	Wastes such as contaminated effluent pond, biosorb and absorbent have been added.
14	23/10/2015	Wastes of plastic twines has been added
3 to 14	25/05/2016	QSE Coordinator changed to QSE Manager
8	25/05/2016	Place of storage of industrial wastes has been changed
14	25/05/2016	Place of storage of plastic twines has been changed
5	30/09/2016	Neel Wastes Solution added to collection and recycling of fluorescent tubes
9	30/09/2016	G.H Engineering replaced by Royal Clean for domestic wastewater pumping
4 & 14	21/12/2016	Surfrider added
6	03/02/2017	Neelu Steel trading replaced Hennergeet
10	03/02/2017	Mr. Carver added
11	03/02/2017	Pallet World Limited added
9	27/08/2017	Treatment facility added for contaminated waste packaging from laboratory
11	27/08/2017	Treatment facility added for cloth contaminated with oil & grease and Gloves contaminated with oil & grease
13	27/08/2017	Treatment facility added for aerosol spray bottles and Used Biosorb that have already encapsulated oil or grease
14	27/08/2017	Treatment facility added for used absorbent that absorbed chemicals
2-16	16/06/2020	Adjustments and QSE Manager changed to QSE Coordinator→Rev09
3	29/06/2020	Chapter 2 & 3 added
16	29/06/2020	Location of Bins added→ rev09



2. WASTE SEGREGATION AND COLOUR CODING:

Red Bins - For recyclable Paper and Cardboard Waste

Blue Bins - For recyclable Plastic Waste

Green Bins - For Non-recyclable solid waste - referred as Domestic Solid Waste in the waste management plan

3. WEIGHING OF WASTES

- All Wastes disposed should be weighed.
- All weight of wastes disposed should be recorded in the Waste Register [TGEN-BL-WMA-001]



4.0 Waste Management Plan

No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
1	Paper	<p>Please remember to reuse paper before putting it away as waste.</p> <p>Examples of waste paper:</p> <ul style="list-style-type: none"> • Newspapers • Magazines • Envelope • Notebooks • Waste office paper <p>Note: All waste paper should be clean and free from moisture. -Ensure confidential paper are shredded and are well disposed without any risk to privacy of data.</p>	<p>Each office is provided with a red 'paper bin'. Put only waste paper in the red bin.</p> <p>During daily cleaning of offices, the lady (Alpha cleaning services) will collect waste paper from the bins and carry them to the waste paper collection container.</p>	<p>Waste paper collection container (beside the assembly point) -painted in red</p>	Monthly	<p>Each person is responsible to ensure good waste segregation.</p> <p>The Maintenance Manager is responsible for the waste until its collection. He will contact the company on behalf of Terragen Ltd.</p>	<p>Atics Ltd Allée des Manguiers - Pailles - B.P. 717 Bell Village Tel: 2112280 Fax: 2114189</p>	Mrs Jeanine Sam Yuen	Terragen pays the company at an approved rate.	Recycling
2	Cardboard	<ul style="list-style-type: none"> • Packaging (clean & moisture free) 	<p>Cardboard will be directly placed inside the cardboard collection container.</p>	<p>Waste cardboard collection container (beside the mechanical workshop) -painted in red</p>	Monthly	<p>Each person is responsible to ensure good waste segregation.</p> <p>The Maintenance Manager is responsible for the waste until its collection. He will contact the company on behalf of Terragen Ltd.</p>	<p>Atics Ltd Allée des Manguiers - Pailles - B.P. 717 Bell Village Tel: 2112280 Fax: 2114189</p>	Mrs Jeanine Sam Yuen	Terragen pays the company at an approved rate.	Recycling



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
3	Plastic	<p>Plastic that are allowed in the bin:</p> <ul style="list-style-type: none"> • plastic bottles: water, fizzy, detergent, shampoo • Clean plastic cups, plates, containers <p>Plastic that are not allowed in the bin:</p> <ul style="list-style-type: none"> • Styrofoam • Plastic bag • dairy products containers • Food packaging 	Everyone will put his waste plastic in the waste plastic collection bin of blue color.	<p>Waste plastic collection bin located</p> <ol style="list-style-type: none"> 1. beside the assembly point 2. in front of laboratory 3. near contractors' mess 4. next to front security post. 	As and when required	<p>Each person is responsible to ensure good waste segregation.</p> <p>The QSE coordinator will check the volume of plastic inside the container on a weekly basis and will call the mentioned company when it requires disposal.</p>	<p>Power Plastic Ltd/Surfrider Forbach autoroute du nord Tel: 2668182 Fax: 2668194</p>	Mrs Geraldine Luquet	Free of charge	Recycling
4	Used oil	<p>Used oil is obtained from the following:</p> <ul style="list-style-type: none"> > after draining & replacement of oil in gearbox, compressor. > Contaminated used oil when draining oil trap. > Lube oil tank > Transformer oil 	<p>When draining oil on site from gearbox/compressor or pumping oil from oil trap, the operator is required to carefully recover the oil in an appropriate container and store it in the waste oil storage area.</p> <p>Frequency of oil removal from oil trap: yearly</p>	At the back of cooling tower 2	As and when required	<ul style="list-style-type: none"> • The Head of mechanical/ electrical department is responsible for safe collection & storage of used oil. • When the oil requires disposal, the HoD will inform the QSE Coordinator who will contact the company for disposal. • On the day of collection, one personnel from the department must accompany the contractor. 	<p>Ecofuel Ltd P.O. Box 726, Bell Village Tel: 2344915/ 2341930/ 2341561 Fax: 2341889 Email: ecofuel@intnet.mu</p>	Nalini Boodhoo/ Jameel	Either Ecofuel or Terragen pays depending on the type & quality of oil. See waste management folder.	Re-use & incineration



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
5	Oil containers	<p>Metal drums:</p> <ul style="list-style-type: none"> • Metal drums will be reused for storing used oil • or it will be disposed as scrap metal <p>Plastic containers:</p> <ul style="list-style-type: none"> • Plastic containers will be reused for storing used oil • or it will be disposed as waste plastic <p>Note: No oil container (metal or plastic) should be given to any person for personal use.</p>	Waste metal and plastic containers will be stored in designated area after use.	At the back of cooling tower 2	As and when required	<ul style="list-style-type: none"> • The Head of mechanical/ electrical department is responsible for storage of the containers until disposal. • When the containers require disposal, the HoD will inform the QSE coordinator who will contact the company for disposal. • On the day of collection, one personnel from the department must accompany the contractor. 	<p><u>Plastic</u> Power Plastic Ltd Forbach autoroute du nord Tel: 2668182 Fax: 2668194</p> <p><u>Metal</u> H. Ennergeet Co. Ltd Mr Hemduth Ennergeet 3 Delta Street GRNW Port Louis Tel: 57608627</p>	<p><u>Plastic</u> Geraldine Luquet (See above for waste plastic)</p> <p><u>Metal</u> Mr Hemduth Ennergeet</p>	<p><u>Plastic</u> Free of charge</p> <p><u>Metal</u> The company pays Terragen at an approved cost.</p>	Re-use
6	Fluorescent tubes & lamps	Maintenance & replacement of tubes & lamps	<ul style="list-style-type: none"> • Care should be taken while handling the tubes & lamps. • Do not break them. • Carry the tubes and lamps carefully to the designated area after any maintenance 	Hazardous Waste Storage Area	NA	<ul style="list-style-type: none"> • The electrical department is responsible for the safe storage of tubes & lamps. • The QSE Coordinator ensures recycling of tubes 	Neel Wastes Solution 130, Route des Pamplemousse Str Port Louis	Mr. Roumar Ramjan	Terragen pays the company at an approved rate.	Recycling



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
7	Waste electrical & electronic equipment	Any damaged/faulty/scrap electrical & electronic equipment from Terragen Ltd	<ul style="list-style-type: none"> Small parts/equipment will be placed in a bin. Big equipment will be stored as per the instructions of the Head of electrical department until its disposal. 	Bin is in the electrical workshop	As and when required	<ul style="list-style-type: none"> The electrical department is responsible for storage of the waste. The QSE coordinator will contact the company if it requires disposal. 	RVE 99B, Royal Road Beau Bassin Tel/fax: 4644688 Email: rve.sales@gmail.com rve.collecte@gmail.com	<ul style="list-style-type: none"> Oomar Dookhee 	Terragen pays the company at an approved rate depending on the type of e-waste.	Re-use and recycling
8	Ink cartridge & toner	Used cartridges of printers Used toners of printers and photocopy machine ribbon of dot matrix	All used cartridges & toners must be placed in the bin provided A new cartridge or toner will be given to a personnel upon handing over of the used cartridge/toner to the Store Supervisor.	The bin is located in the Store	As and when required	The Store Supervisor will not issue a cartridge/toner until he gets the used one. The Store supervisor will notify the QSE coordinator if the waste requires disposal and the latter will ultimately contact the company.	RVE 99B, Royal Road Beau Bassin Tel/fax: 4644688 Email: rve.sales@gmail.com rve.collecte@gmail.com	<ul style="list-style-type: none"> Oomar Dookhee 	Terragen pays the company at an approved rate.	Re-use and recycling
9	Metal	Scrap metal	All scrap metal generated from power plant's activities will be stored in a big bin.	Adjacent to coal silo - Scrap Metal Storage Area	As and when required	The Maintenance Manager is responsible for the storage of the metal until its collection. He will contact the company when it requires disposal.	Neelu Steel Trading Bholah Road, Laventure Flacq Tel: 57433633 & 54924110	Mr. Shariff	The company pays Terragen at an approved rate.	Re-use



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
10	Lead acid batteries	Used lead acid batteries generated from: <ul style="list-style-type: none"> • UPS • diesel generator • fire pump 	All used batteries will be stored in a wooden box.	LV room (First floor - administration building)	The batteries will be disposed upon approval of the Head of electrical department.	<ul style="list-style-type: none"> •The Head of electrical department is responsible for the safe storage of the batteries until disposal. •The QSE coordinator will contact the company to dispose of the batteries upon confirmation by the Head of electrical department. 	Éclair batteries Ltd Industrial Zone Plaine Lauzun Tel: 2120356 Fax: 2082825	<ul style="list-style-type: none"> • Mr Philippe Sepin Tel: 7299999 • Priscilla Vincatassin 	The company pays Terragen at an approved rate.	Re-use and recycling
11	Batteries other than lead acid batteries	Used batteries generated from: <ul style="list-style-type: none"> • Walkie talkie • Alkaline batteries 	All used batteries must be placed in the bin provided. A new battery will be given to a personnel upon handing over of the used one to the Store Supervisor.	The bin is located in the Store	As and when required	<ul style="list-style-type: none"> •The Store Supervisor will not issue a new battery until he gets the used one. •The Store supervisor will notify the QSE coordinator if the waste requires disposal and the latter will ultimately contact the company. 	Orange shop Mauritius Telecom (any showroom in Mauritius)	Call 8002277 for waste collection	Free of charge	Re-use and recycling



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
12	Green grass waste	Grass mowing	The grass is carried to Parc ecume for making compost.	Parc ecume 1	Upon mowing of grass (monthly)	The 'Prestateur gestion sous produits' is responsible for compost making and utilisation.	Charles Vaultbert de Chantilly Tel: 57363514	Charles Vaultbert de Chantilly Tel: 57363514	Job contract between Terragen and mentioned contractor	Composting
13	Industrial waste	<ul style="list-style-type: none"> • bulky waste • construction & demolition waste • green waste • Any other waste except hazardous waste 	All waste must be placed in the 'GREEN' bin found adjacent the contractor mess room. Ensure that the waste fits inside the container.	Bin found adjacent the contractor mess room.	As and when required	The Maintenance Manager is responsible for the storage of the waste until its collection. He will contact the company when it requires disposal.	Green (General refuse enterprise for environmental needs Ltd) Plaine Lauzun, Port Louis. Tel: +230 2086155 Fax: +230 2082995 E-mail greenltd@orange.mu	Rajeev Dabydin Operation Manager	Terragen pays the company at an approved rate. See waste management folder.	Landfill
14	Domestic solid waste	Any waste generated from kitchen, office, general yard cleaning except clean paper, clean plastic, green waste.	The waste must be placed in green color bins or labelled as Non-Recyclable Solid Waste.	The green color bins are present on various places on site. [See Plan at end of document]	Weekly	The Maintenance Manager is responsible for the waste until its collection. He will contact the company on behalf of Terragen Ltd.	Atics Ltd Allée des Manguiers - Pailles - B.P. 717 Bell Village Tel: 2112280 Fax: 2114189	Mrs Jeanine Sam Yuen	Terragen pays the company at an approved rate.	Landfill



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15	Domestic waste water	Wastewater generated from kitchen, toilet, washrooms	The wastewater goes to a collection tank.	Near Hazardous Waste Storage Area.	Three monthly basis	The Maintenance Manager is responsible for the waste until its collection. He will contact the company on behalf of Terragen Ltd.	Royal Clean Limited 26, Hajee Alaman Plaisance, Rose Hill Tel: 4652014 Mob: 57947668	Mr. Mikael Pittooa	Terragen pays the company at an approved rate.	Wastewater treatment plants
16	Contaminated waste packaging: Laboratory	Chemical packaging from laboratory	<p><u>Plastic containers:</u> 1. Triple rinsing & re-used where practicable 2. Recycle as plastic waste after triple rinsing</p> <p><u>Glass containers:</u> To put in 'GREEN' container as industrial waste after triple rinsing</p> <p><u>Expired chemicals/hazardous liquid waste:</u> Stored in Terragen's hazardous wastes storage area. Mercury liquid generated after laboratory test are also kept separately there.</p>	<p><u>Plastic containers:</u> Plastic bin near mechanical workshop and outside Laboratory</p> <p><u>Glass containers:</u> GREEN container is located adjacent to coal silo</p> <p><u>Expired chemicals/hazardous liquid waste:</u> Hazardous Waste Storage Area.</p>	As and when required	The Chemist is responsible for the waste until its disposal. The QSE Coordinator organizes wastes collection by the Ministry of Environment. The MOE sends it to the Interim Hazardous Treatment Facility at La Chaumiere	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment



No	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
17	Contaminated waste packaging: water treatment plant	Chemical packaging from water treatment plant	<p><u>IBC:</u> Used IBC are stored temporarily and returned to suppliers.</p> <p><u>Plastic containers:</u> 1. Triple rinsing & re-used where practicable 2. Recycle as plastic waste after triple rinsing</p> <p><u>Plastic bag containing caustic</u> are returned to supplier.</p>	Hazardous Waste Storage Area	As and when required	The Chemist is required to store the waste safety until its disposal.	<p><u>IBC:</u> Coroi Maurice Ltée Grewals Lane, Pailles Bell Village Tel: 2863333 Fax: 2863335</p> <p><u>Plastic:</u> Geraldine Luquet (See above for waste plastic)</p>	Mr. Carver	Free of charge	Re-use, recycling or sent to landfill after triple rinsing.
18	Activated carbon	Replacement of activated carbon during the water treatment process	After replacement, the activated carbon is stored in designated area.	Chemical store (back)	Upon replacement of the activated carbon, the old stock will be burnt in boiler as its combustion presents no risk to the environment.	The Chemist is required to store the waste safety until its disposal.	In house	NA	NA	Incineration
19	Resin	Demineralisation process	This waste will be disposed as industrial waste	Chemical store (back)	As and when required	The Chemist is required to store the waste safety until its disposal.	Green (General refuse enterprise for environmental needs Ltd) Plaine Lauzun, Port Louis. Tel: +230 2086155 Fax: +230 2082995 E-mail greenltd@orange.mu	Rajeev Dabydin Operation Manager	Terragen pays the company at an approved rate. See waste management folder.	Landfill



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
20	Cloth contaminated with oil & grease	Waste generated during maintenance of equipment	Stored in Terragen's hazardous wastes storage area.	Two bins are provided: - One is located in Hazardous waste storage area; - One on level planche de chauffe	As and when required	The Head of departments are responsible for safe collection and storage of waste cloth. The QSE Coordinator organizes wastes collection by the Ministry of Environment. The MOE sends it to the Interim Hazardous Treatment Facility at La Chaumiere	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment
21	Gloves contaminated with oil & grease	During maintenance work	After conducting a work, employees will place used nitril gloves in designated bin.	Two bins are provided: - One is located in Hazardous waste storage area; - One on level planche de chauffe	As and when required	The Head of departments are responsible for safe collection and storage of used gloves. The QSE Coordinator organizes wastes collection by the Ministry of Environment. The MOE sends it to the Interim Hazardous Treatment Facility at La Chaumiere	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment
22	Wooden pallet	Storage of parts or chemicals	Any wooden pallet that is not in usable state will be disposed of in 'GREEN container' Wooden pallet in good condition shall be stored and sent for recycling.	Recyclable wood pallets stored behind Contractor's mess	As and when required	The Head of departments are responsible for storage	Pallet World Limited	Mrs. Sushmeeta	NA	Re-use and recycling



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23	Oil filter	Replacement of parts in turbine, boiler & compressor	Once removed from the equipment, the oil filters must be properly drained of all oil and placed in plastic drums. The Ministry will then come for an inspection. Upon approval by the Ministry, the used oil filters will be packed in plastic bags, sealed and disposed of at landfill. Put in 'GREEN container' when they are ready to be disposed of.	At the back of cooling tower 2	As and when required	The Head of mechanical department is responsible for the waste until its collection. The QSE Coordinator will call the Ministry for inspection.	Green (General refuse enterprise for environmental needs Ltd)	Rajeev Dabydin Operation Manager	Terragen pays the company at an approved rate. See waste management folder.	Landfill
24	Silica gel granule	During mechanical and electrical maintenance of equipment: air dryers, transformers, overband magnets	As soon as the silica granules are replaced, they must be placed in a plastic bag and dispose as industrial waste in the Green container.	The container is located adjacent to coal silo	As and when required and upon confirmation by Head of departments	The Head of mechanical/electrical department are responsible for the waste until its collection.	Green (General refuse enterprise for environmental needs Ltd) Plaine Lauzun, Port Louis. Tel: +230 2086155 Fax: +230 2082995 E-mail greenltd@orange.mu	Rajeev Dabydin Operation Manager	Terragen pays the company at an approved rate. See waste management folder.	Landfill



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25	Aerosol spray bottles	During maintenance work	Any waste aerosol spray bottle will be placed in designated bin	The bin is located in Hazardous waste storage area	As and when required	The Head of departments are responsible for the safe collection of bottles. The QSE Coordinator will contact the Ministry of Local government & Disaster Risk Management when they require disposal.	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment
26	Effluent pond contaminated with an important amount of pollutants as per TGEN-INS-EMG-003	Spillage of oil, and chemicals. Generation of wastewater after extinguishing a fire by Fire and Rescue Service	Please refer to Contingency Plan for Chemical Spillage TGEN-INS-EMG-003	The polluted effluent water will be retained in the effluent pond itself	Unpredictable	1. Chef de bloc 2. Head of Spill Response Team	D.Seeven LTD Waste Water Services Camp Roches Henrietta 6845897/6844572/ 59193750/4999400 /52553750	Mr. D Seeven	NA	Wastewater will be collected in cisterns and sent to Roche Bois Treatment Plant
27	Used Biosorb that have already encapsulated oil or grease	During maintenance work or accidental spillage	Collect and put in labelled plastic bags	Stored at Hazardous Waste Storage area	As and when required	QSE Manager	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment



No.	Waste type	Source	Waste segregation method	Place of storage of waste	Frequency of waste collection & disposal	Responsibility of waste	Company details	Contact person	Cost of waste disposal	Final destination of waste
28	Used absorbent that absorbed chemicals	Accidental spillage	Collect and put in labelled plastic bags	Stored at Hazardous Waste Storage Area	As and when required	QSE Coordinator	Ministry of Environment, Solid Wastes Management Division Ken Lee Tower, Cnr Barracks & St Georges Streets, Port-Louis. Tel: +(230) 203 6200	Environmental Officer	Rs 100/kg	Treatment
29	Wastes of plastic twines from cane trash bales de-compacting	From cane trash bale de-compacting	To inform the Chargé Soutien/Sécurité. The latter will place it in front of the coal tower well covered or in plastic bags.	In front of the coal tower	As and when required	Each person is responsible to ensure good waste segregation. The QSE Coordinator will check the volume of plastic collected on a weekly basis and will call the mentioned company when it requires disposal.	Power Plastic Ltd/Surfrider Forbach autoroute du nord Tel: 2668182 Fax: 2668194	Mrs Geraldine Luquet	NA	Recycling
29	Any other waste	If you are unsure of the nature of waste and how it should be disposed of, contact the QSE Coordinator								



