Table I.8 (i) CONCLUSIONS ON BAT

Title of Document			
BAT reference Number	**Waste Industries Treatment BREF**	**Applicability to installation**	**Proposed/ in place**
BAT 1	BAT is to implement and adhere to an environmental management system (EMS)….	Applicable	EMS specified in Condition 2 of the Licence is in place
BAT 2	BAT is to ensure the provision of full details of the activities carried out on-site.	Applicable	In place. Provided in Licence Application and EIAR.
BAT 3	BAT is to have a good housekeeping procedure in place, which will also cover the maintenance procedure, and an adequate training programme, covering the preventive actions that workers need to take on health and safety issues and environmental risks	Applicable	Operational procedures in place: Training programme in place; Health & Safety Policy in place
BAT 4	BAT is to try to have a close relationship with the waste producer/holder	Applicable	In place. AES regularly liaises with its commercial customers and waste contractors that deliver wastes to the facility
BAT 5	BAT is to have sufficient staff available and on duty with the requisite qualifications at all times. All personnel should undergo specific job training and further education	Applicable	In place. Site Manager and/or Deputy Manager have appropriate qualifications and at least one is on site at all times. Staff training programme in place
BAT 6	BAT is to have a concrete knowledge of the waste IN	Applicable	Waste acceptance procedure in place that specifies the wastes that can be accepted
BAT 7	BAT is to implement a pre-acceptance procedure	Not Applicable	Given the nature of the wastes accepted and the types of processing carried out, pre-acceptance procedures are not required.
BAT 8	BAT is to implement a waste acceptance procedure	Applicable	Waste acceptance procedures in place
BAT 9	BAT is to implement different sampling procedures for all different incoming waste vessels	Not Applicable	Given the nature of the wastes accepted and the types of processing carried out, sampling procedures are not required
BAT 10	BAT is to have a reception facility that includes inter alia a quarantine area.	Applicable	In place. Quarantine area provided

BAT 11	BAT is to analyse the waste OUT according to the relevant parameters important for the facility. If RDF is manufactured the processed materials will be tested to confirm they meet customer/regulatory requirement	Applicable	In place. All wastes transferred from the site are recorded using LoW codes
BAT 12	BAT is to have a system in place to guarantee the traceability of waste treatment	Not Applicable	Given the nature of the wastes accepted and the types of processing carried out, traceability of waste treatment is not required
BAT 13	BAT is to have and apply mixing / blending rules	Not applicable	Given the nature of the wastes accepted and the types of processing carried out, mixing and blending rules are not required.
BAT 14	BAT is to have a segregation and compatibility procedure in place	Applicable	In place. Waste acceptance procedures to remove and store non suitable wastes in quarantine area
BAT 15	BAT is to have an approach for improving waste treatment efficiency	Applicable	In place. AES has completed a treatment capacity assessment.
BAT 16	BAT is to produce a structured accident management plan	Applicable	In place. Accident Prevention Policy and Health & Safety Statement prepared.
BAT 17	BAT is to have and properly use an incident diary.	Applicable	In place. All incidents are recorded.
BAT 18	BAT is to have a noise and vibration management plan in place as part of the EMS	Not Applicable	Noise and vibration are not an issue at the site
BAT 19	BAT is to consider future decommissioning	Applicable	In place. Decommissioning Management Plan prepared and approved by the Agency.
BAT 20	BAT is to provide a breakdown of the energy consumption and generation	Applicable	In place. Energy consumption recorded and reported in the AER.
BAT 21	BAT is to continuously increase the energy efficiency of the installation	Applicable	In place. AES has carried out an energy audit and is currently rolling out ISO 5001 Energy Management thorough out the Group.
BAT 22	BAT is to carry out an internal benchmarking (e.g. on an annual basis) of raw materials consumption	Applicable	In place. AES monitors material consumption and reports on same annually in the AER.
BAT 23	BAT is to explore the options for the use of waste as a raw material for the treatment of other wastes.	Not Applicable	The wastes accepted are not suitable to treat other wastes.

BAT 24	**Storage and Handling**		
a)	BAT is to ensure storage areas are away from watercourses and sensitive perimeters, and located to eliminate or minimise the double handling of wastes within the installation	Applicable	In place
b)	BAT is to ensure that the storage area drainage infrastructure can contain all possible contaminated run-off and that drainage from incompatible wastes cannot come into contact with each other	Applicable	In place. Separate drainage system provided for the floor of the processing building.
c)	BAT is to ensure use of a dedicated area/store equipped with all necessary measures related to the specific risk of the wastes for sorting and repackaging laboratory smalls or similar waste.	Not applicable	Laboratory wastes not accepted or generated at the site.
d)	BAT is to handle odorous materials in fully enclosed or suitably abated vessels and storing them in enclosed buildings connected to abatement	Not Applicable	This relates to odorous liquid wastes, which are not accepted at the site
e)	BAT is to ensure that all connections between the vessels are capable of being closed via valves.	Not Applicable	This relates to odorous liquid wastes, which are not accepted at the site
f)	BAT is to ensure measures are available to prevent the building up of sludges higher than a certain level and the emergence of foams that may affect such measures in liquid tanks,	Not Applicable	No biological treatment of liquid wastes on site.
g)	BAT is equipping tanks and vessels with suitable abatement systems when volatile emissions may be generated.	Not Applicable	Liquid organic wastes not accepted at the site
h)	BAT is to store organic waste liquid with a low flashpoint under a nitrogen atmosphere to keep it inertised	Not Applicable	Organic waste liquids not accepted at the site
BAT 25	BAT is to separately bund the liquid decanting and storage areas using bunds which are impermeable and resistant to the stored materials	Not Applicable	Liquid wastes are not accepted.
BAT 26	**Tank and Process Pipework**		
a)	BAT is to clearly label all vessels with regard to their contents and capacity	Applicable	Oil storage tanks are labelled..
b)	BAT is to ensure the label differentiates between wastewater and process water, combustible liquid and combustible vapour and the direction of flow.	Not Applicable	

c)	BAT is to keep records for all tanks, detailing the unique identifier; capacity; its construction, including materials; maintenance schedules and inspection results; fittings; and the waste types which may be stored / treated in the vessel, including flashpoint limits	Applicable	In place. Tanks subject to regular integrity assessment.
BAT 27	BAT is to take measures to avoid problems that may be generated from the storage/accumulation of waste	Applicable	In place. Waste Storage Plan prepared
BAT 28	**Waste Handling Techniques**		
a)	BAT is to have systems and procedures in place to ensure that wastes are transferred to the appropriate storage safely.	Applicable	In place
b)	BAT is to have a management system for the loading and unloading of waste in the installation, which also takes into consideration any risks that these activities may incur.	Applicable	In place.
c)	BAT is to ensue that a qualified person attends the site to check the laboratory smalls, the old original waste, waste from an unclear origin or undefined waste (especially if drummed), to classify the substances accordingly and to package into specific containers.	Not Applicable	The site does not have a laboratory and does not accept hazardous waste
d)	BAT is to ensure that damaged hoses, valves and connections are not used	Not Applicable	Hoses, valve and connections are not used
e)	BAT is to collect exhaust gas from vessels and tanks when handling liquid waste	Not Applicable	The site does not accept liquid wastes that generate exhaust gases.
f)	BAT is to unload solids and sludge in closed areas which are fitted with extractive vent systems linked to abatement equipment when the handled waste can potentially generate emission to air (e.g. odours, dust, VOCs)	Not Applicable	Facility operations are not a source of odour nuisance.
g)	BAT is to use a system to ensure the bulking of different batches only takes place with compatibility testing	Not Applicable	Given the nature of the wastes accepted and the types of processing carried out, compatibility testing is not required.
BAT 29	BAT is to ensure that the bulking /mixing to or from packaged waste only takes place under instruction and supervision and is carried out by trained personnel	Applicable	In place. All waste handling, is carried out by trained personnel.
BAT 30	BAT is to ensure that chemical incompatibilities guide the segregation required during storage	Not Applicable	Chemically incompatible wastes are not accepted at the site.

BAT 31	**Handling of Containerised Waste**	Not Applicable	Containerised waste is not accepted.
BAT 32	BAT is to perform crushing, shredding and sieving operations in areas fitted with extractive vent systems linked to abatement equipment when handling materials that can generate emission to air (e.g. odours, dust, VOCs)	Not Applicable	The facility is not a source of significant dust emissions and is not a source of odours that give rise to impairment outside the site boundaries.
BAT 33	BAT is to perform crushing/shredding operations under full encapsulation and under an inert atmosphere for drums/containers containing flammable or highly volatile substances.	Not Applicable	Drums/containers containing flammable or highly volatile substances are not accepted at the installation.
BAT 34	**Washing Processes**		
a)	BAT is to identify the components that may be present in the items to be washed (e.g. solvents)	Not Applicable	
b)	BAT is to transfer washings to appropriate storage and then treating them in the same way as the waste from which they were derived	Not Applicable	Waste are not washed at the site
c)	BAT is to use treated waste water from the WT plant for washing instead of fresh water	Not Applicable	No on-site WT plant.
	Air Emission Treatment		
BAT 35	BAT is to restrict the use of open topped tanks, vessels and pits	Applicable	In place. There are no open topped tanks, vessels and pits..
BAT 36	BAT is to use an enclosed system with extraction, or under depression, to a suitable abatement plant. This technique is especially relevant to processes which involve the transfer of volatile liquids, including during tanker charging/discharging	Not Applicable	Volatile liquid waste are not accepted at the facility.
BAT 37	BAT is to apply a suitably sized extraction system which can cover the holding tanks, pre-treatment areas, storage tanks, mixing/reaction tanks and the filter press areas, or to have in place a separate system to treat the vent gases from specific tanks	Not Applicable	Liquid wastes with the potential to vent gases will not be accepted at the site
BAT 38	BAT is to correctly operate and maintain the abatement equipment, including the handling and treatment /disposal of spent scrubber media.	Not Applicable	Air abatement equipment not required at the site.
BAT 39	BAT is to have a scrubber system in place for the major inorganic gaseous releases from those unit operations which have a point discharge for process emissions.	Not Applicable	Process do and will not generated major inorganic gaseous emissions.

BAT 40	BAT is to have leak detection and repair procedures in place in installations a) handling a large number of piping components and storage and b) compounds that may leak easily and create an environmental problem	Not Applicable	
BAT 41	BAT is to reduce air emission to the following levels VOC 7-20mg/$Nm^3$and PM to 2-20mg/Nm^3	Not Applicable	The site does not have point emission sources for either VOC or PM
	Wastewater Management		
BAT 42	Reduce the water use and the contamination of water		
a)	BAT is to apply site waterproofing and storage retention methods.	Applicable	In place. The site is covered by buildings and paved yards.
b)	BAT is to carry out regular checks of the tanks and pits especially when they are underground	Applicable	In place. Current licence requires regular integrity assessment of all storage tanks.
c)	BAT is to apply separated water drainage according to the pollution load (roof water, road water, process water)	Applicable	In place. Separate drainage systems provided for rainwater, process wastewater and sanitary wastewater.
d)	BAT is to apply a security collection basin	Not Applicable	
e)	BAT is to performing regular water audits, with the aim of reducing water consumption and preventing water contamination.	Applicable	In place. AES reviews water consumption annually as part of the preparation of the AER.
f)	BAT is to segregate process water from rainwater.	Not Applicable	In place. Refer to 42 (c).
BAT 43	BAT is to have procedures in place to ensure that the effluent specification is suitable for the on-site effluent treatment system or discharge.	Not Applicable	Only sanitary wastewater treated on-site.
BAT 44	BAT is to avoid the effluent by-passing the treatment plant systems.	Not Applicable	No on-site effluent treatment system.
BAT 45	BAT is to have in place and operate an enclosure system whereby rainwater falling on the processing areas is collected along with tanker washings, occasional spillages, drum washings, etc. and returned to the processing plant or collected in a combined interceptor.	Not Applicable	All waste processing is carried out inside the buildings.
BAT 46	BAT is to segregate the water collecting systems for potentially more contaminated waters from less contaminated water.	Not Applicable	

BAT 47	BAT is to have a full concrete base in the whole treatment area, that falls to internal site drainage systems which lead to storage tanks or to interceptors that can collect rainwater and any spillage. Interceptors with an overflow to sewer usually need automatic monitoring systems, such as pH checks, which can shut down the overflow	Applicable	In place.
BAT 48	BAT is to collect the rainwater in a special basin for checking, treatment if contaminated and further use	Not Applicable	
BAT 49	BAT is to maximise the re-use of treated waste waters and use of rainwater in the installation	Not Applicable	The treated sanitary wastewater is not suitable for re-use.
BAT 50	BAT is to conduct daily checks on the effluent management system and to maintain a log of all checks carried out, by having a system for monitoring the effluent discharge and sludge quality in place	Applicable	The on-site sanitary wastewater treatment unit is regularly inspected and serviced. Daily checks are not required.
BAT 51	BAT is to firstly identify waste waters that may contain hazardous compounds, secondly segregate the previously identified wastewater streams on-site and thirdly, specifically treat waste water on-site or off-site	Applicable	Separate wastewater collection systems provided for process waste water and sanitary wastewater.
BAT 52	BAT is to ultimately, after the application of BAT number 42, select and carry out the appropriate treatment technique for each type of waste water	Applicable	In place.
BAT 53	BAT is to implement measures to increase the reliability with which the required control and abatement performance can be carried out.	Applicable	In place. On-site sanitary wastewater treatment plant subject to routine inspection and servicing.
BAT 54	BAT is to identify the main chemical constituents of the treated effluent and to then make an informed assessment of the fate of these chemicals in the environment	Applicable	In place. Process wastewater analysed to confirm it is suitable for treatment at off-site municipal treatment plant.
BAT 55	BAT is to only discharge the waste water from its storage after the conclusion of all the treatment measures and a subsequent final inspection	Applicable	In place

BAT 56	BAT is to achieve the following water emission values before discharge Water parameter Emission values associated with the use of BAT (ppm) COD 20 – 120 BOD 2 – 20 Heavy metals (Cr, Cu, Ni, Pb, Zn) 0.1 – 1 Highly toxic heavy metals: As <0.1 Hg 0.01 – 0.05 Cd <0.1 – 0.2 Cr(VI) <0.1 – 0.4	Not applicable	No discharge form the site. All process wastewater and treated sanitary wastewater tinkered from the site ..
	Management of Process Related Residues		
BAT 57	BAT is to have a residue management plan as part of the EMS including a) basic housekeeping techniques and b) internal benchmarking techniques	Applicable	In place. AES has procedures to manage waste arising from site activities, which include canteen and office waste and waste oils
BAT 58	BAT is to maximise the use of re-usable packaging (drums, containers, IBCs, palettes, etc.)	Applicable	In place.
BAT 59	BAT is to re-use drums when they are in a good working state. In other cases, they are to be sent for appropriate treatment	Not Applicable	The site does not accept drums
BAT 60	BAT is to keep a monitoring inventory of the waste on-site by using records of the amount of wastes received on-site and records of the wastes processed	Applicable	In place. AES keeps records of all of the wastes accepted and consigned from the site.
BAT 61	BAT is to re-use the waste from one activity/treatment possibly as a feedstock for another	Not Applicable	Given the nature of the wastes accepted and the type of processing carried out, there is no opportunity to re-use waste on-site.
	Soil Contamination		
BAT 62	BAT is to provide and then maintain the surfaces of operational areas, including applying measures to prevent or quickly clear away leaks and spillages, and ensuring that maintenance of drainage systems and other subsurface structures is carried out	Applicable	In place. All operational and waste storage areas are paved.
BAT 63	BAT is to utilise an impermeable base and internal site drainage	Applicable	In place. All operational and waste storage areas have an impermeable base.
BAT 64	BAT is to reduce the installation site and minimise the use of underground vessels and pipework	Applicable	In place. .