

Comment order	Author of Representation	Application it is relating too	Question/Comment/Representation (as cited in the response)	Response received to representation from T & TS	Outcome/Condition
1	Environment Scrutiny Panel	All Permits	There appears to be some lack of transparency in the process, particularly a lack of detail in documentation about actual volumes as well as concentrations of the biocide that will be employed to treat cooling water, and how much will subsequently enter the environment. This adds an unwelcome degree of uncertainty (if not proof of harm) to possible outcomes	The Applicant has been advised by the Jersey Electricity Company that the current levels of biocide are immeasurable at the discharge point with the commercially available monitoring equipment they employ for this purpose. The Application includes a clear statement about the maximum concentrations of biocide that will be dosed using its existing system by the Jersey Electricity Company. No additional concentration of dosing is required by the addition of the Energy from Waste Plant operation. Therefore, the Applicant maintains that, even with the more regular cooling water discharge volumes that would follow the Energy from Waste operation commencing, the concentration of biocide at the discharge point will not increase beyond the existing level, which has separate deemed consent.	Transport & Technical Services have stated that they will not add biocide in addition to that added by Jersey Electricity Plc (JE) prior to receipt of the cooling water. Condition 6 of the permit specifically prohibits the permit holder from adding any biocide to the seawater prior to it being discharged to the environment. The JE cooling water permit (DP(B)2000/11/37) includes Condition 8 which specifies the maximum concentration of biocides at the point of discharge to controlled waters (i.e where it enters the environment, rather than the point at which it is administered as a dose). Condition 11 of that permit further stipulates a regular sampling program by JE agreed with the regulator using an analysis method also agreed by the regulator (Condition 12). The maintenance programme, including the dosing equipment related to the addition of the biocide, is covered by Condition 15. Further, any change in the use of biocide will be notified to the regulator (Condition 20 and note 2 to the permit).
2	Environment Scrutiny Panel	All Permits	The Panel considers that it may be appropriate for any additional testing arising from these applications to be at the expense of the applicant.	The Applicant has indicated willingness to support its proportion of any ecological monitoring of potential thermal impact if this is considered essential by the Regulator.	The regulator already follows the polluter pays principle. In this respect, the permit holder will pay for all regular sampling and will forward the results of these for inspection to the regulator. In addition, the regulator undertakes its own, independent audit sampling.
3	Ramsar Management Authority Technical Subgroup	All Permits	The technical sub-group has concerns relating to the process of the use of seawater cooling to dissipate heat generated through the various industrial processes that occur and would urge the applicants to consider any technology or alternative use including commercial applications that would minimise or eliminate the need for a seawater cooling system.	The Applicant considers that the use of sea water cooling is environmentally far preferable to air cooling, which is the alternative for facilities of this kind. Whilst the Energy from Waste facility would use sea water for process cooling, engineering safeguards have been included within the design to contain contamination in the event of a fault occurring. These safeguards have been clearly described in the application. The States of Jersey are committed within the draft Energy Strategy to conducting a feasibility study to assess whether the waste heated water from the Energy from Waste Plant can be efficiently used within heating or cooling systems prior to any planning application for the East of Albert development being submitted.	This response is not related to the application for a discharge permit. The regulator has no further comment to add to the response from TTS.
4	Save Our Shoreline	All Permits	We have this week also heard from Mr. Rob McInnes, of Bioscan UK, independent adviser to the Environment Scrutiny Panel who says this: 'Given the recommendations provided in the Scrutiny Review report, the appropriate regulation of any discharge consents is an opportunity for P&E to demonstrate that they have taken on board the suggestions made and that the discharge of potentially damaging substances to the marine environment is avoided'	The Applicant has, through considering thermal monitoring of the biotopes surrounding the cooling water culvert, demonstrated that concerns of stakeholders are important and will be taken into account. The Applicant fully intends through its actions and those of its affiliates to avoid damage to the vitally important Ramsar site and believes that the Application demonstrates this fully.	The regulator accepts the response from TTS. The regulator has undertaken extensive public and statutory consultation and has conditioned the discharge permit to ensure environmental safeguard. The marine ecosystem will be monitored by the permit holder as stipulated in Condition 11 of the EFW permit.
5	Save Our Shoreline	All Permits	RECOMMENDATIONS 1: That the practice of pumping biocide into the marine environment be stopped and another method found. 2: That before any discharge permits be given on the cooling water for EFW, an Independent Environmental Impact Assessment be undertaken on the likely impact of pumping 13.2 million gallons of heated (and biocide treated) water a day into Havre des Pas bay. Only when pertinent facts are established, safety issues agreed, we suggest, can consents be given	The Applicant considers that: 1. Some means of dosing chemical is required to prevent biotic accumulation in the cooling water system of these two crucial power generation facilities for the Island. Sea water cooling is used in power generation facilities across Europe and dosing with biocide is standard practice. It is accepted that the dosing chemical should meet the highest regulatory standards accepted in Europe and the Jersey Electricity Company has indicated that the chemical currently employed is likely to change within the coming year. When the current biocide is removed from use an alternative, acceptable for use within European countries, will be adopted. Therefore, the first recommendation is not accepted as a biocide will be needed within the cooling system for the foreseeable future. 2. An assessment has been made of the impact of the discharge of the cooling water and this is included within the Applications. Therefore the second recommendation is rejected as the Application itself constitutes such an assessment.	The regulator is committed to safeguarding the environment and Ramsar. Condition 6 of the EFW permit specifically prohibits the applicant from adding any biocide to the seawater prior to it being discharged to the environment. The regulator recognises that the backwash and interceptor discharge permit applications will potentially discharge biocide in higher concentrations than the cooling water discharge. The regulator has therefore not issued the JE backwash and interceptor permits and has requested that JE undertake a comprehensive and independent environmental assessment prior to further consideration. The regulator currently believes that the dilution factor of the receiving waters means that if any impact occurs it will be localised. Condition 11 of the EFW permit has been included to provide further evidence to confirm this statement.
6	Steve Braithwaite (Ramsar group)	EFW	In the UK, companies that are granted an IPPC (Integrated Pollution Prevention and Control) Permit by the Environment Agency are required to have an Environmental Management System in place which is comparable to ISO14001. This is the international standard which specifies the components that a good environmental management system should have. These management systems are then certified by a third party and subject to continual surveillance by the same third party. In my experience, if implemented correctly, it leads to the permit holder taking greater responsibility for their environmental management and its continual improvement. In a community liaison group meeting, the former TTS Chief Officer, John Richardson, gave the group assurances that the new plant would have an EMS which was ISO14001 compliant. It might be worth taking this opportunity to ask the regulator to make this a permit requirement (as it is in the UK).	The Applicant reviewed the use of independently assured quality and environmental management systems for the facility and does not consider these are necessary given that equivalent systems will be introduced. These will be set out within the Waste Management Licence Application. In the United Kingdom, it is a permit requirement that all Applicants implement an Environmental Management System and the Applicant will do so as part of operating in accordance with the Waste Management Licence. It is not a permit requirement in the United Kingdom that the Environmental Management System chosen be ISO 14001 accredited. The ISO 14001 accreditation is used only to demonstrate the use or existence of an Environmental Management System. However, if the Regulator of the Water Pollution (Jersey) Law (2000) determines that an independent accreditation of the Environmental Management System is essential for operation of the facility, the Applicant would reconsider their introduction.	The regulator recognises that the operator should meet the management standards as set out in an environmental management system (such as ISO14001 or equivalent) to minimize any harmful effects on the environment caused by its activities, and to achieve continual improvement of its environmental performance. This will be covered in the Waste Management Licence
7	Health Protection (Andrew Pritchard)	EFW (all three applications)	One small observation relating to the EFW application (repeated in the 3 applications); in the Fichtner letter dated 19 Mar 10 (page 3 para 8) the talk is of confirming the emergency procedures for an internal fire in the working plan. My only concern with this is that the operator will need to commit to getting the working plan, and thus all the emergency procedures, resolved prior to commissioning works.	The response is noted and the Applicant agrees that an approved Working Plan and all other relevant procedures will need to be in place prior to receiving waste under the Waste Management Licence	The activity is already planned and will be actioned and regulated as part of the determination of the Waste Management Licence for the EFW

8	Save Our Shoreline	EFW Cooling Water	With reference to the amine biocide that is currently in use by the JEC, we find that the information supplied with the application on this chemical is lacking in several areas. Where are the toxicology reports and the risk assessment of the effects of this chemical on the marine biota surrounding the site?	The dosing chemical currently employed by the Jersey Electricity Company is employed by that company under a separate deemed Discharge Consent. The Regulator of the Waste Pollution (Jersey) Law (2000) will therefore have satisfied themselves that the dosing chemical is not unsuitable in the application for which it is currently employed, i.e. for the purposes of preventing fouling of the cooling water system at all operating conditions that the Jersey Electricity Company is permitted to operate under. The Jersey Electricity Company is retained under Legal Agreement by the Applicant to provide suitable cooling water for the Energy from Waste Plant to guaranteed supply conditions. The Applicant has been provided with the Material Safety Data Sheet for the dosing chemical by the Jersey Electricity Company and has submitted it with the application. This data sheet sets out the hazardous properties of the dosing chemical andThe Jersey Electricity Company has advised that, under current operating conditions, the dosing chemical cannot be detected when monitoring is conducted at the discharge point. Applicant considers it reasonable that, provided the maximum concentrations of the dosing chemical remain within the concentrations stated within the application, then the risk to marine biota will be no higher than under the current operations, which are deemed acceptable by the Regulator of the Water Pollution (Jersey) Law. The Jersey Electricity Company has advised the Applicant that the current risk to surrounding biota from the dosing	Transport & Technical Services will not be permitted to add biocide in addition to that added by Jersey Electricity Plc prior to receipt of the cooling water. The regulator recognises that the JE backwash and interceptor discharges, currently subject to permit applications, will potentially discharge biocide in higher concentrations than the cooling water discharge. The regulator has therefore not issued the JE backwash and interceptor permits and has requested that JE undertake a comprehensive and independent environmental assessment prior to further consideration. This will include information on the toxicology of the biocide and an assessment of other biocides available.
9	Save Our Shoreline	EFW Cooling Water	What is the molecular mass of this chemical, how will it disperse in the environment and what is the LD50 of this substance?	At the very low maximum concentration levels proposed, the Jersey Electricity Company advise the Applicant that the dispersal of the dosing chemical will be such that the employment of Lethal Dose measurements of specific biota would not be meaningful. The Applicant understands that relevant Lethal Concentration data for the chemical has been provided to the Regulator of the Water Pollution (Jersey) Law (2000) by the Jersey Electricity Company.	The molecular mass of the chemical and its LD50 are not relevant in this instance. The regulator notes that the maximum permitted amine concentration is close to the LC50 (not the LD50) for the freshwater species Daphnia. However, the biocidal properties at the final discharge point will be low due to the filming out over the network of piping etc. The additional and regular flow from the EFW cooling water will improve the situation through higher dilution of biocides.
10	Save Our Shoreline	EFW Cooling Water	What is the potential chemical loading of the area during its active period taking into account the fact that it will be in the environment and has the biodegradability: 64% (28 days).	At the very low maximum concentration levels proposed within the Application, the Jersey Electricity Company advise the Applicant that the dispersal of the dosing chemical (which is readily biodegradable) will be so high that chemical loading will not be significant.	The regulator considers that over a 28 day period, given the high tidal exchange and low daily volumes added, the loading and impact will not be significant.
11	Save Our Shoreline	EFW Cooling Water	Does this biocide bioaccumulate?	The Jersey Electricity Company has advised the Applicant that, at the maximum concentrations indicated within the Application, the dosing chemical employed would not bioaccumulate in any measurable way. However, the Applicant recognises that research into the effects of different biocidal chemicals is continuing and would seek to alter its Agreement with the Jersey Electricity Company in the event that any evidence arose that the dosing chemical employed under that Agreement was unsuitable for the application proposed.	The regulator notes that the manufacturer Nalco have stated that the biocide does not bioaccumulate. The regulator has requested that JE undertake a comprehensive and independent environmental assessment which will include verification of any potential for accumulation by biota of the biocide.
12	Save Our Shoreline	EFW Cooling Water	At what concentration or dilution is this substance a skin irritant? Could it affect the swimmers nearby?	The Material Safety Data Sheet submitted with the Application indicates that, in its raw state, the dosing chemical is an irritant. The Applicant is advised by the Jersey Electricity Company that the dosing chemical will not be an irritant to swimmers adjacent to the culvert provided that the maximum concentrations of the dosing chemical remain within the maximum levels stated within section B(4) of the application. The responsibility for maintaining the guaranteed supply conditions, which will be specifically below these concentrations, lies with the Jersey Electricity Company under its deemed Discharge Consent. No additional dosing chemical will be added by the Applicant to the cooling water.	The regulator has consulted with Health Protection who have stated that they have received no reports of any swimmer suffering from skin irritation in the discharge area.
13	Save Our Shoreline	EFW Cooling Water	What if any are the potential chemical reactions with other substances that could occur – worse case scenario.	This question is regrettably not specific enough to enable a meaningful response to be given and a speculative response to this important matter will not be attempted.	The discharge permits will be conditioned so that any variation to the existing discharge (including additions of further chemicals/treatments) will require a variation to the permit and may be subject to full public consultation.
14	Save Our Shoreline	EFW Cooling Water	In accordance with Article 4(2) of Regulation (EC) No 2032/2003, biocidal products containing active substances for which a non-inclusion decision was taken shall be removed from the market. Amine is a substance that is due to be phased out of sale during 2011.	The Applicant and the Jersey Electricity Company are aware of the likely change in status of a substance within the dosing chemical under the European Union's Biocide Directive Research Programme. The Applicant understands that the Jersey Electricity Company plan to change their dosing chemical in the current year, although they are yet to conclude the most appropriate dosing chemical to employ. At present the dosing chemical employed by the Jersey Electricity Company has not been declared inappropriate for use under the Biocide Directive and therefore is not inappropriate for use within the European Union. The Applicant would not accept the use of any dosing chemical which had been declared inappropriate for use under the Biocide Directive within its cooling water system and will ensure that its arrangements with the Jersey Electricity Company reflects this requirement.	The regulator has requested that JE undertake a comprehensive and independent environmental assessment which will include verification from the manufacturer as to whether this directive will affect the biocide being supplied and what their proposed actions would be in this event. Should any change in the use of the biocide be proposed the regulator will require a variation to the permit.
15	Save Our Shoreline	EFW Cooling Water	What alternatives to using this chemical have been considered?	The Jersey Electricity Company has advised the Applicant that it has employed a number of different dosing chemicals at differing concentrations during the operation of the power station. The current concentration of the dosing chemical is considered optimal by the Jersey Electricity Company who advises that lesser levels result in biotic accumulation within the cooling water system and that could, if unchecked, prevent the effective operation of the power station. This could prove highly significant, given the power station's critical role supporting the majority of other key infrastructure for the Island.	This is irrelevant for the EFW application as biocide is added by JE. Future options for alternative chemicals to Seatreat will be assessed during the environmental risk assessment being undertaken by JE.

16	Save Our Shoreline	EFW Cooling Water	Why is a substance which is classed as dangerous to the environment being allowed to pass in to controlled waters?	The Applicant agrees with the Jersey Electricity Company that some means of dosing chemical is necessary if sea water cooling of power generation plant is to be continued in Jersey. Inevitably, any dosing chemical must prevent biotic accumulation to be effective. The information provided in the data sheet is to ensure that all those using the chemical are aware of its appropriate use. As sea water cooling is considered the most environmentally efficient means of cooling an Energy from Waste facility turbine in this case, a balance must be struck between the advantages of sea water cooling as against the risk of some minimal loss of biota that may occur within the immediate environs of the sea water cooling system.	The regulator notes this point. However, this is the reason why the regulator defines and controls the discharge through strict conditions that can be enforced within a discharge permit according to the Water Pollution (Jersey) Law, 2000.
17	Save Our Shoreline	EFW Cooling Water	How can a walk over survey assess possible chemical degradation of the area?	It is not clear what survey the Representation is referring to. It is the case that an ecological "walk over" survey, such as that carried out in 1999 by Plymouth Marine Laboratory Applications of the area, could identify significant chemical degradation of an ecosystem. That survey did not identify any significant chemical degradation in the vicinity of the cooling water culvert.	A walkover survey is not designed to assess chemical degradation. A walkover survey is designed to give an initial indicator of the state of the marine life in the area of the discharge. The ecology will be comprehensively assessed according to Condition 11 requiring monitoring of the ecology by the permit holder.
18	Ramsar Management Authority Technical Subgroup	EFW Cooling Water	Oxygen super saturation Seawater in coastal waters around Jersey are generally fully or supersaturated with oxygen. An increase in temperature will result in a reduction in the capacity of the water to retain the gas in solution. The technical subgroup asks the regulator to ensure the applicant provides evidence as to the impact of this phenomenon on marine life.	The extreme dilutory effect of the quantity of the relatively smaller volume of thermally heated cooling water into the massive volume of the receiving sea water means that any slight reduction in oxygen concentration is unlikely to be measurable. Therefore this proposal would not be supported.	The regulator considers this is unlikely to be a problem in the context of seasonal and tidal variation that currently exist next to the discharge. Nevertheless, the size of the temperature plume will be ascertained by TTS and this will inform the regulator and enable assessment of the likelihood of any oxygen depletion.
19	Save Our Shoreline	EFW Cooling Water	As to the volume of warmed water, treated by the JEC before entering the plant using Nalco Seatreat6. The volumes quoted are 60,000 cubic metres a day, 24 hrs a day 7 days a week. This equates to 13.2 million gallons a day or the volume of 24 Olympic swimming pools. TTS argue that the strong tidal flow will dissipate the biocide quickly and this volume of water will not change the marine environment. We believe that this is not the case. The culvert exits into the bay in an area which dries out twice a day for many hours. On neap tided the flow is slack. This area is already degraded as evidenced by the Plymouth Marine Laboratory report entitled 'Review of the current ecological status of the SE coast Jersey Ramsar Site' commissioned by WEB and the Environment Department and published in October 2009 (and not made public until very recently).	Although the volumes of cooling water required by the Energy from Waste plant may appear high to stakeholders, the key factor for protection of the environment is that the maximum concentrations of the dosing chemical permitted under the Discharge Consent are extremely low and the dilution factor within the receiving waters will be massive. Similarly, the impact of the thermal uplift of the discharged water within the massive volume of the receiving waters is not considered to be significant.	The marine ecosystem will be monitored by the permit holder as stipulated in Condition 11 of the EFW permit. This will include an assessment of the impact during low water (and all other states of tide).
20	Environment Scrutiny Panel	EFW Cooling Water	The Panel is aware of some concerns expressed by members of the public about the effect of discharges from the JEC culvert on the health of marine organisms in the Havre des Pas area, particularly in view of the poor circulation of tidal waters in parts of the bay. It is not known whether specific surveys/studies of this area have been undertaken to ascertain whether there is any basis for such concerns, and/or whether the water in the Havre des Pas bathing pool is subject to testing. If not, it is considered that it may be appropriate to commission a survey of the Havre des Pas area surrounding and adjacent to the outfall to establish whether there is any evidence that marine or other organisms in this part of the Ramsar site have been contaminated or affected in any way by discharged waters.	It is acknowledged by both the Applicant and the Jersey Electricity Company that the recently released PML Applications survey of the ecological status of the Ramsar site (1999) suggests that the existing cooling water discharge may have some influence on the biota surrounding the culvert. The Application makes clear that the thermal impact of the commencement of the Energy from Waste facility cooling operation will not be greater than the previous and potential impact of the Jersey Electricity Company power station, for which deemed Discharge Consent has been granted. However, to seek to reassure stakeholders, the Applicant and the Jersey Electricity Company are willing to consider conducting regular additional surveys of the biota in the vicinity of the culvert for a defined period and in a manner to be agreed with the Regulator of the Water Pollution (Jersey) Law 2000 to help establish that the commencement of the Energy from Waste plant cooling operation does not cause any unacceptable thermal impact upon the Ramsar site.	Regular surveys of marine biota as defined by the area of the temperature plume will be conditioned by the regulator within the discharge permit (Condition 11). The regulator has consulted with Health Protection who have stated that they have received no reports of any swimmer suffering from a skin irritation in the Havre des Pas area.
21	Save Our Shoreline	EFW Cooling Water	How will this discharge affect the large part of the Islands shellfish which is stored in viviers (seawater tanks) on the Victoria Pier, also the adjacent area to the west of La Collette (Elizabeth Castle) shellfish is also stored in nourrices (floating viviers) considering the high toxicity to aquatic organisms?	The Application makes clear that no additional cooling water capacity is proposed within the Application and therefore there will be no significant change in impact from what is already occurring under the deemed Discharge Consent for the Jersey Electricity Company power station.	The regulator recognises that the JE backwash and interceptor discharge permit applications will potentially discharge biocide in higher concentrations than the cooling water discharge. The regulator has therefore not issued the backwash and interceptor permits and has requested that JE undertake a comprehensive and independent environmental assessment prior to further consideration. The regulator has requested that includes information on the potential impact on the shellfish viviers.
22	Save Our Shoreline	EFW Cooling Water	Why does this application for a discharge notice have the same reference number as the one made by SBC Limited last year?	No comment	Not relevant
23	Save Our Shoreline	EFW Cooling Water	Application is not filled out correctly, Part A not completed, there are no details of the length of outfall and distance and depth relative to low water mark as the discharge is to coastal waters.	The Regulator has not advised that this information is required. If required, the information can be ascertained and provided given reasonable notice.	This information is not considered necessary for the determination of the permit as it is an existing outfall.
24	Environment Scrutiny Panel	EFW Cooling Water	In respect of water temperature uplift, the Panel queries the relevance of intake water temperature as a determining factor, as opposed to the temperature of the receiving water, and wonders whether there has been any consideration of the tolerance levels of organisms naturally found in the receiving waters.	The temperature of the inlet waters is monitored by the Jersey Electricity Company, but the outlet temperature at the discharge will be highly variable and the volume of receiving water is in any case so large that the relative impact of the discharge sought is expected to be minimal.	The regulator considers that temperature uplift is the most relevant measurement. The temperature of receiving water and intake waters are similar and the harbour water is more easily measured. The marine ecosystem will be monitored by the permit holder as stipulated in Condition 11 of the EFW permit.

25	Save Our Shoreline	EFW Cooling Water	<p>The maximum temperature rise of the trade effluent to be discharged is 12°C, however where are the average/ambient sea temperatures, and what are the likely effects from the difference in temperatures on coastal waters of the Ramsar site and the marine biota?</p>	<p>The Applicant will monitor the temperature of the cooling water at the discharge point as detailed in the Application. Similarly, the Jersey Electricity Company monitors the temperature of their cooling water at their discharge point into the culvert. The 12 degrees Centigrade indicated will be a maximum temperature uplift and will only be applicable in the very limited time during which the turbine is in bypass mode. For obvious economic reasons it is in the interests of both the Applicant and the Jersey Electricity Company to minimise these periods. For the majority of time the uplift will be of the order of 10 degrees Centigrade. The ambient temperature of the sea is extremely variable according to tidal, seasonal and geographic location in Jersey and therefore monitoring at the culvert discharge would be problematic. It is acknowledged by both the Applicant and the Jersey Electricity Company that the recently released PML <u>Applications survey of the ecological status of the Ramsar site (1999)</u>on the biota surrounding the culvert. The Application makes clear that the thermal output of the commencement of the Energy from Waste facility cooling operation will not be greater than the previous and potential impact of the Jersey Electricity Company power station, for which deemed Discharge Consent has been granted. However, to seek to reassure stakeholders, the Applicant and the Jersey Electricity Company are willing to consider conducting regular additional surveys of the biota in the vicinity of the culvert for a defined period and in a manner to be agreed with the Regulator of the Water Pollution (Jersey) Law 2000 to help establish that</p>	<p>The JE power generation and temperature uplift predated the Ramsar site and was considered as part of that designation. The area of any temperature plume will be assessed by TTS during various tidal states. Marine ecology will be monitored as part of Condition 11 of the EFW permit.</p>
26	Save Our Shoreline	EFW Cooling Water	<p>We would suggest that in this context (Ramsar) that this is in fact a very major issue. What is important here is not the general heat rise but the induced oscillations between temperatures at certain times. At neap tides a pool of slightly elevated temperature water could sit in the area for days, and at other times be purged almost immediately. Take a scenario of a seemingly insignificant interstitial archiannelid such as <i>Protodrilus symbioticus</i> (a species that few people would have realised even existed) some 300m from the discharge point, on a normal April day, on a spring tide. When the tide is up it will be at 10°C with 100% saturation of oxygen, when the tide goes down it will either remain in those conditions, stream dependent, or immersed in 22°C with only 33% saturation. This brings the anoxic level to the surface of the sand and they all die at that point. Although <i>Protodrilus</i> is not well known to the general public, it shows how this discharge can have unseen negative effects its a good one. And of course it could well have an LD50 dose of amines on it as well. We can't see how this fits 'wise use'?</p>	<p>The scenario suggested is not accepted. It is not considered likely that a pool of slightly elevated temperature water could sit in the area for days. The temperature would quickly return to ambient temperature. Neither is it reasonable to suggest that the discharge from the facility will have the impact suggested 300 metres from the outlet to the culvert. The proportion of discharged water compared to the receiving waters is not sufficient to be likely to have such an effect. However, the concern of stakeholders is acknowledged and proposed monitoring of the thermal impact on biotopes in the vicinity is proposed by means of reassurance.</p>	<p>The regulator accepts the response from TTS. Notwithstanding, the marine ecosystem will be monitored by the permit holder as stipulated in Condition 11 of the EFW permit.</p>
27	Ramsar Management Authority Technical Subgroup	EFW Cooling Water	<p>Temperature The application sets out the increase in temperature above ambient the discharge will return to the environment. Whilst it is acknowledged that the change in working practice at the JEC power station has a compensatory factor in relation to the EFW discharge this does not negate the need to ensure the activity does not impact on the Ramsar site and the wider marine environment. The technical subgroup asks the regulator to ensure the applicant provides evidence as to what the impact, if any, the increased water temperature has on the environment, in particular geographical extent of any impact. This evidence must consider the situation at the worst case scenario (i.e. greater temperature differential) and at various tidal states (i.e. high and low tide). The regulator is also asked to confirm the nature of the relationship with the existing consented permit with respect to the various components of additional heating each supply under all conditions including maximum loading of all operations.</p>	<p>The Applicant has indicated willingness to consider ecological monitoring of the potential thermal impact of the discharge, although it is not accepted that this will be significantly different from the existing impact from the Jersey Electricity Company Power Station. The monitoring would highlight any significant impacts from the discharge from the existing benchmark provided by the study conducted into the ecological status by PML Applications in 2009. The complex seasonal and tidal variations, when considered together with the occasional and complex nature of generation by the Jersey Electricity Company, mean that modelling the estimated extent of any impact is unlikely to produce meaningful results and is therefore not supported.</p>	<p>The JE power generation and temperature uplift predated the Ramsar site and was considered as part of that designation. The added discharge is considered not to make the situation worse than the original JE discharge. The discharge will be assessed by TTS to determine its extent during various tidal states and the marine ecology will be monitored by the permit holder (Condition 11).</p>
28	Environment Scrutiny Panel	EFW Cooling Water	<p>Application 1 – Energy from Waste Plant 1. The Panel has some difficulty with some statements contained in Application 1, e.g. "the cooling system being used is the JEC's, which has not been modified". It is assumed that the actual situation is that the pumps used to circulate the cooling water may be shared, the dosage of biocide will be similar and applied by the same equipment, but the actual flow of cooling water will be separate and additional to the requirements of the JEC. Despite comments to the effect that the thermal burden will be significantly lower than that created by the JEC power station under full load, once the Energy from Waste plant is operating full-time this will generate a constant outflow of biocide-dosed cooling water with associated thermal uplift to the Havre des Pas culvert outfall. The Panel considers that this represents a very different situation to the operation of the JEC in recent years, and would therefore have expected the application to be dealt with on the basis of 'new business' rather than as an extension of the JEC's operation.</p>	<p>For the avoidance of doubt, the Application is for a new discharge consent, not an extension of the Jersey Electricity Company deemed consent and therefore is "new business" under the description employed by the Panel. The Applicant is employing the Jersey Electricity Company's existing cooling water system unmodified, (apart from the connection pipes and valves required for the connection to the new plant), therefore the statements made in the Application are correct. The fact that the Jersey Electricity Company does not employ steam generation to the previous degree does not alter the fact that deemed consent allows for such greater generation has been given. Indeed, this may still be required and significant generation has occurred using steam plant in the recent past for commercial reasons. The Jersey Electricity Company requires steam generation on-Island to some degree for security of supply and training reasons in any case. The level to which the Energy from Waste supply offsets steam generation by the Jersey Electricity Company is a commercial matter for that Company.....</p> <p>.....The Application is clear, open and transparent about the requested discharge consent and it is considered reasonable for the Applicant to put the context in which the discharge consent will operate. Indeed, it would be negligent not to do so.</p>	<p>The regulator accepts the response from TTS. The JE cooling water permit (DP(B)2000/11/37) includes Condition 8 which specifies the maximum concentration of biocides at the point of discharge to controlled waters (i.e. where it enters the environment, rather than the point at which it is administered as a dose). Condition 11 further stipulates a regular sampling programme by JE agreed with the regulator using an analysis method agreed by the regulator (Condition 12). The maintenance programme, including the dosing equipment related to the addition of the biocide, is covered by Condition 15 of this permit. Further, any change in the use of biocide will be notified to the regulator (Condition 20 and note 2) to the JE permit. The marine ecosystem will be monitored by the permit holder as stipulated in Condition 11 of the EFW permit.</p>

29	Save Our Shoreline	EFW Cooling Water	It is plain that TTS are expecting this permit to be 'rubber stamped'. They would have known how much cooling water they would need and at what temperature it would exit the culvert so it could have been part of the Planning conditions. Going back to the transcripts of meeting with Planning & Environment and TTS in July and September 2009, there was considerable discussion on the subject of discharge permits. We attach the relevant references to refresh memories. Note: We submit that TTS are relying on existing 'deemed' discharge permit conditions for both the culvert and the JEC chimney (the next phase). Can we expect a discharge permit to be applied for using the JEC chimney 'within the deemed discharge permit'? If so this will not be acceptable.	The air emissions from the Energy from Waste plant will be controlled in accordance with the requirements of the European Directive on the Incineration of Waste (2000/76/EC) and regulated under a Waste Management Licence in accordance with the requirements of the Waste Management (Jersey) Law (2005).	Any emissions to air will be regulated by the conditions stipulated within the Waste Management Licence and not through the discharge permit.
30	Save Our Shoreline	EFW Interceptors	What precautionary measures will be used to prevent accidental chemical or oil spills?	The Application makes clear that specific standard operating procedures will be developed to minimise spillages of chemicals or oils. These will be prepared prior to acceptance of waste under the Waste Management Licence.	This will be addressed under the Waste Management Licence, specifically the environmental management system. Condition 6 of both interceptor permits stipulate that a documented maintenance programme be established and that copies of the maintenance programme and the daily inspection records shall be made available for inspection by the Regulator at all reasonable times.
31	Save Our Shoreline	EFW Interceptors	Run off will at times be immense at times of heavy rain, given the roof area. We note that run off will be harvested from the building roofs, but the overflow will be piped to the discharge point in the culvert at the northern end of the site. We note that the system has limited capacity and we see this as a planning oversight. We feel that overflow will happen often and water will inevitably spill onto the site. The potential for rainwater to become polluted by inevitable spills of on site oil and chemical pollutants is very real. Will the contaminated run off be directed into the foul sewers and how will it be treated?	The Application makes clear how the waste water treatment plant within the Energy from Waste facility will treat all runoff from potentially contaminated surface areas prior to discharge to foul sewer under a separate Trade Effluent Discharge Consent. The Application makes clear that the Energy from Waste facility has an engineered drainage system that will ensure areas where potential contaminated spillages might occur are drained to a waste water treatment plant before discharge to foul sewer. Any separated hazardous waste will be stored in bunded containers. The Applicant considers the measures in place to manage surface runoff are sufficient and robust.	Response to representation by TTS is accepted.
32	Ramsar Management Authority Technical Subgroup	EFW Interceptors	Management of hard standing areas The application relates to the discharge of rainwater from the EFW site and refers to the interceptor. There is little information on the management of these areas. The technical subgroup asks the regulator to ensure the applicant provides all information related to the management of these areas particularly relating to storage of equipment and materials within the drainage areas and the systems in place following any incidents (either planned or accidental). The regulator also should ensure the inspection regime proposed is the most appropriate for the situation. In keeping with overall good environmental management, the technical subgroup would encourage the applicant to consider recycling any rainwater for other purposes and undertake to review this periodically as new applications and uses may become available over time.	The Applicant submitted, concurrently with the Discharge Consent applications, a Waste Management Licence application which the Regulator will be aware addresses the concerns raised in this Representation	This will be addressed under the Waste Management Licence, specifically the environmental management system. Condition 6 of both interceptor permits stipulate that a documented maintenance programme be established and that copies of the maintenance programme and the daily inspection records shall be made available for inspection by the Regulator at all reasonable times.
33	Save Our Shoreline	EFW Interceptors	Will water used for washing down plant and floors be directed to the foul sewers, in which case, where will the water be treated, how and where?	The Applications make clear how the waste water treatment plant within the Energy from Waste facility will treat all runoff from potentially contaminated surface areas prior to discharge to foul sewer under a separate Trade Effluent Discharge Consent. The Applicant considers the measures in place to manage surface runoff are sufficient and robust.	Response to representation by TTS is accepted.
34	Save Our Shoreline	EFW Interceptors	Application is not filled out correctly, Part A not completed, there are no details of the length of outfall and distance and depth relative to low water mark as the discharge is to coastal waters.	The Regulator has not advised that this information is required. If required, the information can be ascertained and provided given reasonable notice.	This information is not considered necessary for the determination of the permit as it is an existing outfall.
35	Save Our Shoreline	EFW Interceptors	Where will it eventually exit into the marine environment?	The Applications make clear where the discharge points are located for the three discharge consents sought.	Response to representation by TTS is accepted.