

Consideration of Public Comments received on the previous EIA Report submitted in February 2011 and responded by Project Proponent

No.	Comments	Proponent's Response	EIA Report Ref.
PC001	<p>環境局負責環境保護、能源、可持續發展方面工作。環境局此舉有在保護長洲嗎？</p>	<p>是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>是次環評研究根據兩個可能選址，評估了三個情景： 只於曾咀選址發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施； 只於石鼓洲附近的人工島上發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施；及 在兩個可能選址各自發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施（並存情況）。</p> <p>環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>
PC002	<p>I am a journalist from a news website covering the low carbon economy. I focus on the green activities in China. You may review our website through this link: http://www.ecoseed.org/</p> <p>I am interested to find out more details regarding the integrated waste management facility that will be built near the Shek Kwu Chau.</p> <p>Would you be open for a Skype interview? If not, would you kindly refer me to someone I can speak to regarding the facility.</p> <p>Hoping to hear from you soon. Please and thank you.</p>	<p>For the information about the Integrated Waste Management Facility (IWMF), public can visit the web site: http://www.iwmf.hk/index/index.html to obtain detailed information.</p> <p>The Environmental Impact Assessment Study for IWMF is completed and is available for public inspection at this web site www.eia.hk.</p> <p>Regarding the interview request mentioned, it was followed up separately.</p>	<p>General Enquiry and is not under the jurisdiction of EIAO</p>
PC003	<p>Based on the statistics from Environmental Protection Department, and the Executive Summary and some parts of full EIA report of IWMF, in my opinion, TTAL site is preferred IWMF location. In addition, the Government should have long-term planning of municipal solid wastes related to incineration and landfill.</p> <p>According to paragraph 1.1.1.3 of the Executive Summary, three strategic landfills are now projected to approach their capacity in 2014 (SENT), 2016 (NENT) and 2018 (WENT) respectively. In Tables ES2 and ES3 in the Executive summary, IWMF in TTAL will commence on August 2016 whereas IWMF in SKC will commence on May 2018. The Government tends to build IWMF in SKC. So, there is not more landfill site after the commencement of IWMF. However, if IWMF is built in TTAL, we have 2 years earlier for the MSW not to be disposed of at landfill. Hence, there will extend the life-span of strategic landfill sites.</p> <p>In addition, the capacity of the proposed IWMF is just 3,000 tpd whereas, in 2009, the rate of MSW at landfill is 8,963 tpd. From 1991 to 2009, the quality of MSW disposed of at landfill is ranged from 2-3 million tones a year. So, landfill is also a major method to treat MSW. I suggest the Government and general public to have a long term plans for the MSW. Moreover, according to Tables 6a.8 and 6b.8 of the full EIA Report, about 923 tpd (~30.8% of the capacity of treating MSW</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>

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	<p>in IWMF) of the waste generated in the operation of the proposed IWMF will be disposed to WENT landfill site. As a result, the need of landfill sites does still exist.</p> <p>Comparing the ecological and fisheries impacts of the proposed IWMF in TTAL and SKC, TTAL has fewer ecological and fisheries impacts than SKC, and so fewer mitigation measures will be needed. The construction phase of IWMF in SKC will affect the habitat of Finless Porpoise, the 198 coral colonies, and permanently loss of 31 hectares of fishing ground and 15.9 hectares of fisheries pawning and nursery ground.</p> <p>Comparing the health impacts of the proposed IWMF in TTAL and SKC, although both highest incremental (excess) cancer risk arising from the IWMF in TTAL and SKC are within the screening level of 1×10^{-5} adopted by USEPA, the figure shown in TTAL (9.87×10^{-7}) is lower than the figure shown in SKC (2.76×10^{-6}). These figures may imply that the IWMF at TTAL may be more safe than SKC.</p> <p>In conclusion, IWMF in TTAL will commence about 1.5 years earlier than IWMF in SKC and may help to extend the life-span of the existing strategic landfill site. Also, IWMF in TTAL has fewer ecological and fisheries impacts than IWMF in SKC and so fewer mitigation measures are needed. Moreover, IWMF in TTAL shows fewer health impacts than IWMF in SKC. So, the IWMF at TTAL is preferred. Besides this, the long term plan of treating MSW related to incineration and landfill is needed.</p>	<p>appropriate mitigation measures are implemented.</p> <p>To minimize and mitigate the potential ecological and fisheries impacts at SKC site, the following measures are recommended:</p> <ul style="list-style-type: none"> • Government making firm commitment to seek to designate an appropriate area of waters of about 700 hectares between Shek Kwu Chau and Soko Islands as a marine park, in accordance with the statutory process stipulated in the Marine Parks Ordinance. A marine park study would be conducted to identify the location and coverage of the park area and to determine suitable marine ecology enhancement measures such as deployment of artificial reef and release of fish fry to be implemented within the proposed marine park. • Adopt measures to avoid or reduce adverse impact on the marine water quality due to the site reclamation and submarine cable laying works. This would include use of non-dredge method for site reclamation, building coffer dams around the marine area prior to commencement of reclamation filling, employment of silt curtains, control on dredging and filling rates • Avoidance of noisy works during peak Finless Porpoise season • Monitoring of exclusion zone, adoption of regular marine traffic route, and limitation of vessel speed to ten knots at areas with high Finless Porpoise sighting density. • While the rate of water intake for water supply at the desalination plant of the IWMF is slow, the potential impact from impingement and entrainment of fisheries resources would be further minimized by provision of screen at the seawater intake <p>With the implementation of the proposed mitigation measures, the residual impact for proposed two sites would be acceptable.</p> <p>The incremental (excess) cancer risk arising from the IWMF at both sites are within the screening level of 1×10^{-5} and thus the Project shall not present an unacceptable risk at both sites.</p>	<p>ES:4.3.5</p> <p>ES:4.3.3 & EIA : S5b.8</p> <p>ES:4.4.3</p>
PC004	<p>The beautiful stretch of water between Hong Kong and Macau must see more tourists pass through it than any comparable stretch of water in the world. I had a letter published in these columns about 25 years ago when I suggested that in order to protect the waterway, the city should declare the area a Marine Park. Nothing happened of course. Now, with 25 years accumulation of rubbish collection points and other eyesores along the waterway, they are going to add an incinerator and a garbage recycling plant, with all the barges carrying the garbage to the site as well. What can I say?</p>	<p>The proposed artificial island near Shek Kwu Chau (SKC) (south west side of SKC) is outside the waterway, Adamasta Channel. Marine transportation has been adopted for efficient and environmental friendly transportation of municipal solid waste (MSW) in Hong Kong for about 20 years. The MSW is compacted into sealed containers at three existing Refuse Transfer Stations (i.e. Island East Transfer Station, Island West Transfer Station and West Kowloon Transfer Station) and transported by dedicated vessels to the waste disposal site. Contingency plans for typhoon, rough seas and foggy conditions have been developed and implemented without any adverse problem. The existing vessels for MSW transport already use clean ultra-low sulphur diesel so as to reduce pollutant emission and avoid black smoke. This practice will continue for transportation of MSW to the future IWMF. Moreover, as all the MSW are contained in sealed containers, their transportation by ships has not caused any floating refuse problem and the future transportation to the IWMF would not cause any increase in floating refuse problem as well.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>

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		<p>Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>The project proponent will also seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance by 2018, in order to tie in with the operation of the IWMF at the artificial island near SKC. Deployment of artificial reef and release of fish fry have also been proposed as additional enhancement measures for the loss of habitat for Finless Porpoise and fisheries resources.</p>	ES:4.3.5
PC005	<p>As a Cheung Chau resident for many years even I had moved out lately, I still not comfortable with the government's plan for a large size incineration facilities in Shek Ku Chau which is vincintiy to Cheung Chau Island</p> <p>I believe it will be everyone's responsibilities and it should a multiple sites setup rather than picking just a couple of places. I think you have tried to avoid the publicities and offset the importance of educating the people's social responsibilities !</p> <p>No matter where you build the facilities, it will raise certain discontent but why not picking a few more places to offload the risks ? I know the project cost is expensive but concentrating in one place is not always cost effective. I am not too convinced it is cost effective too. In that sense, would your reason for picking Shek Ku Island by ignoring or discriminating the islanders wishes are because we are minority or relatively smaller voices or low income group ?</p> <p>If you take a rough count on the number of visitors to Cheung Chau each week, you will find the numbers are growing. Why spoiling a paradise for weekenders ?</p> <p>If your decision is trying to find a place far from populated areas, why not choose a place much farther ? I know there might be a bundle of attributes that you will consider but I am not sure what is the logic behind your decision on this.</p> <p>As an islander before, I love this island a lot. I strongly discontent and disappointed by the government's decision on this. I know there is still a lot of troubles in Taiwan's incineration facilities and same for other countries as well. The project is not just posting identified and unidentified risks</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p>	ES 4, ES 5 and under various parts of EIA Reports

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	<p>to the surrounding environment but also to the health of the people around the area ! Would the documentation on environment assessment and cost be published and open to public to review ? As a researcher, I would have a lot of questions on how you come to a decision on this.</p> <p>I urge the reconsideration on this and disclosure of environmental, cost assessment and potential sites comparison details.</p> <p>Looking forward to hearing from you.</p>		
PC006	<p>After studying your reply and the recent released EIA report for the Integrated Waste Management Facilities, I have some points that required your department to clarify. Please forgive my late reply as the EIA report is to technical for a normal lady to understand!</p> <p>First of all, I am quite surprising that Cheung Chua is not considered as Air Sensitive Receivers. According to Section 3b.7.2.6 (Air Quality Impact) and Section 9b.2.3.2 (Health Impact), all Cheung Chau residential area are not included in your Identified Air Sensitive Receivers near SKC although Cheung Chau had a population more than 40,000. At the same time, some areas in Tung Chung (which is much more far away than Cheung Chau as well as Tung Chung is hinder by Lantau Island) are included in your list of Identified Air Sensitive Receivers near SKC. I could not understand why Cheung Chau (the most populated dense outlying island) is not included.</p> <p>My second point is about the cumulative effect with other pollution sources. I had made an enquiry to your department in last year. And your department's reply said the cumulative effect would include Cheung Chau Crematorium and Chimneys in Cheung Chau. And your department reply said there is only odour pollution from Cheung Chau Slaughter House.</p> <p>According to Section 3b.5.2.2, the EIA only include the majot polluter Lamma Power Station located 12 Km away, how about the others pollution sources especially the chimneys in Cheung Chau. Why these chimneys (which are more close to the SKC) are not considered in the assessment of cumulative air quality impacts?</p> <p>For the Cheung Chau Slaughter House, the odour problem may be the major complaints sources in your department's record. However, my concern is about the invisible air pollutants. There are in fact two Chimneys within the area of Cheung Chau Slaughter House and Cheung Chau Wastewater Treatment Plant. Please refer to the attached photos for reference. These two chimneys are only about 5km from SKC IWMF. And more important, one of the most populated dense estate (Cheung Kwai Estate) was just next to the area of Cheung Chau Slaughter House and Cheung Chau Wastewater Treatment Plant. What would be the cumulative effect of the air pollutants to them? Why Cheung Kwai Estate is not one of your Air Sensitive Receiver?</p> <p>Other than normal condition, I think the EIA report shall also include the worst case that these Chimneys had emitted air pollutants at the same time during the operation phase of IWMF. However, the EIA report did not cover these worst cases analysis. That's why I can't agree the conclusion of the EIA report that the air quality objective could meet during the operation phase.</p> <p>Being residences in Cheung Chau, I really want to know all kind of air pollutants that I am going to breathe in the future. Therefore, I would like your department to explain clearly to all the residences</p>	<p>The air quality assessment of the IWMF EIA was carried out to cover the entire territory of the HKSAR including Cheung Chau and Tung Chung.</p> <p>The Air Sensitive Receivers (ASRs) listed under Section 3b.7.2.6 and Section 9b.2.3.2 are ASRs refer to areas that would likely be subject to high level of cumulative air pollutant concentrations close to the AQOs. As the air pollutant concentrations at Cheung Chau are predicted to be well below the AQOs, it is hence not included in the list of ASRs. Details of the air pollution sources considered in the cumulative air quality assessment are described in Sections 3b.6.2.18 to 42 of the EIA Report. In consideration of the public view, Cheung Chau as ASR has been added in the Revision of the EIA Report. Moreover, as shown in Appendix 3.11f, the maximum contribution of IWMF emissions on the cumulative air quality at Cheung Chau would also be minimal. For example, the contribution of IWMF emissions to the annual average NO2 concentration at Cheung Chau would be less than 0.08µg/m3 or less than 0.1% of the respective AQO of 80 µg/m3.</p> <p>All major air pollution sources that may contribute to cumulative air quality impacts have been taken into account in the EIA, this include those in the Pearl River Delta Economic Zone, roads, marine vessels, airport, power plants (including not only the Lamma Power Station stated in Section 3b.5.2.2 but also other power stations as listed in Section 3b.6.2.25) and the industries within Hong Kong, as well as major chimney emissions from Cheung Chau (e.g. the crematorium). Besides, the cumulative air quality assessment has taken into account the worst-case scenario that all these major pollution sources would be operating simultaneously.</p> <p>With regard to the two chimneys within the area of Cheung Chau Slaughter House and Cheung Chau Wastewater Treatment Plant shown in the attached photos, it is noted that these chimneys belong to the Slaughter House but they have not been used for a long time and there is no plan for future use. Both the Cheung Chau Slaughter House and the Cheung Chau Wastewater Treatment Plant do not have any flue gas emission.</p> <p>The air quality modeling results under the worst case scenario indicated that, with the 150m high IWMF stack and the separation distance of about 3.5km to 5km between the stack and Cheung Chau, the IWMF stack emissions would become vastly diluted when reaching Cheung Chau. The predicted cumulative concentrations of pollutants at Cheung Chau would comply with the respective AQOs.</p> <p>Regarding odour, the EIA has assessed the potential odour impacts associated with the IWMF operation. The wastewater treatment plant, the waste reception halls and the waste storage areas of the IWMF would be fully enclosed and the odorous air in this facility would be extracted and used as combustion air for incineration to remove the odorous compounds. For the mechanical plant, it would be equipped with deodorizing system of 95% odour removal efficiency. Besides, the wastewater treatment plant, waste reception halls, waste storage areas and the mechanical treatment plant would also be operated under</p>	EIA: Appendix 3.11, S3b.7.2.6, 9b.2.3.2, S3b.6.2.18 to 42, S3b.5.2.2, S3b.6.2.25

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	in Cheung Chau that what kind of full scale analysis your department had made for the residences in Cheung Chau.	negative pressure to prevent odour leaking to the outdoor environment. The predicted cumulative odour concentrations would comply with the criteria required in the EIAO-TM. Adverse odour impact on nearby ASRs would not be expected. Besides, as far as public complaints are concerned, EPD's records indicate no complaints relating to the Cheung Chau crematorium or other chimneys in Cheung Chau have been received in the past two years.	
PC007	<p><u>有關：強烈反對石鼓洲興建垃圾焚化爐</u></p> <p>本法團得悉政府於本年二月十七日公佈環境評估報告，建議於石鼓洲興建垃圾焚化爐。本法團現特函 貴署強烈反對上述建議，原因是澄碧邨為大嶼山最大型低密度住宅，所有居民均享受遠離都市大自然氣息和清新空氣，但如 貴署考慮於石鼓洲興建垃圾焚化爐，由於石鼓洲距離澄碧邨甚近，垃圾焚化爐興建與運作對本邨附近生態環境有嚴重影響。</p> <p>另一重要反對原因由於政府並沒有為澄碧邨提供自來水，現時本邨食水來源全依賴雨水及夜間霧水積聚後由後山山間流出儲存以供飲用；而且焚化爐排出有毒氣體，大大降低澄碧邨鄰近空氣質素，尤其是當吹西南風向，毒氣體隨風直接吹向本邨。空氣質素下降直接影響附近雨水及霧水水質，嚴重影響本邨居民健康。</p> <p>此外，石鼓洲設有一軍用停機坪供緊急飛航服務，焚化爐每日排出大量煙及氣體對日後使用緊急飛航服務必大受影響。基於上述原因，本法團代表 xxx 所有業主居民：</p> <p>「強烈要求政府立刻擱置於石鼓洲興建垃圾焚化爐，應諮詢各方意見及訴求，考慮其他可行方案！」</p> <p>本法團建議 貴署應考慮其他地點興建垃圾焚化爐，例如選擇較遠離澄碧邨及長洲之大鴉洲，同時希望 貴署由覆本法團有關上述訴求，如有任何查詢，請致電 xxxx xxxx 與 xxx 客戶服務處 xxx 或致電 xxxx xxxx 與 xxx 聯絡。</p>	<p>有關焚化設施會排放大量煙及氣體而可能影響石鼓洲直升機停機坪提供緊急飛航服務的問題，綜合廢物管理設施會採用先進的 3T 技術及多重氣體潔淨系統，確保設施的排放符合國際上最嚴格的歐盟標準，並不會排出濃煙影響直升機的緊急飛航服務。</p> <p>有關選址方面，政府在 2007-08 年進行了詳細的綜合廢物管理設施選址研究，根據廢物管理設施諮詢小組(成員來自專業團體、環保團體、學術界和商界等)的建議，把包括郊野公園、海岸公園和海洋保護區、自然保育區、住宅和商業區等 23 種地區排除在初步選址範圍外。而索罟群島(即大鴉洲和小鴉洲)已被指定發展擬議的索罟群島海岸公園。該區是中華白海豚和江豚的重要生境，而且是這兩種海洋哺乳類動物在香港的出沒地區當中，唯一主要重疊空間的地區。該區亦是商業漁業資源的繁殖和育幼區。因此索罟群島並不適合發展綜合廢物管理設施。</p>	<p>ES:4.3.1 ES:4.4.2</p> <p>ES: 3.1 ES:3.1.1.4</p>
PC008	<p>Among the potential sites for the construction of incinerator as stated in the EIA Report, Lamma Quarry is preferred instead of the "Artificial Island next to Shek Kwu Chau" ...</p> <p>1) Maintain the high ecological value of Shek Kwu Chau's coastal area: fish spawning and nursery ground; sighting of Chinese White Dolphin and Finless Porpoise and coral community. Please treasure these beautiful creatures and their importance in the marine ecological system as their value is immeasurable.</p> <p>2) Let the marine creatures growing healthily in HK water, then people can have a chance to see these rare species e.g. through well-managed eco-tours.</p> <p>3) Lamma is closer than Shek Kwu Chau in terms of carrying the waste from the urban areas so save the transport cost.</p> <p>4) If Lamma quarry is chosen, land already available and no reclamation is required, so save the reclamation cost. Also, no dredging from the sea bed or other places is required, thus avoid negative environmental impacts that might happen in the dredged areas.</p>	<p>Ex-Lamma Quarry was not selected for the development of the IWMF because the IWMF there would face directly the existing tourist spot with seafood restaurant and marine culture zone (which is about 500m away) in the close vicinity. The IWMF would not be compatible with the existing land use as well as the future planned development for tourism and recreation there.</p> <p>For the proposed IWMF on the artificial island near SKC, the IWMF EIA proposes that a marine park of approximately 700 ha be designated in a suitable area in the waters between SKC and the Soko Islands. In this connection, a study to identify the suitable location and area for the proposed marine park and the marine ecological enhancement measures that should be implemented in the proposed marine park, such as deployment of artificial reef and release of fish fry, would be conducted. The EIA Study also proposed a number of measures to mitigate the potential indirect impacts on Finless Porpoises during construction and operation of the IWMF. These include avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, adoption of regular traffic route and limitation of vessel speed to 10 knots in areas with high Finless Porpoise sighting density.</p> <p>The impact to the coral could be effectively mitigated through water quality control measures such as deploy silt curtain system control of dredging and filling rates etc. With the implementation of the proposed</p>	<p>ES:4.3.5</p> <p>ES: Section3</p>

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	<p>5) Regarding the issue of "significant visual impact", the figure shows that the project only involves the construction of an incinerator and 3 low blocks. These structures can be designed into visually pleasing landmark. Look at the buildings around us! PLEASE TRUST THE ABILITY OF HONG KONG'S ARCHITECT! They are trained to design with creativity, practicability and functionality. Thus, these few structures can be designed and constructed to receive praises from the people living nearby.</p> <p>6) It will be a great opportunity to accommodate a visitor centre near the incinerator. The centre can be both recreational and educational, which match with the plan of making Lamma a place for recreation. With reference to the establishment of Hong Kong Wetland Park, where the centre is full of electronic games and displays to provide the knowledge of wetland to public through their interactive educational facilities. And, these successfully help raise the public awareness on wetland conservation. If Hong Kong wants to reduce wastes, education is very important to change the attitude of people so that in their daily living, they can realize some irresponsible actions might cause negative impacts to the environment and the whole society bears the consequences. Gradually, people will learn how to run a green living that the whole society will benefit.</p> <p>7) Keep the wilderness of Shek Kwu Chau, Hong Kong is having less and less places like this.</p> <p>Please re-consider the Lamma Quarry to be the potential site for the construction of incinerator. Thank you very much for your understanding!</p>	<p>measures, unacceptable impacts on corals are not anticipated.</p> <p>Regarding to the Chinese White Dolphin, the concerned area is not the habitat for Chinese White Dolphin.</p> <p>To conclude, ecological impacts due to the construction and operation of the proposed Project would be acceptable.</p>	
PC009	<p>選址於"石鼓洲的人工島"會嚴重影響離島居民的生活. 島上居民的生活環境會因而起了很壞的變化, 此決定將會嚴重影響離島居民與香港政府和各區居民的和諧.</p> <p>而且選址於"石鼓洲的人工島"並不是最有效的方案和選擇:</p> <ol style="list-style-type: none"> 根本性的垃圾制造問題並沒有長遠的解決方案; 並不合乎成本和營運效益; 相對於石鼓洲, 香港水域還有很多遠離民居的小島可供興建焚化爐. 阻力亦可以大大減少. 以民為本和服務大眾之原則下, 安居樂業是政府對市民服務的首要條件. 在任何一个接近民居的地方興建也會導致社會分化和破壞社會和諧. 基於"同一獅子山下"的理念, 香港政府可以考慮其他成本較高但又不影響各區居民. 例如於遠離民居的小島興建或考慮於中國境內遠離民居的地方興建, 與當地主地區政府共用焚化設施, 達致雙贏局面. 嚴重破壞鄰近離島的自然生態, 例如長洲, 影響離島居民的生活, 香港市民可供"充電"的地方. 對珍貴的海洋生態和資源造成不可勉回的破壞. 受害的是全香港的市民. <p>最後, 請反思於石鼓洲的人工島興建焚化爐的原因和理據, 不要為了急於興建一座焚化爐而草</p>	<p>為了全面地處理這個迫在眉睫的廢物問題, 香港特區政府根據 2011 年 1 月時的最新發展, 檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》(以下簡稱《政策大綱》)所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物, 而且不會造成環境問題, 政府會採取下列行動:</p> <ol style="list-style-type: none"> 把 2015 年的都市固體廢物回收率目標提高至 55%, 並加強有關減少廢物和把廢物循環再造的推廣和宣傳; 加快立法建議, 引進新的「生產者責任計劃」, 並擴大現時的「生產者責任計劃」, 鼓勵減少廢物。 鼓勵市民繼續參與討論各種方案, 以便引入都市固體廢物收費, 作為在源頭減少廢物的直接經濟誘因; 及 於 2012 年初向立法會財務委員會申請撥款, 務求先進廢物處理設施(包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物/有機廢物的有機資源回收設施)和現有堆填區的擴建都能夠及時啓用, 確保以不間斷及更加可持續的方法管理固體廢物。 <p>香港必須盡快確定發展第一個綜合廢物管理設施, 以便大幅減少都市固體廢物的體積, 否則, 在堆填區可用容量日漸減少的情況下, 到了 2018 年時, 便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成, 因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施, 香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理</p>	<p>ES:S1</p> <p>ES 4,</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>草下解決而最終造成破壞整體香港人利益的事情。</p>	<p>設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦提出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>是次環評研究根據兩個可能選址，評估了三個情景：</p> <ul style="list-style-type: none"> • 只於曾咀選址發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施； • 只於石鼓洲附近的人工島上發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施；及 • 在兩個可能選址各自發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施（並存情況）。 <p>環評研究結果摘要載於附件。環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p>	<p>ES 5 and under various parts of EIA Reports</p>
<p>PC010</p>	<p>The following are my comments in respect of the EIA Report (Ref: CE 29/2008(EP))</p> <p>The Report, Chapter 3, item 3.1.1.4, quoted as follows: Soko Islands were not considered for the development of the IWMF becauseIt is also a spawning and nursery ground of commercial fisheries resources. The development of the IWMF in the potential marine park was not considered suitable.</p> <p>Comments:</p> <p><u>Item 3.1.1.4 Soko Island</u></p> <p>The EIA Report touches only briefly on the question of site selection for the IWMF and rejected the Soko Islands due to it being:-</p> <ul style="list-style-type: none"> • Habitat of the Chinese White Dolphins, • A Marine Park, • The Finless Porpoises, • Spawning and nursery grounds for fish. <p>However it is my understanding, that the Soko Islands (locals call them the "Ah Chau Islands") consist of several islands, the two larger ones of which have already been "ruined or spoilt" to some extent as follows:-</p> <p><u>Siu Ah Chau</u></p> <p>The smaller of the two, Siu Ah Chau already has a Government built "Storage" for storing radioactive waste material, medical used wasted material; putting the waste aside for a long time, so that it slowly degrades. There is a signboard put up warning people not to go near. Threatening!</p> <p>The "Storage" is in corner bay of Siu Ah Chau, facing Tong Fuk Village. One feels uneasy and uncomfortable when approaching the "Storage". Somehow, this was built and presumably passed the Environmental Assessment?</p>	<p>The project proponent have gone through a systematic and deliberate process in shortlisting and evaluating the potential sites for the development of the IWMF. A site search exercise was conducted in 2008 under the study <i>Site Search for Integrated Waste Management Facilities in Hong Kong for Municipal Solid Waste</i> to identify the potential sites for the development of the IWMF. The Legislative Council, the Tuen Mun and Islands District Councils and the Advisory Council on the Environment were briefed on the findings of the site search in 2008. In the preliminary search exercise, 23 types of areas, including Country Parks, Marine Parks and Marine Reserves, Sites of Special Scientific Interest, Green Belt, Conservation Areas, Coastal Protection Areas, etc., were excluded, and an initial list of 21 sites was formed. The initial list of potential sites was then subject to further consideration with respect to their site characteristics, latest development status, prevailing wind directions and the dominant environmental conditions to form a site proposal. Six potential sites were shortlisted for evaluation based on the criteria, including environmental consideration, engineer/technical feasibility, cost, social and community impacts. The evaluation outcome suggested that an artificial island near Shek Kwu Chau and Tsang Tsui Ash Lagoons were worth taking forward for detailed studies and further consideration as potential sites for the IWMF.</p> <p>The EIA for developing the IWMF at the above two sites has now been completed. Taking into account the EIA report results, other factors relating to site selection and Hong Kong's overall waste management strategy as a whole, the Government has identified the artificial island near SKC as the preferred site for developing the first modern IWMF, subject to final approval of the EIA report. The main consideration/factors are: –</p> <p>(a) Central location and distance of MSW transportation. The artificial island near SKC is closer to the refuse transfer stations on Hong Kong Island and Kowloon than TTAL. The estimated aggregate refuse vessel transfer trip length from the refuse transfer stations to an IWMF at the artificial island near SKC would be reduced by one fourth to one third. The operation of the IWMF at the artificial island near SKC would be more environmental and cost effective. It would also reduce marine traffic near Ma Wan. Since the volume of MSW would be substantially reduced by 90% after incineration, the amount of residues need to be transported to the landfill will be much smaller than the original volume of MSW. The residues will be transported by sea directly in one round trip per day to the landfill at Nim Wan;</p> <p>(b) TTAL and SKC are both remote locations, and SKC is even farther from major population clusters</p>	<p>ES:S.3.1.1.4</p>

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	<p>However Shek Kau Kung fish caught near that area are considered to be unsafe for human consumption.</p> <p>Moreover a letter, written in Chinese, by EPD was sent the South Lantau Rural Committee on 7th June, 2005. ref: EPI611R1I1(XVII). The letter contained warnings and security measures regarding "the storage".</p> <p>From this, one must assume that:-</p> <ul style="list-style-type: none"> • EPD is aware and concerned of potential danger to the public, • The "storage" facility is not entirely safe, <p>Otherwise why issue the letter?</p> <p><u>Tai AhChau</u></p> <p>The larger island is called Tai Ah Chau.</p> <p>In 2007 China Light, CLP, made an Environment Assessment report to facilitate their building of a natural gas collection depot for fueling Power. Objections were raised, but somehow, the EA Report was passed. It was almost at the stage of commencing construction, when mainland China stepped in to provide natural gas from China, and hence, the project stopped. There is ample evidence to support this.</p> <p><u>The Natural Habitats</u></p> <p>Strangely, in both cases, the original grounds for not considering the Soko Islands for IWMF were conveniently ignored.</p> <p>i.e. The Report, Chapter 3, item 3.1.1.4, Namely:-</p> <ul style="list-style-type: none"> • the natural habitat of the Chinese White Dolphins, • the Marine Park, • the Finless Porpoises, • the spawning and nursery ground for fish <p>Presumably Government is going to adopt this same evasive tactic in respect of the Shek Ku Chau project.</p> <p>What is now required is a detailed and comprehensive study that explores ALL aspects of the potential negative impact on the environment, marine habitats and nearby residents and ALTERNATIVES.</p> <p>Who will explain why yet another island is to be vandalized?</p> <p><u>Alternative solutions</u></p>	<p>than TTAL. There is a residential population of about 300 on the island. SKC is about 3.5 km to 5 km away from Cheung Chau which is not located in the prevailing downwind direction (i.e. northeasterly wind towards southwest in the sea). It is also worth noting that there are no other emissions sources within 10 km of the SKC site. The cumulative impact on the air quality would be relatively small;</p> <p>(c) The IWMF could generate positive economic synergy with nearby islands, particularly Cheung Chau during the construction and operation stages, in terms of an increase in employment opportunities, ferry service and other economic activities from people who work at or visit the facility); and</p> <p>(d) the selection of the IWMF site at the artificial island near SKC will achieve a well-balanced spatial distribution for waste management facilities for Hong Kong as a whole.</p>	

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	<ul style="list-style-type: none"> • Has anyone considered alternatives? • What are the alternatives? <p>Summary</p> <p>Something is happening all the time around us, the residents on Islands.</p> <ul style="list-style-type: none"> • on Siu Ah Chau, the radioactive medical waste storage (built and in operation), • on Tai Ah Chau, the CLP natural gas storage (abandoned, luckily) • on Mong Tung Wan, Chimawan peninsular, the Columbarium (proposed) • on Shek Kwu Chau, the Incinerator (now proposed) • on Hei Ling Chau, Super Prison (previously proposed) <p>My Conclusion - objection to the Project</p> <p>The Report and its conclusion are contradictory and flawed and require further in depth study, including extensive public consultation and above all, transparency.</p> <p>In view of above reasoning I must say that I strongly object to the proposed project.</p>		
PC011 - PC155	<p>Covering</p> <ol style="list-style-type: none"> 1. 反對石鼓洲，興建焚化爐! 2. 長洲是我家，唔想咁快瓜! 3. 愛我下一代，齊心保未來! 4. 我愛藍天，空氣新鮮! 5. 毒煙釋放，長洲即喪! 6. 健康無價，不容欺詐! <p>Contents</p> <ol style="list-style-type: none"> 1. 烏煙瘴氣，影響洲民健康，禍及下一代 2. 捨近取遠，浪費公帑 3. 爐底灰燼，運回堆填區，更加擾民傷財 4. 建人工島，破壞生態，引致江豚絕種 5. 填海工程，範圍廣泛，趕絕漁民生計 	<p>健康影響</p> <p>為確保公眾健康和保護環境，綜合廢物管理設施將會採納國際上最嚴格的歐盟排放標準。環評結果確定綜合廢物管理設施的排放不會對香港造成不可接受的健康或環境影響。</p> <p>經過多年的發展，廢物焚化技術已非常成熟，亦為世界上不同城市廣泛採用。除了新加坡，鄰近香港的廣州、澳門，以及日本的主要城市，均早已採納焚化技術，以協助處理沉重的都市固體廢物問題。在焚化設施被廣泛採用的同時，國際間亦發展了一套以歐盟為最高指標的排放標準，對這類型設施的排放作出規定，確保設施在運作期間對居民健康不會有影響。</p> <p>空氣質素</p> <p>綜合廢物管理設施將會裝設先進的空氣污染物控制系統，包括清除氮氧化物的選擇性催化還原、清除二噁英的活性碳，以及排放物持續監察系統，以確保來自綜合廢物管理設施煙囪的排放物符合香港和歐盟委員會的廢物焚化設施排放上限或更嚴格的目標排放上限。是次研究評估了本工程項目可能造成的累積空氣質素影響。這項空氣質素影響評已經考慮了區域性和本地排放源所造成的累積影響，其中包括珠江三角洲經濟區以及香港的主要空氣污染源。在可能受到綜合廢物管理設施影響的地區內，各個具代表性的空氣質素敏感受體各項空氣質素參數，其預測最高累積濃度全部符合相應的香港空氣質素指標。</p> <p>設施落成後，會採用公開和高透明度的監控系統，市民及長洲居民每日 24 小時均可以讀取由連續性排放監控系統所得的即時數據，以確保知道綜合廢物管理設施有效運作並符合排放標準。</p> <p>氣味管理</p> <p>要有效排除氣味問題，運送廢物的流程設計是關鍵的一環。香港現時的三個策略性堆填區中當中，現</p>	<p>Under various parts of the EIA Reports</p> <p>ES:S.4.2.1, S.4.3.1, S.4.4.2</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>6. 環評報告，空泛失實，掩人耳目</p> <p>7. 舒緩壓力後花園，藍天白雪，清新空氣，毀於旦夕</p> <p>8. 世界聞名歷史文化小島，從此消失，旅客嚇怕，永不再來</p> <p>9. 增加航道壓力，嚴重影響船隻安全</p> <p>10. 運輸途中，污水臭味，嚴重破壞環境</p> <p>11. 破壞風水，影響深遠，有違基本法</p> <p>12. 未經諮詢，先斬後奏，無視長洲人意見</p> <p>13. 垃圾問題，人人有責，不應離島居民獨力承擔</p> <p>(Note: The 145 nos. of public comments from PC011 – PC155 basically have the similar / identical objection reasons as mentioned above.)</p>	<p>時來自香港島和九龍的廢物是以密封貨櫃透過水路形式運送往位於稔灣的新界西堆填區。我們在從水路妥善運送廢物方面，已經有約二十年豐富的經驗。未來，所有從位於港島及九龍廢物轉運站運往綜合性廢物管理設施的都市固體廢物，都會載於密封貨櫃內，由船隻從現有的垃圾轉運站運抵人工島選址，確保運送途中不會構成氣味滋擾。</p> <p>至於綜合廢物管理設施內可能產生氣味滋擾的裝備，例如污水處理廠、廢物接收大堂、廢物存放區和機械式處理廠等，環保署會訂明承建商必須採用全封閉的設計。此外，設施亦會裝設抽氣除臭系統，並且會在負氣壓下運作，以防止氣味洩漏到室外環境。環評研究預測綜合廢物管理設施引致的累積氣味濃度會符合《環評技術備忘錄》所要求的準則，不會對選址附近或長洲造成不良氣味影響。</p> <p>江豚生境的保育</p> <p>毗鄰石鼓洲的人工島選址不在法定或擬議的生態保護區，環評研究顯示石鼓洲附近的海域不是中華白海豚經常出沒的區域，在大嶼山和南丫島以南的海域，包括石鼓洲附近地區，是江豚（<i>Neophocaenaphocaenoides</i>）的重要生境。擬建的人工島可能令江豚永久失去 31 公頃生境。其實，江豚出沒的區域非常廣闊，夏天及秋天較多在蒲台島附近出沒，而冬天及春天較多在大嶼山以南（包括索罟群島、石鼓洲、長洲、及近大嶼山等附近的海域）和南丫島以南的海域出沒。雖然如此，為了緩解 31 公頃生境損失，環評研究建議在石鼓洲和索罟群島之間的海域內，劃出約 700 公頃的合適範圍作為海岸公園。為此我們會進行一項海岸公園研究，以便找出設立海岸公園的適當地點和範圍，並決定在擬建的海岸公園內應該實施的海洋生態改善措施，例如放置人工魚礁和釋放魚苗等。</p>	<p>ES:2.2.3.2</p> <p>ES:S.4.3.5</p>
PC156	<p>Covering</p> <p>1. 反對石鼓洲，興建焚化爐!</p> <p>2. 長洲是我家，唔想咁快瓜!</p> <p>3. 愛我下一代，齊心保未來!</p> <p>4. 我愛藍天，空氣新鮮!</p> <p>5. 毒煙釋放，長洲即喪!</p> <p>6. 健康無價，不容欺詐!</p> <p>Content</p> <p>堅決反對興建石鼓洲焚化爐，還我清新空氣藍天白雲</p>	<p>此外，環評研究也建議了多項措施，緩解綜合廢物管理設施在施工和運作階段可能對江豚造成的間接影響。這些措施包括避免在江豚最活躍的季節進行高噪音工程、對專用區進行監察、採用固定的交通航線，以及在較多發現江豚的地區限制船隻時速在十海里以內等。在實施各項建議緩解措施後，本工程項目對江豚造成的不良影響會被降低至可接受水平。</p> <p>漁業影響</p> <p>在毗鄰石鼓洲的人工島發展綜合廢物管理設施，需要進行約 16 公頃填海工程。為了盡量減少填海挖泥和填土工程及其環境影響，我們已將填海面積比原先的建議減少約四成，環評研究亦建議以“格孔式圍堰”的填海方法來取代斜坡式海堤。所謂“格孔式圍堰”，即是先以筒狀的金屬物料興建圍堰劃定填海範圍，再注入填料進行填海的方法，使人工島防波堤的建造工程無需進行大規模的沉積物挖掘。此外，我們在工程期間會使用隔泥幕系統、控制挖泥和填土速度等多項緩解措施，減少工程影響海洋水質。長遠來說，更重要的一點是未來的設施將會做到零排放的目標，在廢物處理過程所產生的污水經處理後會全部回用。</p> <p>環評研究據此進行了水質影響的定量評估，結果顯示在實施緩解措施的情況下，工程所產生的水質影響會是局部和輕微的，對附近海域捕漁業造成的間接影響亦只是輕微的和暫時性質的。而大嶼山長沙灣養魚區距離人工島選址超過九公里海程，預計興建人工島的填海工程不會影響養魚區的水質及其運作。施工及運作期間會進行嚴密的水質監察，並在互聯網上公布監察結果，以維持高度透明。</p> <p>因興建人工島發展綜合廢物管理設施，香港南部海域會永久失去 31 公頃捕魚區。環評研究顯示該海區只支持低至中等的漁業產量(每公頃約 100-200 公斤)，加上會永久失去的 31 公頃只佔香港整體捕魚區的極小部份，因此綜合廢物管理設施項目應不會對香港整體的漁業產量構成任何重要的影響，項目</p>	<p>ES:S.4.3.6</p>

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		<p>對漁業造成的影響會在可接受水平。上面提及的江豚生境生態緩解措施，亦助提昇漁業資源。</p> <p>關於選址的考慮 是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦提出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>是次環評研究根據兩個可能選址，評估了三個情景： 只於曾咀選址發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施； 只於石鼓洲附近的人工島上發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施；及 在兩個可能選址各自發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施（並存情況）。</p> <p>環評研究結果摘要載於附件。環評報告顯示，在上述兩個地點興建现代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p> <p>地區諮詢 我們一直就擬建的綜合廢物管理設施與相關的區議會及地區人士保持聯絡，希望能令地區人士更了解現代廢物焚化處理方法，如在 2008 年 3 月，我們曾向離島區議會介紹在本港發展綜合廢物管理設施的最新進展和選址研究的結果，並分別在 2008 年 4 月及 5 月出席長洲鄉事委員會及其舉辦的居民大會，聽取市民的意見。在 2009 年，我們聯同屯門和離島區共 26 位議員到東京和大阪，實地考察日本當地如何利用先進的焚化技術來處理當地的廢物及污泥。我們亦於 2010 年 11 月 15 日、2011 年 2 月 21 日向離島區議會和 2011 年 3 月 8 日、3 月 10 日、3 月 17 日、3 月 29 日、4 月 11 日、4 月 12 日、4 月 14 日向長洲鄉事委員會、長洲地區組織及居民介紹在本港發展綜合廢物管理設施的最新進展。</p>	ES 4, ES 5 and under various parts of EIA Reports
PC157	<p>The xxxx is writing to express its views on the captioned EIA report, and associated issues on which the formal opportunity to comment has regrettably not been afforded.</p> <p>In summary:-</p> <ul style="list-style-type: none"> We accept in principle the building of modern waste to energy incinerators as part of a comprehensive waste management strategy. We note with deep regret that as yet there is no comprehensive waste management strategy, and We deplore the decision to site the first IWMF adjacent to Shek Kwu Chau, a proposed conservation area <p>[Paragraph references in our submission following are to the Executive Summary]</p> <p><u>Site selection of Shek Kwu Chau (SKC)</u></p> <p>1. Had the criteria for excluding sites included that of "proposed conservation area" then SKC</p>	<p><u>Site selection of Shek Kwu Chau (SKC)</u></p> <p>During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chau as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and will recommend environmental monitoring and audit programmes to ensure the effectiveness of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p>	ES:2.1.1.3 ES 4, ES 5 and under various parts of EIA Reports

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	<p>would have been excluded. We are enclosing a copy of the <u>latest</u> planning study for this area, the South West New Territories Development Strategy Review (SWNT DSR) which shows the publicly debated and agreed outcomes for the study area which includes SKC.</p> <p>2. Other proposed conservation designations are listed - <i>potential country parks, potential marine parks, proposed fisheries protection areas, proposed landscape protection areas</i> (3.1.1.2). <u>We do not understand why proposed conservation areas are not a category for exclusion, nor why a publicly endorsed planning strategy was ignored.</u></p> <p><u>Lack of a comprehensive waste management strategy</u></p> <p>3. We took part in discussions on such as long ago as 2002 yet EPD is no further advanced in implementing an over-arching strategy. Individual initiatives have been piecemeal and despite good intentions, have been poorly implemented. For example the landfill charging scheme was intended to encourage waste reduction, but due to a complete absence of associated enforcement funding, was in fact circumvented by dumping in countryside areas. <u>We do not understand why HK cannot implement a comprehensive policy</u></p> <p>4. We note that HK infamously ranks first in the world in producing the most waste per capita, yet the Administration proposes <u>no</u> education to encourage reduction in consumption. Indeed the opposite is the case, with conspicuous consumption being favoured and promoted. This is unsustainable in resource terms, as well as negating improvements in waste processing. <u>In this era of enlightened awareness of diminishing resources and associated climate change, we do not understand why the Administration cannot promote responsible living.</u></p> <p>5. We note that government owns the landfills and proposes to own the IWMF. Yet it has not taken responsibility for recycling, arguably the most important of the 3 legs to waste disposal. Recycling in HK is an orphan, devolved to the private sector to struggle with acquisition of appropriate sites, tenure issues and the vagaries of the market place. Our view is that recycled materials represent a return of the Earth's diminishing resources as well as an effective disposal strategy. <u>We do not understand why the Administration refuses to take up the entire waste management effort as a public purpose.</u></p> <p><u>Merits of the two short-listed sites</u></p> <p>6. Contrasting sites would be harder to find. The only aspect which they have in common is their relative remoteness from centres of population. This aspect however should not be a determinant if indeed the IWMF is completely safe (which the EIA indicates) and is a community asset and tourist attraction (which the Administration states). Indeed given the latter, it behoves the Administration to place the IWMF in a convenient location to bolster our tourism industry and the lucky district wherein it is sited. We note this has not been the case, which somewhat undermines the credibility of the argument.</p> <p>7. Tsang Tsui (TT) comes out clearly in the EIA as the logical site. It is:-</p> <ol style="list-style-type: none"> i. a brownfield site, and entirely compatible with its neighbours ii. possessed of both marine and land access 	<p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ol style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW that we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p><u>Photomontages</u></p> <p>The architectural and landscape design will be carried out by the future Design-Build-Operate contractor. In order to demonstrate the effect of the proposed landscape and visual mitigation measures, photomontages were prepared based on a reference design. The reference design aims to form a baseline for the future design to ensure that the architectural and landscape design shall meet this minimum requirement.</p> <p><u>NOx Emission Standard</u></p> <p>Currently the EU standards limit the daily average NOx emission to be not more than 200 mg/m³. Since the Government has decided to adopt advanced technology to improve the quality of air emissions, the daily</p>	<p>ES:S.1</p> <p>ES: Figure ES4</p> <p>ES:2.2.1.3</p>

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	<p>iii. of almost no environmental impact</p> <p>iv. not damaging to fisheries</p> <p>v. much cheaper and much quicker to build</p> <p>vi. the facility with the smaller footprint - one quarter of SKC</p> <p>vii. adjacent to a power station to take the power generated</p> <p>viii. adjacent to a landfill (WENT) to take the residual ash</p> <p>ix. adjacent to WENT and offers the prospect of landfill mining in future</p> <p>8. Shek Kwu Chau (SKC) has none of the advantages listed at 7. Rather it is:-</p> <p>i. a pristine seascape adjacent to an island scheduled for conservation</p> <p>ii. possessed only of marine access - a one access option facility</p> <p>iii. of considerable environmental value, particularly marine and visual</p> <p>iv. a considerable asset to fisheries</p> <p>v. much more costly than TT, and takes 2 years longer to build</p> <p>vi. of a massive footprint - 4 times that of TT</p> <p>vii. requiring a long, expensive and environmentally damaging power connection</p> <p>viii. requiring further barging of 10% of waste to WENT</p> <p>ix. has no prospect of landfill mining in future - a measure which could markedly extend landfill life</p> <p>9. The Administration has said that SKC has been chosen for 4 reasons:-</p> <p>i. <i>The distance from SKC to the RTS is shorter thereby saving transport-related environment costs. In our view this is simply a selective choice of RTS.</i> The position could equally be argued for TT if NT located RTS are chosen. It also fails to mention the disposal of ash residue</p> <p>ii. <i>The population clusters are further away.</i> This is clearly not the case if only nearby clusters are considered. Lung Kwu Tan, 3 km from TT, has a population vastly <u>less</u> than Cheung Chau, also 3 km from SKC. <u>It is quite wrong to factor in Tuen Mun town</u> which is over 6 direct km away and screened by 2 ridges of hills including Castle Peak itself</p> <p>iii. <i>There is synergy with community and tourism.</i> We are quite unable to see how this has in any way influenced the decision in favour of remote and hard to access SKC. <u>The opposite seems the case.</u></p> <p>iv. <i>Achieving a balance throughout HK of such facilities.</i> This statement has no logic whatever. Locations lend themselves to certain activities and preclude others. We would not propose such for Central for example. <u>It would make a mockery of urban planning if every district was to bear its own 'share' of industrial facilities.</u></p> <p><u>Comments on the technical aspects of the EIA - Executive Summary</u></p> <p>10. The photo montages are likely to be misleading and not the final outcome if they are indeed only "reference designs" [2.1.1.2]</p> <p>11. The specification that NOx emissions are capped at 50% of the most stringent EU standards, is praiseworthy [2.2.1.3]</p>	<p>average emission limit of NOx for the IWWMF is lowered to 100 mg/m³.</p> <p><u>Visual Impact of Breakwater</u></p> <p>Shek Kwu Chau will serve as the natural visual barrier to provide screening effect to the structures of IWWMF including the breakwater. The potential visual impact can be alleviated.</p> <p><u>Soko Island</u></p> <p>Soko Island is considered not a suitable site for IWWMF because Soko Islands have been designated for the development of a proposed Soko Islands Marine Park.</p> <p><u>Sources of MSW to be delivered to IWWMF</u></p> <p>It is proposed to deliver the MSW from 3 existing refuse transfer stations (RTSs), including Island East Transfer Station, Island West Transfer Station and West Kowloon Transfer Station. The key reason for selecting these RTS is the total amount of MSW collected will be very close to 3,000 tonnes/day, which is the design capacity of the IWWMF. This arrangement will facilitate the control of amount of MSW to be delivered to the IWWMF. Either too much or too less MSW to the IWWMF would not be favorable for the optimal operation of the IWWMF. As the amount of MSW being directly delivered to the landfills would be difficult to control, it is not recommended to divert this MSW to the IWWMF.</p> <p><u>Visual Impact to Sea Travellers</u></p> <p>The visual impact to the sea travellers of Deep Bay (VSR4) for the Tsang Tsui site and the sea travellers for the artificial island near SKC (VSR4) are both rated "Substantial". After implementation of the mitigation measures, the long-term residual impact would become "Moderate" for the sea travellers of Deep Bay (VSR4) for the Tsang Tsui site and "Slight / Moderate" for the sea travellers for the artificial island near SKC (VSR4).</p> <p><u>Designation of Marine Park</u></p> <p>Designation of marine park, where incompatible activities would be regulated and proper management regime imposed in accordance with the Marine Park Ordinance, would significantly help to conserve Finless Porpoise, and serve as an effective compensation measure for the permanent loss of Finless Porpoise habitat arising from the project. The enactment of Marine Park Ordinance (Cap. 476) provides for the designation, control and management of marine parks and marine reserves. Measures such as limitation on vessel speed limit (prevent collision between FP and vessel), control of fishing activities (protecting prey items), and restriction on development activities within a marine park (providing a non-disturbed environment for FP) could help to conserve Finless Porpoise through enhancing the quality of habitat.</p> <p><u>Translocation of Corals</u></p> <p>There were successful cases of coral translocation including the one for Proposed Extension of Public Golf Course at Kau Sai Chau Island, Sai Kung (HKJC, 2005). A total of 89 coral colonies were transplanted to a</p>	<p>ES:4.3.8.4</p> <p>ES:S.3.1.1.4</p> <p>ES:S2.2.3</p> <p>ES:4.3.8</p> <p>ES:4.3.5</p> <p>EIA: S7b.6.2.14</p>

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	<p>12. The height and length of the SKC breakwater will be massively intrusive. We have first hand evidence at Tai O. [2.2.2.6].</p> <p>13. We note that from 2.2.3.2 that the MSW selected for SKC is currently delivered to WENT despite the longer transport movement compared with SENT, which somewhat invalidates the cost-saving argument advanced for SKC.</p> <p>14. We note with approval that the Sokos have been excluded from the site selection [3.1.1.4], for proposed marine park and marine habitat reasons. Yet EPD very recently allowed the Sokos to be considered for a LNG terminal. As noted at paras 1 and 2 above, there is clear problem with the site selection criteria adopted by EPD.</p> <p>15. It is stated at 3.1.1.5 that <i>"the IWMF should be located in areas compatible with neighbouring activities."</i> This is clearly <u>not</u> the case with the selection of SKC.</p> <p>16. There is a clear indication of bias in 3.1.3.9. The health effects of emissions are said to be <i>"very small and unlikely to be quantifiable"</i> [4.2.7.1] so the introduction of being "downwind" is irrelevant and misleading.</p> <p>17. We have commented at para 9 (i) above on the choice of RTSs to be served and note the undue weight that is placed on SKC thereby in 3.1.3.9.</p> <p>18. We are puzzled by 3.6.1.4. If time is of the essence, as the Administration has been saying, then why choose SKC? If TT was chosen, the compromises between phased and concurrent construction could be eliminated to the benefit of the environment - surely an objective for EPD?</p> <p>19. We note from 4.2.1.5 that even with cumulative air quality impacts factored in, TT still complies with AQOs.</p> <p>20. We note and agree with 4.2.2.1 that TT is <i>"situated in a remote location"</i>. It is not <i>near population clusters</i> as various Administration utterances have stated.</p> <p>21. We note from 4.2.2.2 that the noise effects from servicing TT by road amount to an inconsequential increase of <i>"well below 1DBA"</i> on the Lung Kwu Tan Rd.</p> <p>22. We note with approval the specification that no generated waste water will be released from site [4.2.3.2]</p> <p>23. The residue ash -10% by volume of the MSW processed - will need to be disposed of at WENT [4.2.4.2]. We consider that this places TT firmly at an advantage being adjacent, and behaves the Administration to make this distinction (which it currently does not) when comparing transport matters.</p> <p>24. The long term visual impact to sea travellers of Deep Bay will be <i>"moderate / substantia"</i> [4.2.8.4]. <u>The transient nature of these travellers is not mentioned</u>. In contrast, the long term visual impact to travellers off SKC will be <i>"substantial"</i> but these travellers are however <i>"of transient nature"</i> [4.3.8.7]. We have noted this misleadingly selective choice of words in other</p>	<p>nearby site in late November 2006 due to construction works. The recipient site is 80 m to the south of a ferry pier where corals of similar species composition were already present on the bedrocks. Coral monitoring surveys for transplanted colonies were conducted quarterly for one year (4 surveys in total: from December 2006 to September 2007). According to the Environmental Monitoring and Audit (EM&A) reports during the coral monitoring period between December 2006 and September 2007, by the end of the monitoring period, 86 out of 89 transplanted corals were recovered and their condition remained similar with the baseline condition before transplantation. Only a total of 3 colonies went missing; and within the 86 remaining colonies, only 3 colonies showed some degree of mortality (30-80%). No signs of mortality nor bleaching were noted in the rest of the 83 transplanted coral colonies (ibid.). With over 93% of transplanted corals remained in the same condition before transplantation, and no trigger of Event and Action Level, coral translocation is considered to be an effective measure to avoid direct loss of corals under this Project.</p> <p><u>Mitigation Measures for White-Bellied Sea Eagles</u></p> <p>The proposed mitigation measures for potential impacts to the White-Bellied Sea Eagles include avoidance of noisy works during the breeding season of White-bellied Sea Eagle, restriction of vessel access near the nest of White-bellied Sea Eagle, and avoidance of unnecessary lighting and provision of shielding for lights to minimize glare disturbance from the IWMF.</p> <p><u>Impact to Landscape Resources</u></p> <p>As mentioned in the last sentence of Section 4.3.8.4, the area occupied by the proposed works is reduced to practically minimum by measures such as efficient site layout and use of cellular cofferdam for the construction of breakwater and the artificial island, and the impact to LR3 would be as small as possible.</p> <p>In consideration of the impact of a project to a landscape resource, it is rational to compare the loss of the landscape resource with its original size or extent. For the proposed reclamation near SKC, the extent of the reclamation (about 15.7ha) is considerably small not only comparing to the current extent of the seawater landscape but also comparing to some major reclamation projects in Hong Kong, such as Penny's Bay (about 280 ha).</p>	<p>ES: S4.3.5.4</p>

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	<p>EIAs.</p> <p>25. The permanent loss of 31 hectares of important habitat for finless porpoises cannot be replaced [4.3.5.2], and it is most unlikely that placing a marine park designation on waters they already swim in, is any sort of effective mitigation.</p> <p>26. At 4.3.5.3 it is presumed that translocation of corals will be effective. This has <u>not</u> been our experience. EPD destroyed a considerable number of soft corals when it built its Tai Lei Chau RTS on and amongst them.</p> <p>27. We are unable to see how the proposed mitigation measures will be found "<i>acceptable</i>" by the white bellied sea eagles [4.3.5.4]</p> <p>28. <u>We cannot agree</u> with the conclusions at 4.3.5.6 that mitigation measures proposed will reduce impacts on finless porpoises, sea eagles and coral colonies to "<i>acceptable</i>" levels. "<i>Acceptable</i>" is a subjective word and in this case it has been used in the context of proceeding with the development notwithstanding the well documented severe impacts which included the expunging of entire habitats.</p> <p>29. At 4.3.8.4 we have almost the only mention in the entire Summary of what is the issue for SKC. It is a place with "<i>valuable landscape resources</i>", and the "<i>proposed works are of an industrial nature</i>". <u>Indeed! This is the crux of the issue</u> and one which until this point has remained unspoken. The choice of SKC offends existing planning proposals (the SWNT DSR) and even the site selection criteria at 3.1.1.5 ("<i>in areas compatible with neighbouring activities</i>").</p> <p>30. At 4.3.8.5 there is a statement "<i>However the quantity of the loss of the seawater as landscape resource is relatively small in comparison to the large extent of the adjacent seawater landscape</i>". This is non-argument-almost any reclamation can be shown to be small compared with the sea area adjoining. It is the replacement of the sea with any form or size of reclamation that is the issue.</p> <p>31. We note that despite the proposed mitigation measures at SKC, the long term prognosis is that the landscape and visual aspects will only be "<i>marginally acceptable</i>". With the understatement typical of EIAs this is an eloquent summary of the effects of this totally incongruous proposal.</p> <p>We have been massively disappointed with EPD in this matter. The choice of the site for the new IWMF lies with EPD, yet despite the overwhelming financial, operational and environmental advantages of TT, it has opted for SKC for reasons which do not stand argument. In truth the 'Protection' which forms part of the departmental title is more aptly renamed as 'Mitigation'</p> <p>We hope that EPD will listen to our comments and many others in a similar vein, and be persuaded to make TT the choice for the first IWMF.</p>		
PC158 - PC160	<p>本質詢文件內容共分兩部份：</p> <p>1) 根據上述環境影響評估報告內容及對於政府擬定在石鼓洲興建垃圾焚化爐提出質詢；</p>	<p>第一部份： 是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積</p>	ES 4, ES 5 and

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	<p>2) 對於政府擬定採用「活動爐排焚化技術」提出質詢。</p> <p>第一部份： 跟據環境影響評估報告內容，本人對於政府擬定在石鼓洲興建垃圾焚化爐提出以下疑問及質詢。</p> <p>工程因素： 選址曾咀鄰近龍鼓灘發電廠及無需作任何填海工程，除有關基礎建設工程及地盤平整外，於石鼓洲興建焚化爐將需要額外六項的建設工程，包括 1) 建造圍繞填海區的圍堰、2) 填海區的填土工程、3) 填海區的負重加壓工程、4) 建造防波堤、5) 碼頭區的打樁工程、6) 額外鋪設海底電纜連接大嶼山工程。未計及法定刊憲程序、裝設公用設施、更複雜的技術要求及填海工程而引發的時間風險。石鼓洲便需要額外 21 個月才能投入服務，選址石鼓洲的工程風險是一個非常不利的因素。</p> <p>工程開支： 按政府 2008 年估算興建焚化爐的基礎成本是 40 億，雖然政府並沒有提供最新造價，但根據工程師學會前會長黃耀新先生接受「經濟日報」訪問時估計(2011 年 2 月 18 日)，選址石鼓洲而導致額外的填海工程，其基礎成本將高達 80 億港元。</p> <p>對漁業的影響： 報告指出，如選址曾咀，其工程項目在施工和運作期間不會捕魚區和漁業資源受到損失。而選址石鼓洲，預計會永久失去 31 公頃捕魚區及接近 16 公頃魚類產卵和育幼區。</p> <p>空氣質素的影響： 報告指出，與曾咀比較，選址石鼓洲將增加有毒氣體二氧化氮在其他地區的份量，包括：北大嶼山、南大嶼山、機場、東涌及葵青區。但環保署並沒有將此重要結果在 2011 年 2 月 21 日離島區區議會簡報中向議員透露。(南華早報 22/02/2011)</p> <p>生態影響： 報告指出，無論在工程項目在施工和運作期間，選址石鼓洲對生態的影響比曾咀為大，所影響的種類亦較多，包括江豚、珊瑚及白腹海鷗。</p> <p>焚化技術的選擇： 首先，本人對於政府利用日本現正使用的焚化技術(即 氣化技術)，與環保署擬定使用的焚化技術(即 活動爐排技術)作出比較，實在是誤導公眾。據資料顯示，日本的「氣化焚化技術」是以 1350℃ 焚化垃圾，相比署方所建議以 850℃ 焚化垃圾的活動爐排技術高 500℃。兩者最大分別就是 850℃ 並不能將致癌物質二惡英完全分解，所以日本焚化爐的污染物排放量比署方建議的技術為低。再者，現時大部份日本焚化爐的每日處理量約為 300 公噸，就算東京最大的都市廢物焚化設施“新江東清掃工場”，其每日處理量也是 1800 公噸。而署方所建議的每日處理量為 3000 公噸。本人認為這比較並不合乎邏輯，結論亦非公平及客觀。</p> <p>廢物運送路線： 按署方公佈，選址石鼓洲的其中一個原因是因為由三個廢物轉運中心(即 西九龍/港島東/港島</p>	<p>影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦提出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p> <p>有關工程造價，現正進行詳細工程技術研究，與及諮詢有關團體就綜合廢物管理設施內的附加設施意見，具體造價仍未落實。</p> <p>對漁業的影響：</p> <p>在施工階段對漁業造成的間接影響只是暫時和局部性質。是次研究建議了多項緩解措施，例如使用隔泥幕、降低挖泥速度和分期進行海事工程等，藉此減少本工程項目對水質造成的不良影響，保護漁業資源。</p> <p>在運作階段，雖然綜合廢物管理設施的海水化淡廠的進水速度較慢，仍可以在海水進水口設置網隔來進一步減少漁業資源受到滋擾和沖走的潛在影響。</p> <p>除此以外，為補償江豚重要生境和漁業資源的損失，也會在擬建的海岸公園內實施額外的海洋生態改善措施，放置人工魚礁和釋放魚苗。</p> <p>若能妥當地實施各項建議緩解措施，本工程項目對漁業可能造成的影響會在可接受水平。</p> <p>空氣質素的影響：</p> <p>根據環評報告，在可能受到綜合廢物管理設施影響的地區內，已考慮了該地區內其它污染源，而本項對累積濃度的貢獻是微小的。各個選址方案中所預測最高累積濃度在各個具代表性的空氣質素敏感受體，都是相若及全部符合相應的香港空氣質素指標。</p> <p>生態影響：</p> <p>為了緩解對生態的影響，是次研究建議了多項緩解措施，包括：本工程項目的倡議者作出確實承諾，於 2018 年之前，按照《海岸公園條例》所規定的法定程序，在石鼓洲和索罟群島之間的海域內，劃出約 700 公頃的合適範圍作為海岸公園，以配合綜合廢物管理設施在毗鄰石鼓洲的人工島的運作。除此以外，為補償江豚重要生境和漁業資源的損失，也會在擬建的海岸公園內實施額外的海洋生態改善措施，放置人工魚礁和釋放魚苗。至於本工程項目可能對江豚造成的間接影響，例如聲音滋擾、與船隻碰撞，以及在施工和運作階段的行為模式改變等，是次研究也建議了多項緩解措施，其中包括：避免在江豚最活躍的季節進行高噪音工程、對專用區進行監察、採用固定的交通航線，以及在較多發現江豚的地區限制船隻時速在十海里以內。在實施各項建議緩解措施後，本工程項目對江豚造成的不良影響會被降低至可接受水平。</p>	<p>under various parts of EIA Reports</p> <p>ES: S4.3.6.1</p> <p>ES: S4.3.1</p> <p>ES: S4.3.5</p>

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	<p>西) 運送廢物, 其航程比曾咀少四分之一。然而, 署方並沒有計算 1) 將已焚化廢物的 300 公噸灰燼、2) 不能焚化及回收的 200 公噸廢物運回新界西堆填區的航程。由於新界西堆填區的位置是位於曾咀附近, 如選址曾咀, 不論海路或陸路, 運送該 500 公噸廢物肯定比石鼓洲更合乎經濟效益及快捷。另外, 署方並未透露是否有其他不能焚化但可回收的廢物需要運往其他地區再作處理? 所以本人對此理據實在未能認同, 並認為署方 1) 應以整個廢物運送過程來計算其運輸成本 及 2) 應以每公噸廢物的處理成本作為參考數據。</p> <p>第二部份: 本人對於政府擬定採用「活動爐排焚化技術」的理據提出極度質疑。據了解, 青洲英坭曾向當局建議「環保廢物熔化系統」, 然而當局並沒有積極考慮, 本人對此感到失望。按現有資料顯示, 「環保廢物熔化系統」比當局的建議 1) 造價更低、2) 更快投入服務、3) 每日處理量更多、4) 更具成本效益、5) 污染物的排放量更低、6) 不會對生態造成不良影響、7) 灰燼作為水泥生產原料, 無需要運往堆填區, 造成第二次污染。(請參考附表 A) 對於當局曾用各項理由拒絕考慮該公司建議, 包括 1) 青洲英坭未提交環評報告、2) 選址未符要求、3) 技術可行性成疑 及 4) 缺乏競爭性, 這裡本人想作出一點補充。</p> <ol style="list-style-type: none"> 1) 據了解, 該公司恐怕在政府現時指定的選址及技術下, 根本不能參與競投, 因此未有進行環境評估。該公司曾表示, 如當局容許在不限制技術及選址的情況下參與投標, 該公司願意自費進行環評。有見及此, 希望政府明確答覆, 會否放寬投標限制? 否則, 本人認為政府指青洲英坭不做環評的批評有欠公允; 2) 該公司的屯門廠房本身已屬工業用地, 遠離民居, 加上位處現時垃圾運送往堆填區的航道上, 亦非常接近另一選址曾咀, 相信審批程序會相當順利及較大機會通過環評報告; 3) 據了解, 該公司與香港科技大學乃獲創新科技基金撥款支持下, 合作研發環保廢物熔化系統, 並曾獲環保署批出牌照及監察下, 實地進行了為期半年的試驗。而該公司的建議亦與其他先進國家, 如日本、歐洲現行一些同樣結合水泥生產與廢物處理的技術類同。如此看來, 技術可行性的質疑似乎並不成立; 4) 當局曾表示, 「活動爐排焚化技術」因有比較多公司能參與投標, 所以競爭性亦較大, 此點本人不敢苟同。我們追求競爭性的目的並非多人參與就是具競爭性, 這是為競爭而競爭。競爭的意義是在於用更具效益的方法來處理問題。在這問題上, 就是用造價、成本效益、污染物的排放量、每日處理量及對環境的影響來作出衡量、比較, 並作為競爭的基本元素。 <p>總結: 根據上述各項理據及原因, 本人反對選址石鼓洲興建綜合廢物管理設施, 並認為石鼓洲並非一個合適興建綜合廢物管理設施的地點。本人亦認為由於整個項目涉及大量公帑, 亦關乎公眾利益。希望當局能在公開、公平、公正的原則下讓上述公司, 但並不限於該公司進行具有意義的競爭。</p> <p>附表 A:</p>	<p>在擬議填海區內共有 198 個細小的珊瑚群落, 其覆蓋率偏低 (<1%), 當中包括 8 種石珊瑚和 7 種八放珊瑚。牠們都可能受到本工程項目的直接影響。根據記錄, 所有受影響的珊瑚都是可以遷移的, 因此, 是次研究建議把這些珊瑚遷移他處, 以免受到直接損害。位於石鼓洲沿岸的其他珊瑚, 包括一種不常見的品種, 都可能因為施工階段懸浮固體含量增加而受到間接影響, 但可以透過各種水質控制措施而有效緩解。預計在實施各項建議措施後, 本工程項目將不會對珊瑚造成不可接受的影響。</p> <p>在綜合廢物管理設施的施工和運作期間, 繁殖中的白腹海鷗及其鳥巢可能會受到間接滋擾。緩解這些影響的措施包括: 避免在白腹海鷗的繁殖季節進行高噪音的工程、禁止船隻靠近白腹海鷗的鳥巢, 以及避免不必要的照明和裝設燈罩, 以減少綜合廢物管理設施所造成的眩光滋擾。這些措施可以把白腹海鷗可能受到的影響減至可接受程度。</p> <p>此外, 亦建議對江豚、珊瑚群落和白腹海鷗進行監察, 以便評估各項建議緩解措施的效用。在實施各項建議緩解措施和環境監察與審核計劃後, 本工程項目在施工和運作時可能造成的不良生態影響, 會減少至可接受水平。</p> <p>焚化技術的選擇: 為了找尋合適的都市固體廢物處理技術, 政府於 2002 年邀請了本地和海外有興趣的公司, 提交有關廢物處理技術的意向書。當時共收到 59 份建議。同時, 政府亦成立了一個廢物管理設施諮詢小組來評估這些意向書, 並推薦適合香港採用的廢物處理技術。諮詢小組的成員來自專業團體、環保團體和學術界。評估研究的結果顯示, 活動爐排焚化技術在環境、工程 and 成本等因素上, 都是最適合綜合廢物管理設施採用的技術。這些結論與較早前廢物管理設施諮詢小組的建議一致, 因此建議以活動爐排焚化技術作為綜合廢物管理設施的核心技術, 用於處理每日 3,000 公噸的混合都市固體廢物。環境諮詢委員會在 2009 年 12 月 14 日舉行的會議中討論了該次技術檢討的結果, 並表示不反對採用活動爐排焚化技術作為綜合廢物管理設施的核心處理技術。</p> <p>第二部份: 為了找尋合適的都市固體廢物處理技術, 政府於 2002 年邀請了本地和海外有興趣的公司, 提交有關廢物處理技術的意向書。當時共收到 59 份建議。同時, 政府亦成立了一個廢物管理設施諮詢小組來評估這些意向書, 並推薦適合香港採用的廢物處理技術。諮詢小組的成員來自專業團體、環保團體和學術界。評估研究的結果顯示, 活動爐排焚化技術在環境、工程 and 成本等因素上, 都是最適合綜合廢物管理設施採用的技術。這些結論與較早前廢物管理設施諮詢小組的建議一致, 因此建議以活動爐排焚化技術作為綜合廢物管理設施的核心技術, 用於處理每日 3,000 公噸的混合都市固體廢物。由於青洲英坭環保共燃系統技術的主要問題(包括其技術可行性和長遠的商業可行性等)仍未能滿意地解決, 故其技術不被採納。環境諮詢委員會在 2009 年 12 月 14 日舉行的會議中討論了該次技術檢討的結果, 並表示不反對採用活動爐排焚化技術作為綜合廢物管理設施的核心處理技術。</p>	<p>ES:S.3.2</p> <p>ES:S.3.2</p>

No.	Comments		Proponent's Response	EIA Report Ref.
		<p>政府傾向選址石鼓洲興建垃圾焚化爐</p>	<p>環保廢物熔化系統</p>	
投入服務時間	預期最快 2018 年才能投入服務。	審批程序連興建時間，估計可於 2016 年投入服務，有助加快紓解香港迫在眉睫的廢物處理問題。		
成本	需填海興建人工島及鋪設海底電纜，導致成本高昂。有工程界人士預計成本將高達港幣 80 億元。	系統之基礎成本僅為港幣 30 億元。		
每年處理費	港幣 2 億 5 千萬元	港幣 2 億元		
污染物的排放量	較高	05 年的試驗結果顯示，排放量較 政府最好的切實可行方法為低(最多可低 99%)		
土地運用、以及對環境、市民及生態的影響	興建過程及投入服務時造成的空氣污染及臭氣滋擾，將影響長洲居民、週遭雀鳥及海洋生態，以及打擊打擊當區漁業及旅遊業。	營運中的踏石角廠房乃處於工業用地，遠離民居，並已備有基建設施平台，政府無需填海或另外撥地，既節省香港的寶貴土地資源，亦減少對週遭居民或生態造成的滋擾。同時，「環保廢物熔化系統」在處理廢物之餘，尚具備改善空氣質素的環保效益。系統的排放量較傳統焚化爐為低，加上都市固體廢物能取代我們現有水泥廠約 40% 的燃煤，進一步減少氣體排放，整體空氣質素將因而獲得改善。		
廢物處理量	每日可處理 3,000 公噸廢物	每日能處理 4,800 公噸廢物，即超過全港每日都市固體廢物量一半，較政府現建議多 60%。		
紓緩堆填區壓力	經焚化的垃圾之體積可減少九成，即餘下一成的灰燼，仍無可避免地需要運往堆填區處理，造成第二次污染。	以「環保廢物熔化系統」處理垃圾，過程所產生的剩餘灰燼可循環再用及作為水泥生產原料，毋須棄置於堆填區，有助紓緩堆填區壓力。		
PC161	<p>1. There is a lack of concrete mitigating measures to minimize the adverse impact on the air quality surrounding the proposed site. The report describes construction dust from excavation along with air emissions from the incinerator stacks affecting air quality. The concern lies not only for the addiction recovery site on Shek Kwu Chau, but also for residents in South Lantau as the emissions may affect the area as a result of changing wind conditions.</p> <p>2. The installation of submarine cables worries me as well due to the potential impact on marine wildlife. The cable laying process may lead to corals being destroyed, ones which cannot be replaced. There are doubts on the effectiveness of the proposed translocation as such processes usually fail to completely avoid direct loss.</p>		<p>Potential air quality impacts from the construction works for the Project would mainly be related to construction dust from excavation, materials handling, filling activities and wind erosion. With the implementation of mitigation measures specified in the Air Pollution Control (Construction Dust) Regulation, dust impact on air sensitive receivers would be minimal.</p> <p>1. For the operation phase, the IWMP will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMP. Cumulative air quality impact assessment has been</p>	<p>ES: S4.3.1.1, S4.3.1.2 to 4.3.1.4</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>3. Building on point 2, the treatment of white-bellied sea eagles and finless porpoises are vague. The loss of such wildlife cannot be ignored and should be taken into full consideration due to irreversible consequences.</p> <p>4. The current design does not seem to fit in with the natural landscape and scenery. It does not make sense to build a man-made structure on a natural habitat that makes no effort in blending in with the environment.</p>	<p>undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p>The construction of the Project also involves laying of submarine cables between SKC and Cheung Sha as well as the construction of a landing portal at Cheung Sha. The benthos communities of the temporarily affected areas are expected to recolonise the seabed areas after the short period of submarine cable laying operation (about 20 working days). In view of the low to moderate ecological value of the subtidal habitats and temporary nature of the impact, the potential impact on subtidal habitat and the associated benthos communities due to submarine cable laying works is considered to be low.</p> <p>2. There were successful cases of coral translocation including the one for the Proposed Extension of Public Golf Course at Kau Sai Chau Island, Sai Kung (HKJC, 2005). A total of 89 coral colonies were transplanted to a nearby site in late November 2006 due to construction works. The recipient site is 80 m to the south of a ferry pier where corals of similar species composition were already present on the bedrocks. Coral monitoring surveys for transplanted colonies were conducted quarterly for one year (4 surveys in total: from December 2006 to September 2007). According to the Environmental Monitoring and Audit (EM&A) reports during the coral monitoring period between December 2006 and September 2007, by the end of the monitoring period, 86 out of 89 transplanted corals were recovered and their condition remained similar with the baseline condition before transplantation. Only a total of 3 colonies went missing; and within the 86 remaining colonies, only 3 colonies showed some degree of mortality (30-80%). No signs of mortality nor bleaching were noted in the rest of the 83 transplanted coral colonies (ibid.). With over 93% of transplanted corals remained in the same condition before transplantation, and no trigger of Event and Action Level, coral translocation is considered to be an effective measure to avoid direct loss of corals under this Project.</p> <p>3. The mitigation measures for potential impacts to the White-Bellied Sea Eagles include avoidance of noisy works during the breeding season of White-bellied Sea Eagle, restriction of vessel access near the nest of White-bellied Sea Eagle, and avoidance of unnecessary lighting and provision of shielding for lights to minimize glare disturbance from the IWMF. The proposed mitigation measures for Finless Porpoise include designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, deployment of artificial reef and release of fish fry have also been proposed as additional enhancement measures for the loss of important habitat for Finless Porpoise and fisheries resources, avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, marine mammal watching plan, adoption of regular traffic route, and limitation of vessel speed to ten knots at areas with high Finless Porpoise sighting density. With the implementation of the recommended mitigation measures, adverse impacts on White-Bellied Sea Eagles and Finless Porpoise due to the proposed Project would be minimized to acceptable levels.</p> <p>4. The IWMF will adopt aesthetic design with a view to enhance the aesthetic quality and to blend in the IWMF into the natural surroundings, at the same time reducing the visual mass of the structure. This will be achieved by rooftop and vertical greening along the building façade, use of natural materials with recessive colour, provision of sky gardens between the stacks, provision of observation deck to diminish the feeling of chimney, etc. Besides, in order to maximize visual compatibility between the existing natural shoreline of SKC and the IWMF site, natural rocks with similar colour as the SKC</p>	<p>ES: S4.3.5</p> <p>EIA: S7b.6.2.14</p> <p>ES: S4.3.5</p>

No.	Comments	Proponent's Response	EIA Report Ref.
		rocky shore will be employed for the construction of breakwater and artificial shoreline to improve the visual quality.	
PC162	<p><u>Re: EIA Report (Ref: CE 29/2008CEP)</u></p> <p>The following are my comments in respect of the EIA Report (Ref: CE 29/2008(EP))</p> <p>The Report, Chapter 3, item 3.1.1.4, quoted as follows: <i>Soko Islands were not considered for the development of the IWMF because It is also a spawning and nursery ground of commercial fisheries resources. The development of the IWMF in the potential marine park was not considered suitable.</i></p> <p>My views and comments:</p> <p><u>Item 3.1.1.4 Soko Islands</u></p> <p>In the EIA Report touches only briefly on the aspect of selection for IWMF, above quoted. The EIA Report rejected the Soko Islands due to the reason of:-</p> <ul style="list-style-type: none"> ● Habitats of the Chinese White Dolphins, ● the Marine Park, ● the Finless Porpoises, ● the spawning and nursery ground of fishes. <p>It is my understanding, the Soko Islands (locals call them Ah Chau Islands) consist of few islands, and the two bigger ones have already been "ruined or spoilt" to some extend.</p> <p><u>Siu Ah Chau</u></p> <p>The smaller one of the two is called Siu Ah Chau, on which Government has already built a "Storage" for storing radioactive wasted material, medical used wasted material; putting it aside for a long long time, so that it be slowly diluted or degraded by itself.</p> <p>A letter, written in Chinese, issued by EPD was sent the South Lantau Rural Committee on 7^h June, 2005. ref: EPI6IIRIII(XVII), and in this letter, warnings, security measures, etc were mentioned. From this, one could assume (1) EPD is aware and concerned of the potential danger to the public, and (2) it is not entirely safe. Otherwise why issue the letter? Also, there is a signboard put up warning people not to get near. A terrible feeling! Threatening!</p> <p>The "Storage" is in a corner bay of Siu Ah Chau, almost facing Tong Fuk Village, Lantau. One would feel uneasy and uncomfortable when approaching the "Storage". Somehow, this was built and presumably passed the Environmental Assessment, then, I suppose.</p> <p>However, now, the rock fish (Shek Kau Kung) caught near that area are considered to be unsafe for eating by the locals.</p> <p><u>Tai Ah Chau</u></p>	<p>The project proponent has gone through a systematic and deliberate process in shortlisting and evaluating the potential sites for the development of the IWMF. A site search exercise was conducted in 2008 under the study <i>Site Search for Integrated Waste Management Facilities in Hong Kong for Municipal Solid Waste</i> to identify the potential sites for the development of the IWMF. The Legislative Council, the Tuen Mun and Islands District Councils and the Advisory Council on the Environment were briefed on the findings of the site search in 2008. In the preliminary search exercise, 23 types of areas, including Country Parks, Marine Parks and Marine Reserves, Sites of Special Scientific Interest, Green Belt, Conservation Areas, Coastal Protection Areas, etc., were excluded, and an initial list of 21 sites was formed. The initial list of potential sites was then subject to further consideration with respect to their site characteristics, latest development status, prevailing wind directions and the dominant environmental conditions to form a site proposal. Six potential sites were shortlisted for evaluation based on the criteria, including environmental consideration, engineer/technical feasibility, cost, social and community impacts. The evaluation outcome suggested that an artificial island near Shek Kwu Chau and Tsang Tsui Ash Lagoons were worth taking forward for detailed studies and further consideration as potential sites for the IWMF.</p> <p>Alternatives considered during the course of the EIA study are presented in Section 2 of the EIA Report.</p> <p>The EIA for developing the IWMF at the above two sites has now been completed. Taking into account the EIA report results, other factors relating to site selection and Hong Kong's overall waste management strategy as a whole, the Government has identified the artificial island near SKC as the preferred site for developing the first modern IWMF, subject to final approval of the EIA report. The main consideration/ factors are: –</p> <p>(a) Central location and distance of MSW transportation. The artificial island near SKC is closer to the refuse transfer stations on Hong Kong Island and Kowloon than TTAL. The estimated aggregate refuse vessel transfer trip length from the refuse transfer stations to an IWMF at the artificial island near SKC would be reduced by one fourth to one third. The operation of the IWMF at the artificial island near SKC would be more environmental and cost effective. It would also reduce marine traffic near Ma Wan. Since the volume of MSW would be substantially reduced by 90% after incineration, the amount of residues need to be transported to the landfill will be much smaller than the original volume of MSW. The residues will be transported by sea directly in one round trip per day to the landfill at Nim Wan;</p> <p>(b) TTAL and SKC are both remote locations, and SKC is even farther from major population clusters than TTAL. There is a residential population of about 300 on the island. SKC is about 3.5 km to 5 km away from Cheung Chau which is not located in the prevailing downwind direction (i.e. northeasterly wind towards southwest in the sea). It is also worth noting that there are no other emissions sources within 10 km of the SKC site. The cumulative impact on the air quality would be relatively small;</p> <p>(c) The IWMF could generate positive economic synergy with nearby islands, particularly Cheung Chau during the construction and operation stages, in terms of an increase in employment opportunities, ferry service and other economic activities from people who work at or visit the facility); and</p> <p>(d) the selection of the IWMF site at the artificial island near SKC will achieve a well-balanced spatial distribution for waste management facilities for Hong Kong as a whole.</p>	<p>ES:S3.1.1.4</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>The largest one is called Tai Ah Chau. Some years back (in 2007 or so), China Light, CLP, made an Environment Assessment report to facilitate the building a natural gas collection depot for fueling the Power. Objections were raised and met, but somehow, the EA report was passed. It was almost at the stage of commencing construction work, when mainland China stepped in to provide nature gas from China, and hence, the project stopped. I have some old newspaper cuttings to back up this.</p> <p><u>The Natural Habitats</u></p> <p>The funny and strange part is that in both cases, the natural habitats, Chinese White Dolphins, the Marine Park, the Finless Porpoises, the spawning and nursery ground of fishes, were used as reasons of raising objections, but somehow, the problem was solved and there no more. The result was with one island for storing radioactive wasted material, and the other permitted to build gas collection depot. If this was so, and why has no study been undertaken to see if the IWMF could be sited also on the Soko, instead of Shek Ku Chau?</p> <p>What is required, I suppose, is a detailed and comprehensive study that explores, all aspects of the potential negative impact on the environment, marine habitats, and nearby residents and Alternatives.</p> <p>Who will explain why yet another island is to be vandalized?</p> <p><u>Islands around us - Nasty Things</u></p> <p>Something happening all the time around us, the residents on Islands, and they are:</p> <ul style="list-style-type: none"> ● on Siu Ah Chau, the radioactive medical waste storage (built and in operation), ● on Tai Ah Chau, the CLP natural gas storage (abandoned, luckily) ● on Mong Tung Wan, Chimawan peninsular, the Columbarium (proposed) ● on Shek Kwu Chau, the Incinerator (now proposed) <p>Not very cheerful for us, the residents on Islands!!! Something, nasty, on every Hong Kong remaining islands!!! Now, proposed on Shek Kwu Chau, why??</p> <p>Are there some other (alternative) solutions? What are they?</p> <p><u>Other (Alternative) solutions</u></p> <ul style="list-style-type: none"> ● Grouping-Up is one possibility. <p>Put them, all the nasty things, together, instead of scattering around, one on each island, will certainly help to reduce the adverse effect. Security control will also be much better, is it not?</p> <ul style="list-style-type: none"> ● A lady speaker, (NOW TV ch 331, 8.30 to 9.30 pm) in a talk show on 8/3/2011, mentioned that previous EPD Directors, the lady one, Miss Liu, in particular, had done some extensive work of environmental control, ruling out <u>the Burning</u>. However, The present EPD Director prefers <u>Burning</u>. Is it not a good idea that some comments from the former Directors should be taken into consideration without jumping into Incinerator construction? That was raised by the lady 		

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>speaker on TV. To my understanding, the lady speaker said that economically <u>Burning</u> would be far more expensive.</p> <p><u>What, EPD, if you are wrong?</u></p> <p>Is there no other way, except <u>Burning</u>? Is that the final decision? So, we go to <u>Burning</u>, building the incinerator. OK, but if you are wrong, what and how we can turn back? If yes, we can turn back, why this is not mentioned in the EIA Report? If no, we cannot turn back, what makes you so sure that you are doing the right thing?</p> <p>What will be the pros and cons? What will be penalty, if wrong? Can we, the citizen of Hong Kong, have more answers? Remember, the penalty burden lies onto the citizen of HK in future, not the EPD Director/s, who can have an "early retirement", or gone they go, maybe, back to other countries, like UK, US, AUS or Can, right? If you are wrong, for immediate penalty, there will be disease related to breathing to the residents in Chueng Chau, South Lantau, and others; there will be a no-fish zone for fishermen; no beautiful beaches for swimmers on South Lantau area. This is worrying!!!!</p> <p><u>Conclusion - objection to the Project</u></p> <p>In view of above reasoning, and facing with the unanswered questions, I must say that I object to your proposed project.</p> <p>Be kind to us, Director, and please make more studies prior to jumping into decision for such important issue. If you are wrong, we are doomed!!!</p> <p><u>End of this writing.</u></p>		
PC163	<p>We object to Government's proposal to reclaim an artificial island at the south-western coast of Shek Kwu Chau (the site) for the construction of Integrated Waste Management Facilities in Hong Kong for Municipal Solid Waste (IWMF). As the proposal seeks to reclaim land to form an island, other locations within Hong Kong waters which have not been studied may also be suitable for the purpose. There is no reason why the reclamation must be close to or adjacent to Shek Kwu Chau.</p> <p>In addition, the IWMF is an eye-sore and pollution source and is against the conceptual plan of Lantau. Shek Kwu Chau is facing the South Lantau at close range and is a prominent island and landscape seen from the coast of South Lantau and many country parks of Lantau. Government's proposal to have the IWMF adjacent to Shek Kwu Chau is against the conceptual plan for Lantau developed by the Lantau Development Task Force under the Financial Secretary. The plan recommended protecting Lantau which comprise primarily high quality landscape and ecologically sensitive natural environment, for nature conservation and sustainable recreation. The general public and the local community including the Islands DC and Islands RCs welcomed the recreational facilities as proposed in the plan to promote countryside recreation and the local economy. The ACE proposed to include an eco-tourism plan in the Concept Plan.</p> <p>Government is requested to response and explain.</p>	<p>The project proponent has gone through a systematic and deliberate process in shortlisting and evaluating the potential sites for the development of the IWMF. A site search exercise was conducted in 2008 under the study <i>Site Search for Integrated Waste Management Facilities in Hong Kong for Municipal Solid Waste</i> to identify the potential sites for the development of the IWMF. The Legislative Council, the Tuen Mun and Islands District Councils and the Advisory Council on the Environment were briefed on the findings of the site search in 2008. In the preliminary search exercise, 23 types of areas, including Country Parks, Marine Parks and Marine Reserves, Sites of Special Scientific Interest, Green Belt, Conservation Areas, Coastal Protection Areas, etc., were excluded, and an initial list of 21 sites was formed. The initial list of potential sites was then subject to further consideration with respect to their site characteristics, latest development status, prevailing wind directions and the dominant environmental conditions to form a site proposal. Six potential sites were shortlisted for evaluation based on the criteria, including environmental consideration, engineer/technical feasibility, cost, social and community impacts. The evaluation outcome suggested that an artificial island near Shek Kwu Chau and Tsang Tsui Ash Lagoons were worth taking forward for detailed studies and further consideration as potential sites for the IWMF.</p> <p>During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chau as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be</p>	ES:4.3.8.4

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>this instance?</p> <p>Construction waste is also another harmful byproduct of the proposal. The report states that "the wastes are handled, transported and disposed of properly..." Does this mean that the Government will transport the waste to other sites, i.e. landfills? Generating waste to produce a waste treatment facility sounds quite ironic to me.</p> <p>Operation Phase</p> <p>The impact on the natural environment will be substantial and lasting even after the construction period. For example, the installation of submarine cables will surely impact the Finless Porpoise, White-bellied Sea Eagle and coral colonies currently active in the area.</p> <p>Also, where is the proposed landing portal at Cheung Sha going to be constructed? Is this going to adversely affect users of Cheung Sha beach? We need to know that large lorries will not be constantly transporting waste literally in our front steps. Will the transport lorries affect traffic on South Lantau Road?</p>	<p>of quiet plant and working methods, whenever practicable.</p> <p>The potential sources of water quality impact arising during the construction phase of IW MF on an artificial island near SKC include construction site runoff and drainage, wastewater generated from general construction activities and sewage from the workforce. With the implementation of the recommended mitigation measures and site practices outlined in ProPECC PN 1/94 (Practice Note for Professional Persons on Construction Site Drainage), no unacceptable residual impacts on water quality are expected. Besides, to minimize dredging and filling activities and the associated environmental impacts, cellular cofferdam and breakwater instead of sloping seawall are proposed to be adopted. Large-scale sediment dredging is therefore not anticipated for the proposed reclamation and breakwater construction works at the artificial island near SKC. Only small-scale dredging may be required along the proposed cofferdam to remove the top 1m of clayey marine deposit for installation of an anti-scouring protection layer. The water quality impact during the dredging for anti-scouring protection layer has been quantitatively assessed using the near field sediment dispersion model. The model results indicated that the water quality impact generated from the dredging works would be localized and minor under the mitigated scenario and would unlikely contribute to any significant water quality impact. Mitigation measures including the employment of silt curtain system, control of dredging and filling rates etc. are proposed to ensure that no unacceptable water quality impact would be resulted from the dredging works.</p> <p>The Contractor will to ensure that all wastes produced during the construction of the Project are handled, stored and disposed of in accordance with the recommended good waste management practices and EPD's regulations and requirements. A Waste Management Plan (WMP), which is a plan to reduce construction waste production, reuse, and recycle the waste on-site as far as possible, will be prepared in accordance with ETWB TCW No.19/2005 by the Contractor. The EIA reported that small amount of construction waste would be disposed offsite. Provided that the waste is handled, transported and disposed of using approved methods and that the recommended good site practices are strictly followed, adverse environmental impacts would not be expected during the construction phase.</p> <p>Operation Phase</p> <p>Based on the assessment, the overall environmental impact arising from the IW MF project, including installation of submarine cables is acceptable. Please refer to the EIA report for details.</p> <p>The proposed landing portal of the submarine cables is about 500m away from the Cheung Sha beach. During operation phase, there will be no lorries constantly transport waste to/from this landing portal of the submarine cable.</p> <p>The construction of the Project also involves laying of submarine cables between SKC and Cheung Sha as well as the construction of a landing portal at Cheung Sha. The submarine cable works would be carried out by a non-dredging method that would use water jets to create trench at the seabed immediately followed by cable laying. The sides of the trench would then slip around the cable, burying it and leaving a small depression in the seabed. The whole submarine cable laying process would only take a very short period to complete (about 20 working days) and it would not alter or cause damage to the coast line of South Lantau. Considering these, the EIA results for the IW MF project indicate that the potential impacts of the submarine cable installation works on the water quality and the marine ecology are short term and acceptable.</p>	<p>EIA: S6b5.1.15</p> <p>EIA: Fig 2.5</p>
PC166	We agree the implementation of the proposed Shek Kwu Chau integrated waste management facilities	The Air Emission Limits for the IW MF as shown in Table 2.3 of the EIA report are the maximum limits	EIA:

No.	Comments	Proponent's Response	EIA Report Ref.																																																																																															
	<p>scheme if the Government can adjust the emission standard of the EIA regarding a stricter implementation of higher emissions standards for the project. Therefore, it can eliminate the public traditional concerns on incinerator, so as to let all Hong Kong residents agree that the plan is a feasible and reliable method of dealing with the waste problem.</p> <p>We conduct a detailed investigation on the EIA report, and we found a lot of incorrect, incomplete and imperfect places. We have concluded five major precise comments as follows:</p> <p>1. Inappropriate project performance standard</p> <p>It was mentioned in the EIA report that the emission limits should comply with the most stringent international European Union (EU) standard for MSW incinerators and the Hong Kong Best practicable Means for Incinerators. As far as we know, many EU countries adopted "Best Available Techniques for Waste Incineration" (EU-Commission, 2006) which recommends the treatment process and the implementation of recommended technology that can achieve a certain level of standards and emissions targets. In view of production capacity, whether the flue gas concentration or emission of pollutants (such as fly ash, etc.), it is to a large extent more stringent than the standards described in the EIA Report (The criteria used in the EIA report, only NOx emissions standards is stricter than the 2000 European Union standards); especially the new EU waste incineration projects in recent years are mostly using Best Available Techniques (BAT), the Hong Kong Government should possibly implement such modern waste incineration project according to a higher standard. The following is the comparison table of the control limit of EIA with operational emission level ranges associate with the use of Best Available Techniques for Waste Incineration:</p> <table border="1"> <thead> <tr> <th rowspan="2">No.</th> <th rowspan="2">Pollutant</th> <th rowspan="2">Unit</th> <th colspan="2">Control limit in HK EIA</th> <th colspan="2">Operational emission level ranges associated with the use of BAT</th> </tr> <tr> <th>Daily</th> <th>1/2 hourly</th> <th>Daily</th> <th>1/2 hourly</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Total dust</td> <td>mg/Nm³</td> <td>10</td> <td>30</td> <td>1-5</td> <td>1-20</td> </tr> <tr> <td>2</td> <td>TOC</td> <td>mg/Nm³</td> <td>10</td> <td>20</td> <td>1-10</td> <td>1-20</td> </tr> <tr> <td>3</td> <td>HCl</td> <td>mg/Nm³</td> <td>10</td> <td>60</td> <td>1-8</td> <td>1-50</td> </tr> <tr> <td>4</td> <td>HF</td> <td>mg/Nm³</td> <td>1</td> <td>4</td> <td><1</td> <td><2</td> </tr> <tr> <td>5</td> <td>SOx</td> <td>mg/Nm³</td> <td>50</td> <td>200</td> <td>1-40</td> <td>1-150</td> </tr> <tr> <td>6</td> <td>NOx</td> <td>mg/Nm³</td> <td>100</td> <td>200</td> <td>40-100</td> <td>40-300</td> </tr> <tr> <td>7</td> <td>CO</td> <td>mg/Nm³</td> <td>50</td> <td>100</td> <td>5-30</td> <td>5-100</td> </tr> <tr> <td>8</td> <td>Hg and its compounds</td> <td>mg/Nm³</td> <td>0.05</td> <td></td> <td>0.001-0.02</td> <td>0.001-0.03</td> </tr> <tr> <td>9</td> <td>Cd+Tl</td> <td>mg/Nm³</td> <td>0.05</td> <td></td> <td>0.005-0.05</td> <td></td> </tr> <tr> <td>10</td> <td>Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V</td> <td>mg/Nm³</td> <td>0.5</td> <td></td> <td>0.005-0.5</td> <td></td> </tr> <tr> <td>11</td> <td>Dioxin</td> <td>ngTEQ/Nm³</td> <td>0.1</td> <td></td> <td>0.01-0.1</td> <td></td> </tr> <tr> <td>12</td> <td>NH₃</td> <td>mg/Nm³</td> <td></td> <td></td> <td>1-10</td> <td><10</td> </tr> </tbody> </table> <p>Referring to the above table, EIA standards on the Dust, CO, Dioxin, and Heavy metals have a big distance to the indicators of the operation of BAT emission levels achieved. In the process of waste incineration, high CO content means a comparatively high degree of incomplete combustion of solid waste incineration, which is the main factor in dioxin formation. At the same time, CO is also the catalyst to the formation of Dioxin, which encourages the high CO concentrations Dioxin formation,</p>	No.	Pollutant	Unit	Control limit in HK EIA		Operational emission level ranges associated with the use of BAT		Daily	1/2 hourly	Daily	1/2 hourly	1	Total dust	mg/Nm ³	10	30	1-5	1-20	2	TOC	mg/Nm ³	10	20	1-10	1-20	3	HCl	mg/Nm ³	10	60	1-8	1-50	4	HF	mg/Nm ³	1	4	<1	<2	5	SOx	mg/Nm ³	50	200	1-40	1-150	6	NOx	mg/Nm ³	100	200	40-100	40-300	7	CO	mg/Nm ³	50	100	5-30	5-100	8	Hg and its compounds	mg/Nm ³	0.05		0.001-0.02	0.001-0.03	9	Cd+Tl	mg/Nm ³	0.05		0.005-0.05		10	Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V	mg/Nm ³	0.5		0.005-0.5		11	Dioxin	ngTEQ/Nm ³	0.1		0.01-0.1		12	NH ₃	mg/Nm ³			1-10	<10	<p>allowed for the IWMF operation and have been adopted in the assessment of the air quality and health impacts in the EIA report. The assessment results indicate that no adverse air quality and health impacts are anticipated based on the maximum air emissions limits from the IWMF. To ensure a full compliance with the required air emission limits, designers will normally allow safety margin in design of flue gas treatment system in order to cater for any fluctuation of waste quality and hence the quality of flue gas entering the flue gas treatment system. Thus, it is quite common to see that the actual emission levels of incineration plants are lower than the allowed emission limits. Besides, monitoring of air quality parameters of concern due to stack emissions will be conducted in accordance with the requirements similar to those stipulated in EPD's "A Guidance Note on the Best Practicable Means for Incinerator (Municipal Waste Incineration) BPM 12/1(08)" during the operational phase of IWMF to ensure compliance of the emission limits.</p> <p>Following a rigorous technology review and consultation with the Advisory Council on the Environment, it was recommended that IWMF will employ modern moving grate incineration technology, which is the mainstream treatment technology for municipal solid waste management facilities worldwide. It is a robust technology that has the highest capability to treat different sizes and qualities of the mixed municipal solid waste. Unlike old incinerators, the process of advanced incineration is designed to comply the advance 3Ts technology so that waste would undergo treatment in a high-Temperature environment of at least 850°C, with adequate flue gas combustion residence Time and in highly Turbulent conditions. This would ensure complete destruction of organic pollutants (e.g. dioxin).</p> <p>The IWMF EIA has evaluated cancer risk arising from exposure to compounds of potential concern (COPCs) associated with the emissions of the IWMF and concluded that the Project would not present an unacceptable risk. The EIA has also studied the cumulative acute non-carcinogenic health impact arising from the Project and concluded that the impacts are insignificant. These findings have been reviewed and agreed independently by the Health Department who is the authority in this aspect. To ensure effective operation and compliance with the stringent emission standards, a transparent system will be set up to provide the public with the emission monitoring results of the IWMF.</p> <p>The IWMF will be designed to comply with the Air Emission Limits as indicated in Table 2.3 of the EIA report. Assessment of the feasibility of using the state-of-the-art flue gas treatment system, which includes dry/semi dry scrubber for acid gas removal, powder activated carbon injection for mercury and dioxins removal, bag filter for dust removal and selective catalytic reactor for nitrogen dioxide removal has been conducted under the engineering investigation study. During the preparation of tender documents for the IWMF project, more detailed requirements of the flue gas treatment system will be specified in the tender documents to ensure full compliance with the Air Emission Limits.</p> <p>The health risk assessment presented in the EIA Report examined the potential health impact associated with the operation of the IWMF. The assessment has identified a list of compounds of potential concern (COPCs) that are associated with the operation of the IWMF. The assessment has covered a number of pathways including direct inhalation, soil ingestion, consumption of aboveground produce, and animal products & consumption of drinking water and fish. The findings of the health risk assessment concluded that the emissions from the IWMF would not post adverse health impact.</p>	<p>S2.4.2.4</p> <p>Not under the jurisdiction of EIAO</p> <p>EIA: S9a.2.2.4, S9a.2.4.16-9a.2.4.28</p>
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5	SOx	mg/Nm ³	50	200	1-40	1-150																																																																																												
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	<p>leading to the increased original concentration of Dioxin in Flue Gas. Therefore, strict control upon CO concentration/content is a crucial issue here. Given that dust is the main carrier of Dioxin and heavy metal emissions and external diffusion, there should be a stricter limitation on dust emission concentration. Based on our experiences and researches, the total emissions accounted for approximately more than 90% of the Dioxin is attached to the dust surface and row into the atmosphere. Hence, how to get rid of dust is the most important basic factor for the waste incineration plant to achieve emission standard. According to international experiences, the control of the dust concentration below 5mg/Nm3 is the most compelling evidence to achieve dioxin emissions standard. Therefore, strict control of dust, CO emission concentration would directly reduce environmental pollution and also significantly control the heavy metal pollutants and the toxic Dioxin emission which widely concern the public. Our company knows very well the Dioxin catalytic decomposition, wet flue gas cleaning, etc., which are the combination of treatment processes that can easily control the dust content indicator below 5mg/Nm3 as well as Dioxin emissions to be near 0.01 ngTEQ/Nm3, which is the best means of reducing the environmental impact of Dioxin. A comparison table is shown below about the controlled pollutants emission per year described in the HK EIA report with a more advanced pollution control technology (BAT) adopted.</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Pollutant</th> <th>Unit</th> <th>Annual production with the Control limit of HK EIA</th> <th>Annual production associate with the use of BAT</th> <th>Maximum pollutant reduction annually</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Total dust</td> <td>tonne/a</td> <td>60.8</td> <td>6.08-30.4</td> <td>54.72</td> </tr> <tr> <td>2</td> <td>TOC</td> <td>tonne/a</td> <td>60.8</td> <td>6.08-60.8</td> <td>54.72</td> </tr> <tr> <td>3</td> <td>HCl</td> <td>tonne/a</td> <td>60.8</td> <td>6.08-48.6</td> <td>54.72</td> </tr> <tr> <td>4</td> <td>Sox</td> <td>tonne/a</td> <td>304</td> <td>6.08-243</td> <td>54.72</td> </tr> <tr> <td>5</td> <td>NOx</td> <td>tonne/a</td> <td>608</td> <td>243-608</td> <td>365</td> </tr> <tr> <td>6</td> <td>CO</td> <td>tonne/a</td> <td>304</td> <td>30.4-182</td> <td>273.6</td> </tr> <tr> <td>7</td> <td>Dioxin</td> <td>mgTEQ/a</td> <td>608</td> <td>60.8</td> <td>547.2</td> </tr> </tbody> </table> <p>Above table shows that the use of advanced pollution control technology and equipment can greatly reduce the extent of the pollution brought to the environment. Reducing pollutants emission, especially with the mentioned best removal efficiency of the dust and Dioxin can eliminate public fear about these toxic substances to the highest degree.</p> <p>2. No clear definition and stringent assessment on the applicability of the available pollution control technology</p> <p>In the EIA report, we cannot see any clear definition and appropriate evaluation on the applicability of the available pollution control technology in this project. Besides, the report lacks analysis and assessment of the achieved emission indicators with using the applied technical technology in this project. In this way, the public is unable to be aware of whether the technology applied in the projects can meet the provisions and requirements of the EIA report, thus, the Government cannot carry out effective management and supervision on every implementation of the projects. This missing issue is the largest deficiency in the EIA report, which is the critical foundation to determine whether the project can achieve successfully and it is also a necessary integral part of environmental assessment. Technology used in waste incineration and its auxiliary systems is closely related to environmental emission targets. For that reason, during the environmental assessment phase, definite type and scope</p>	No.	Pollutant	Unit	Annual production with the Control limit of HK EIA	Annual production associate with the use of BAT	Maximum pollutant reduction annually	1	Total dust	tonne/a	60.8	6.08-30.4	54.72	2	TOC	tonne/a	60.8	6.08-60.8	54.72	3	HCl	tonne/a	60.8	6.08-48.6	54.72	4	Sox	tonne/a	304	6.08-243	54.72	5	NOx	tonne/a	608	243-608	365	6	CO	tonne/a	304	30.4-182	273.6	7	Dioxin	mgTEQ/a	608	60.8	547.2		
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	<p>of process technology should have already been chosen to apply in the project, instead of making decision upon the selection of process technology in the stage of project implementation. Therefore, it is reasonable for the Hong Kong public to demand a clear and explicit explanation by the government and the EIA unit.</p> <p>3. Identification for pollution source, assessment scope is not comprehensive enough, the sensitivity of the pollutants assessment and proof are not sufficient In the EIA report, sampling analysis has been conducted to reveal the background concentration of atmospheric pollutants in the environmentally sensitive areas. Moreover, the COPs concentration under operation in the environmentally sensitive areas is also predicted. Nonetheless, there is no sampling analysis on COPs in the soil from the environmentally sensitive areas, especially the original background concentration of Dioxin. Process of operation may possibly result in high COPs concentration in the soil, therefore, the extent of the level increased should be assessed and predicted in order to judge the COPs carrying capacity in the soil. It will consequently lead to appropriateness and rationality deficiency in the selection of project site and emission standards. Furthermore, during the operation period in the future, due to lack of necessary and reliable original data, it may result in difficulties to carry out more accurate and comprehensive evaluation and monitoring in the pollution generated by the project. This is a more critical shortcoming in this EIA report.</p> <p>Construction Period: 1) There is no assessment such as continued high-intensity noise generated by the pipe flashing, which could be sustained for several days. Besides, boiler soda boiling would produce a higher concentration of more than a thousand tons of alkaline waste water that may cause environmental pollution and it has not yet been proposed measures to eliminate and mitigate environmental pollution. 2) There is no assessment for the traffic, noise and visual impact to the public generated by construction material transport vehicles. In particular, a large number of concrete tank vehicles may cause traffic congestion.</p> <p>Operation period: 1) Assessment concerning equipment failure that requires some short-term emergency measures may have impact on the environment; for example: entire or part of the flue gas treatment system process equipment failure may occur in a short time, smoke air without treatment directly emitted into the atmosphere subsequently. Therefore, the EIA report should assess different accidents according to each possible situation (excessive time discharge, exceeding the concentration of various pollutants emission, different direction and speed of the wind), the degree of environmental impact including environmental pollution, the total maximum pollution capacity and pollutant analysis evaluation. Inform the Government and public objectively about the project's environmental possible risks. Similarly, the EIA report did not assess the environmental impacts nor any concrete measures to be taken in the future while whole plant needs to shut down for maintenance. 2) Noise assessment of the factory is under evaluated, especially stated in "4a. NOISEIMPACT (TTAL SITE)", there is no particular assessment for noise produced from production process under normal operation in the plant, and neither proposing effective and feasible mitigation measures. We also cannot find any statement concerning noise pollution leading to possible long-term impact on the breeding and living of marine fish.</p>	<p>Construction Period: During the construction period, pipe flashing and boiler soda boiling are not anticipated. The relevant activities with potential noise and water quality impacts have been included in the assessments presented in the EIA report.</p> <p>For the construction noise, the assessment results demonstrated that daytime noise criteria would not be exceeded by the predicted construction noise levels under the unmitigated scenario. Having said that, good practices for the control of noise emissions from construction sites are recommended to further eliminate the potential of noise impact. These include good site practices to limit noise emissions at source and the use of quiet plant and working methods, whenever practicable.</p> <p>The potential sources of water quality impact arising during the construction phase of the Project include construction site runoff and drainage, wastewater generated from general construction activities and sewage from the workforce. With the implementation of the recommended mitigation measures and site practices outlined in ProPECC PN 1/94 (Practice Note for Professional Persons on Construction Site Drainage), no unacceptable residual impacts on water quality are expected.</p> <p>Operation Period: 1) The EIA study was conducted based on conservative assumptions for normal operation of IWWMF to assess the environmental impacts. With the recommended mitigation measures applied and the adoption of advanced technology, the IWWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated. In case of malfunctioning and breakdown of the process, in accordance with EPD's "A Guidance Note on the Best Practicable Means for Incinerator (Municipal Waste Incineration) BPM 12/1(08)" requirements, the incident shall be reported to the Authority without delay and the incinerator shall be closed down as soon as practicable until normal operation can be restored. Besides, monitoring of air quality parameters of concern due to stack emissions will also be conducted in accordance with the requirements stipulated in the BPM during the operational phase of IWWMF to ensure compliance of the emission limits and to allow prompt response to malfunction / failure situation.</p>	<p>ES: S4.3.2.1 S4.3.3.1</p> <p>ES:S1.2.1.2, S5.1.1.2</p>

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	<p>3) The environmental assessment of the waste transfer terminal in the EIA report is not sufficient. For instance, there may appear a small amount of leachate and scattered garbage during transport process of waste containers, and rinsed water for cleaning the transport platforms might have impact on the surrounding environment. However, no assessment has been conducted/shown in the EIA report regarding all these matters.</p> <p>4) We found that assessment of pollutants in the flue gas is also being under evaluated, the report is comparatively assess the impact from NOx, Sox, PM10 in a more comprehensive way, however, HCl and NH3 are the major pollutants for the possible pollution caused by more detailed analysis and proof; other. Since the project may be located at Tsang Tsui Ash Lagoon (TTAL), the sludge disposal plant is only 205 meters away from the plant boundary, special attention needs to be paid to two incineration plants' emission of Hg and the concentration of the superimposed compounds in the atmosphere, the of superposition, which should include the value of the maximum ground concentration, nonetheless, the area should not be limited to the environmentally sensitive listed in the EIA.</p> <p>5) Nowadays, the flue gas treatment system in some new incineration plants built in those more developed countries is mostly applied with combined process; wet flue gas treatment process should be included in one of the possible options. Thus, the EIA report should evaluate the feasibility and ability to achieve emission standard when using wet flue gas treatment. Likewise, the report should also add in possible environmental pollution assessment in connection to the wastewater generated by wet flue gas treatment process.</p> <p>6) Regarding the sea water desalination process, there may be part of the backwash water with high content of suspended solids which may contain a certain amount of chemicals. In the EIA, there are inconsistencies among the assessments of sewage regarding this issue i.e. 5a.7.2.2 stating that there is no chemicals used; but 5b.7.6.8 stating that chemical agents are used, and this part of the water would enter the plant for sewage treatment. We noted, however, the size of the wastewater treatment plant was set without considering the volume of this part of wastewater. It would be more appropriate for AECOM to illustrate and clarify professional standards that need to be exercised as well as to assess possible contamination.</p> <p>7) No drainage assessment and statement on the plant area. Despite the hazardous materials inside the incineration plant is relatively less, according to our experience and the general rule in the industry, the factory must carry out rain and sewage drainage diversion, and stormwater should be discharged into the municipal storm water pipe network, and it has to be treated before discharging into the sea.</p> <p>4. The technology design reference is not advanced enough Although we are not given the reference design prepared by AECOM as described in the EIA, we noticed from the EIA that SCR DeNOx technology is used and activated carbon adsorption process is adopted to remove dioxins, boiler feed water system uses ion exchange, disposal of fly ash with cement solidification, chemical stability programs after landfill etc. The above implementation has been widely used since ten years ago or even some time earlier, and may continue to be used for a certain period, given that there are problems with different levels and aspects, they have been gradually and conditionally replaced by better technology. Therefore, we do not recommend giving up other options which might be more suitable, comprising more advanced treatment technology opportunities and possibilities for the project. For example: oxidation, absorption and SCR</p>	<p>2) The TTAL site is situated in a remote location and no existing or planned noise sensitive receiver (NSR) is identified within 300m from the boundary of the site. Adverse noise impacts from the TTAL site on NSRs during both construction and operation phases are therefore not anticipated.</p> <p>3) During the operation of the IWMF, MSW collected at Island East Transfer Station, Island West Transfer Station and West Kowloon Transfer Station will be stored in water-tight containers and then delivered to the IWMF by dedicated vessels used to transport MSW containers. This is also the current practices for transporting MSW from the refuse transfer stations to the WENT Landfill. There will be no leakage of waste or wastewater from the containers during the transportation.</p> <p>All wastewater generated from the IWMF, including cleaning water for waste containers will be properly collected and treated. The treated effluent will be reused within the IWMF, including landscape irrigation. No wastewater or treated effluent will be discharged to coastal water.</p> <p>4) The health risk assessment presented in the EIA Report examined the potential health impact associated with the operation of the proposed IWMF. The assessment has identified a list of compounds of potential concern (COPCs) that are associated with the operation of IWMF. The emissions from the sludge treatment facilities have been included in the assessment.</p> <p>5) Wet, dry and semi-dry systems have been studied and dry and semi-dry systems could eliminate the need for wastewater treatment and discharge of treated effluent to coastal water as compared with the wet system. Nevertheless, the DBO contractor would propose and design appropriate system that could meet the EIA and contract requirements.</p> <p>6) The brine water drained from the desalination plant is just concentrated seawater (about 1.7-1.8 time more concentrated than the raw seawater), with a low discharge volume. There will be no temperature elevations in the brine water discharge as compared to the ambient water temperature. No other biocides / anti-fouling chemicals (such as chlorine and C-treat-6) will be used for the proposed desalination plant. Instead, membrane would be backwashed frequently to prevent fouling problem. The backwash water, which contains chemical for cleansing the membrane filter, would be diverted to the onsite sewage treatment works. Backwash water would be either re-used or treated by secondary wastewater treatment plant provided on-site.</p> <p>7) Cleaning water or first flush (rainwater) from potential contaminated plant area e.g. berth area will be properly collected and treated. A storage tank as one component of the sewage treatment plant will be provided to temporarily store the first flush and attenuate the peak flow. The stored flow will be pumped to the sewage treatment plant for treatment gradually.</p>	<p>ES: S4.2.2.1</p> <p>EIA: S5a.7.2.1</p> <p>EIA: S9a.2.2.6, Appendices 9.4 & 9.6</p> <p>Not under the jurisdiction of EIAO</p> <p>EIA: S5b.7.6.8</p> <p>ES2.2.1.5</p>

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	<p>technology combined process of de-nitrification, practices with high efficiency, more environmentally friendly catalyzed decomposition technology to remove dioxins-typed organic matter, acid treatment of fly ash technology, the use of EDI instead of ion exchange method de-ionized water.</p> <p>It can be inferred that the flue gas treatment process is lagging behind as described in the EIA report, 40kg fly ash is produced per tonne of waste. Given that too much reliance on increasing the amount of lime to achieve the effect of flue gas de-acidification, it will lead to waste of resources and increase operating costs while the risk of excessive waste potentially exist. If the application of more advanced de-acidification technology, the amount of fly ash generated per ton of waste can be reduced to 10kg, and can be disposed of through appropriate technology by removing heavy metals in fly ash so as to reduce the harm that may be caused. In addition, to ensure the incineration system would adopt the best available technology, we would suggest the HK government to set a clear minimum requirements for the thermal efficiency of the incinerator in order to construct a environmentally friendly and efficient modern incineration plant Hence, to reduce the financial burden of the government and the public at the same time.</p> <p>5. Absence of effective mitigation measures on environmental impact</p> <p>1) Regarding fly ash disposal, the EIA report solely proposes land-filling treatment after solidification and stabilization of fly ash. We suggest that we could first consider adopting advanced techniques to reduce the production of fly ash together with detoxification process accordingly. If it is obligatory to adopt the solidification and stabilization technique when treating the fly ash, we suggest to transport the treated fly ash to a designated area in a landfill but not mixing it with slag. Furthermore, the landfill should possess sufficient measures to prevent infiltration while timely and periodic inspection of infiltration conditions in the landfill is also necessary in order to prevent heavy metal pollution incidents.</p> <p>2) The concentrated saline water from the water desalination plant will be directly discharged to the sea inasmuch as the discharging amount is relatively small. According to our knowledge and understanding, this does not comply with the zero-sewage-discharge principle. Worse still, this poses huge hidden risks on future monitoring and operation. We propose adopting a more advanced desalination technology which could minimize or avoid the discharge of concentrated saline water. If not, we suggest an installation of real-time monitoring facility at the saline water outlet in order to prevent the water body from pollution.</p> <p>3) As to the noise control inside the plant, it is suggested in the EIA report that noise sources ought to keep a distance from the direction towards noise-sensitive area. However, the stated noise-sensitive area does not include water bodies which might possibly be the natural habitats of marine species and consequently, it threatens the surrounding marine lives.</p> <p>Suggestion</p> <p>We propose to deal with the opposition issue from the targeted regions. Launching payment-transfer method based on the division stated in the EIA, the area and region where the waste incinerator located, residents of the region can enjoy a specific moderate concessionary water and/or electricity tariff. Another way is to rebate the electricity sales revenue generated from the incinerator to the local residents for regional support of this "Clean Energy" project, it might also enhance development of renewable resource in order to reach a mutually acceptable outcome.</p> <p>Therefore, we propose there should be a section in the EIA report defining the geographic range of the affected regions as well as the number of affected residents in a scientific manner to precisely</p>	<p>The technologies selected for the IWMF are the proven technologies and commonly adopted in advance incineration plants. Design-build-operate (DBO) contract method will be adopted for the IWMF project. All proposed technologies should be well proven with track records.</p> <p>1) Landfilling of treated fly ash is a common disposal approach and adopted in the EIA study. The future DBO contractor can propose alternative fly ash treatment approach e.g. working with a cement plant for reuse for the project proponent's consideration.</p> <p>The bottom ash and fly ash will be collected and disposed separately. The ashes to be disposed have to be met the Incineration Residue Pollution Control Limits, for example as indicated in Table 6b.7 of the EIA report before disposal of at landfill.</p> <p>2) The proposed desalination plant of the IWMF would discharge about 1520 cubic metre of brine water (of 1.7-1.8 times more concentrated than raw seawater) each day through an outfall (at the southern side of the artificial island) located over 400m from the natural shoreline of the SKC. The impact of the brine water discharge has been quantitatively assessed in the EIA. The assessment result indicated that the brine water discharge would be diluted by the ambient seawater by at least 90 times, resulting in a less than 2% ambient salinity elevation within 100 m from the outfall, Hence it is considered that the effect of the brine water discharge would be slight and localized and it would not cause adverse impact on the marine species.</p> <p>3) Most of the major noisy equipment will be housed in buildings. This will reduce the noise impact to noise sensitive receivers (NSRs). The identification of the NSRs and the noise assessment are based on the</p>	<p>ES:S2.2.1.2, S3.2</p> <p>EIA: S6b.4.1.50</p> <p>EIA: S5a.7.2 & 5b.7.6</p> <p>EIA: S4b.2.1.1,</p>

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	<p>show the extent of the impact by the implementation of integrated waste management facilities. We know that any waste management facilities will undoubtedly have a certain impact on the environment, the EIA report should divide the affected areas in a hierarchical manner in accordance to the actual impact on the surrounding areas so as to raise the public awareness and outline a benchmark to rebate and subsidize the affected residents in the region. Furthermore, the EIA report should also provide an understanding to the general public with the impact caused by unexpected idiopathic accidents on the surrounding environment.</p> <p>However, solely depending on this integrated waste management facility may not be the ultimate solution to our growing waste. Due to enhancement of incineration technology, nowadays, newly-built waste incineration plants are able to effectively control the emissions of dioxins and other pollutants. We suggest that the Government would consider building more this kind of integrated waste management facilities in different areas under the premise of not extending landfill sites. Thus, accomplishing payment by polluters and to reduce the pollution problems caused by cross-transportation of the waste. It will also achieve the effect of arousing waste reduction awareness of the whole community, to be truly environmentally friendly.</p> <p>Being a professional waste incineration power project system operator, we are committed to the goal of zero emissions. Not only we have experts in the field of waste incineration power generation, but we also equipped with advanced technical reserves. We work on program planning, infrastructure, equipment selection, environmental assessment, project management, business , operations, personnel training in accordance to Asian cities with high-density population. We have accumulated professional experiences in various senses and start relevant business cooperation with every country and region based on BOT and BOO etc.</p> <p>On the basis of waste incineration power generation projects, we also provide environmental standards-based integrated municipal waste disposal services, in addition to regional operations center in Xiamen, China and Bangkok, Thailand; we have also set up business development centers in Turkey and Vietnam. At present, there are altogether 10 waste incinerators in Mainland China including those have been already running and some are being planned to construct in the near future. From our past experience, every city has its own unique way of waste disposal methods with different reaction from its residents. We, as a local company in Hong Kong, we could see that our city is taking its crucial step in implementing some new approaches to develop technologies for waste disposal. We feel interested, obliged and responsible to participate and contribute to the development of waste disposal. Should you be seeking advices and opinions in any technical, planning and other areas, we shall be honoured to share our faith in the experience of municipal waste disposal.</p> <p>我們贊成實施建議離島石鼓洲發展綜合廢物管理設施選址的計劃，如果政府能把環評的標準提高，項目上嚴格執行更高的排放標準，釋除傳統上公眾對垃圾焚化爐的疑慮，讓全香港市民都認同這項計劃是一個可行及可靠的處理城市垃圾的方法。</p> <p>我們對環評報告進行詳細的研究，發現了很多不正確、不全面及不完善的地方。現將歸納成 5 個大項，具體意見如下：</p> <p>1. 專案執行標準不適當</p> <p>煙氣排放標準中說明本專案要基於最嚴格的歐盟標準和香港最佳實用技術。據我們瞭解到，目前歐盟許多國家採用垃圾焚燒最佳可用技術(EU-Commission,2006)中所推薦的處理工藝並執行推薦工藝所能達到的標準和排放指標，無論是在煙氣排放濃度值還是污染物(如飛灰等)的產生量方面，很大程度地嚴於香港環評報告香港環評報告中所述的標準(香港環評報告報告中採用的標準僅氮氧化物的排放嚴于歐盟 2000 標準);特別是歐盟國家近些年新建的垃圾焚燒專案，大多採用“最佳可用技術”。香港環評報告中引用的標準，為較普遍的排放標準，不符合香港政府</p>	<p>Technical Memorandum on Environmental Impact Assessment Process. The EIA report recommended the exhaust of the ventilation system and any opening of the building to be located facing away from any NSRs.</p> <p>Noted</p> <p>[Since the PC166 has both English and Chinese version with same content, response</p>	<p>S4b.8.2.1</p>

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	<p>希望採用最嚴格的歐盟標準的精神實質和環境治理系統長期發展的需要。香港政府應該而且完全有可能、有條件按更高的標準和水準建設現代的垃圾焚燒項目，以滿足日趨嚴格的環保要求。以下是香港環評報告香港環評報告中的標準與應用“垃圾焚燒最佳可用技術”所能達到的運行排放指標的對比表：</p> <table border="1"> <thead> <tr> <th rowspan="2">No.</th> <th rowspan="2">污染物</th> <th rowspan="2">單位</th> <th colspan="2">香港環評報告中的限值</th> <th colspan="2">應用最佳可行技術能達的排放值</th> </tr> <tr> <th>日平均</th> <th>半小時平均</th> <th>日平均</th> <th>半小時平均</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>塵</td> <td>mg/Nm³</td> <td>10</td> <td>30</td> <td>1-5</td> <td>1-20</td> </tr> <tr> <td>2</td> <td>總有機碳</td> <td>mg/Nm³</td> <td>1</td> <td>20</td> <td>1-10</td> <td>20</td> </tr> <tr> <td>3</td> <td>氯化氫</td> <td>mg/Nm³</td> <td>10</td> <td>60</td> <td>1-8</td> <td>1-50</td> </tr> <tr> <td>4</td> <td>氟化氫</td> <td>mg/Nm³</td> <td>1</td> <td>4</td> <td><1</td> <td><2</td> </tr> <tr> <td>5</td> <td>硫氧化物</td> <td>mg/Nm³</td> <td>50</td> <td>200</td> <td>1-</td> <td>1-150</td> </tr> <tr> <td>6</td> <td>氮氧化物</td> <td>mg/Nm³</td> <td>100</td> <td>200</td> <td>40-100</td> <td>40-300</td> </tr> <tr> <td>7</td> <td>一氧化碳</td> <td>mg/Nm³</td> <td>50</td> <td>100</td> <td>5-3</td> <td>5-100</td> </tr> <tr> <td>8</td> <td>汞</td> <td>mg/Nm³</td> <td>0.05</td> <td></td> <td>0.001-0.02</td> <td>0.001-0.03</td> </tr> <tr> <td>9</td> <td>鎘+鈦</td> <td>mg/Nm³</td> <td>0.05</td> <td></td> <td>0.005-0.05</td> <td></td> </tr> <tr> <td>10</td> <td>其他重金屬總和</td> <td>mg/Nm³</td> <td>0.</td> <td></td> <td>0.05-0.5</td> <td></td> </tr> <tr> <td>11</td> <td>二噁英</td> <td>ngTEQ/Nm³</td> <td>0.1</td> <td></td> <td>0.01-0.1</td> <td></td> </tr> <tr> <td>12</td> <td>氨</td> <td>mg/Nm³</td> <td></td> <td></td> <td>1-10</td> <td><10</td> </tr> </tbody> </table> <p>從以上對照表可見，香港環評報告香港環評報告中的標準在煙塵，一氧化碳 (CO)，二噁英類有機物 (Dioxin)和重金屬這幾個指標與應用“最佳可用技術 (BAT)”所能達到的道行排放水準還有較大的差距。其中，在垃圾焚燒過程中，一氧化碳含量高表明垃圾焚燒不完全燃燒的數量級比較高，不完全燃燒是二噁英產生的主要因素。同時，一氧化碳對二噁英的生成有一定的催化作用，較高的一氧化碳濃度會促進二噁英的生成，導致煙氣中二噁英的原始濃度提高，所以，控制一氧化碳的含量是十分重要的；作為二噁英和重金屬對外擴散和排放的主要攜帶者粉塵，其排放濃度更應該得到更嚴格的限制，依據我們的經驗和相關研究表明，佔排放總量大約 90% 以上的二噁英是附著在粉塵表面排入大氣的；絕大多數重金屬也是以固態粉塵或吸附在粉塵顆粒表面而排入大氣，所以如何除塵，怎樣除塵是垃圾焚燒廠實現排放的最主要的基礎因素，因而，按照國際經驗，把煙塵的濃度控制在 5mg/Nm³ 以下，是實現二噁英達標排放最有力的證明。嚴格控制煙塵，一氧化碳排放濃度，既是直接降低環境污染的要求，又是減少、控制具有高毒性的、受到公眾廣為關注的二噁英類以及重金屬污染物排放的必要手段。</p> <p>依據我公司已經掌握的包括二噁英催化分解、煙氣濕法洗滌等在內的組合煙氣處理工藝，可將粉塵的指標輕易控制在 5mg/Nm³ 以下，二噁英排放指標控制在接近 0.01 ngTEQ/Nm³，以最佳的手段，減少二噁英對環境的影響。根據香港環評報告報告中所採用的標準，每年污染物排放量與採用更先進的工藝技術所能夠控制的污染物每年排放量比較見下表：</p> <table border="1"> <thead> <tr> <th>No.</th> <th>污染物</th> <th>單位</th> <th>依據香港環評</th> <th>應用最佳可用技</th> <th>污染物每年</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					No.	污染物	單位	香港環評報告中的限值		應用最佳可行技術能達的排放值		日平均	半小時平均	日平均	半小時平均	1	塵	mg/Nm ³	10	30	1-5	1-20	2	總有機碳	mg/Nm ³	1	20	1-10	20	3	氯化氫	mg/Nm ³	10	60	1-8	1-50	4	氟化氫	mg/Nm ³	1	4	<1	<2	5	硫氧化物	mg/Nm ³	50	200	1-	1-150	6	氮氧化物	mg/Nm ³	100	200	40-100	40-300	7	一氧化碳	mg/Nm ³	50	100	5-3	5-100	8	汞	mg/Nm ³	0.05		0.001-0.02	0.001-0.03	9	鎘+鈦	mg/Nm ³	0.05		0.005-0.05		10	其他重金屬總和	mg/Nm ³	0.		0.05-0.5		11	二噁英	ngTEQ/Nm ³	0.1		0.01-0.1		12	氨	mg/Nm ³			1-10	<10	No.	污染物	單位	依據香港環評	應用最佳可用技	污染物每年							<p>on this PC166 is already given in the above English version.]</p>		
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No.	Comments						Proponent's Response	EIA Report Ref.
			報告中的標準 污染物最大排 放量	術每年污染物排 放量	最大減排量			
1	塵	噸/年	60.8	6.08-30.4	54.72			
2	總有機碳	噸/年	60.8	6.08-	4.72			
3	氯化氫	噸/年	60.8	6.08-48.6	54.72			
	硫化物	噸/年	304	6.08-243	54.2			
5	氮氧化物	噸/年	608	24 -608	365			
6	一氧化碳	噸/年	304	30.4-182	2 3.6			
7	二噁英類	毫克毒性當量/ 年 mgTEQ/a	608	60.8	547 2			
<p>由上表可以看出，採用先進的污染治理技術設備可以很大程度地減少本項目對環境的污染程度，降低污染物的排放總量，特別是在煙塵和二噁英類有機物的治理方面尤為明顯，可以最大限度地減輕和消除公眾對二噁英類有害物質的恐懼心理。</p>								
<p>2. 環評報告中沒有針對可能採用的防治污染的技術工藝在本項目中的可應用性進行清晰的界定和嚴謹的評價；</p>								
<p>環評報告中未對可以在本項目中應用的技術工藝所能夠達到的污染物排放指標進行分析和評估。這樣，公眾無法瞭解將來項目所採用的技術工藝和設備能否符合香港環評報告報告中的規定和要求，政府和公眾也無法對專案的實施過程進行有效的管理和監督。這個缺項是本環評報告中的最大漏洞，是論證該項目能否在香港成功實現的關鍵基礎，是環境評價不可或缺的必要環節。垃圾焚燒及其輔助系統所採用的技術工藝與環保排放指標密切相關，在環評階段，就應確定可以應用於本項目的技術工藝的種類和範圍，而不應在工程實施階段才進行工藝技術的選擇、評比。因此，香港公眾有理由要求環評單位和政府給出清晰、明確的解釋。</p>								
<p>3. 污染源鑒別、評估範圍不夠全面，對部分敏感性的染污物評估、論證不夠充分；</p>								
<p>香港環評報告中僅對各環境敏感區的大氣中的污染物的背景濃度進行了取樣分析並對項目運行後各環境敏感區的污染物濃度進行了預測。但沒有對專案的環境敏感地區的土壤中的污染物特別是二噁英類的原始背景濃度進行取樣分析，也沒有對項目運行時可能導致的土壤中的污染物的濃度的提升程度進行預測，並針對土壤對污染物的承載能力進行判斷，這樣，一方面導致對項目選址和污染物排放標準選擇的適當性和合理性的論證缺乏必要的依據；另一方面，在將來項目運行期間，由於缺失必要、可靠的原始資料，導致無法對專案產生的污染程度進行更準確、更全面的評估與監測。這是香港環評報告中比較關鍵性的缺陷。</p>								
<p>在建設期：</p>								
<p>1)沒有針對諸如吹管產生的高強度、持續數日的噪音和煮爐後產生的千餘噸較高濃度鹼性廢水可能造成的環境污染進行評估，也未提出減少或避免環境污染的措施；</p>								
<p>2) 未對建築物運輸車輛產生的交通、噪音、視覺方面影響的評估，特別是可能會出現大量混凝土槽罐車集中上路情況。</p>								
<p>在運營期：</p>								

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>1)未對設備發生故障，必須採取一些短時間應急措施時，可能對環境造成的影響進行評估;例如：煙氣處理系統全部或部分工藝設備發生故障，可能會出現的在短時間內，煙氣未經處理或未達標處理直接排入大氣，環評報告應針對不同的事故情況下(超標排放時間、超標排放時各類污染物的濃度、不同風向風速)，對環境影響的程度進行評估，包括環境最大污染容量與污染物總量的分析評估;客觀地告知政府和市民，專案運行時可能存在的環境風險。同樣，香港環評報告中也未針對全廠停產維修時會產生的環境影響以及應採取的措施提出具體的評估和要求。</p> <p>2)對廠界噪音評估不到位，特別是在“4a. NOISE IMPACT (TTAL SITE)”中，未見針對專案生產工藝設備正常運行時產生的噪音進行系統的評估和提出有效、可行的減輕措施;也未對廠界噪音長期持久地對海洋中的魚類的生存、繁殖可能造成的影響做任何說明;</p> <p>3)香港環評報告報告中對垃圾箱轉運碼頭的環境評估不充分。未見針對垃圾集裝箱轉運過程中可能出現的垃圾滲濾液和少量散落的垃圾以及轉運平臺清潔沖洗污水等對周邊環境影響的評估。</p> <p>4)對煙氣中的污染物評估不到位，報告中較充分地評估了氮氧化物、硫化物、塵的影響，但未見針對主要污染物氯化氫和氨可能造成的污染進行較詳細的分析論證;另外，由於項目可能選址在 Tsang Tsui Ash Lagoon (TTAL)，與污泥處置廠廠界距離僅 205 米，建議特別重視兩個焚燒廠排放的 Hg 及其他化合物在大氣中的要加濃度的分析，其中應包括最大落地濃度值，且其範圍不應僅限於所香港環評報告中列出的環境敏感區。</p> <p>5)目前在國際上較發達國家新建的垃圾焚燒廠的煙氣處理系統大部分採用組合工藝，其中，濕法工藝應列為可選方案之一，在香港環評報告中應補充針對濕法煙氣處理工藝的可行性和能夠達到的排放指標以及該工藝所產生的廢水可能造成的環境污染方面的評估。</p> <p>6)海水除鹽工藝中可能有部分反沖洗水，這部分水中懸浮物含量較高而且可能會含有一定量的化學藥劑。在香港環評報告中，對這部分污水的評估前後不一致，在 5a.7.2.2 中，說明無化學藥劑使用;但在 5b.7.6.8 中，又說明使用了化學藥劑，且這部分水要進入廠內汙水處理廠。但我們注意到，設定廠內汙水處理廠的規模時，並未考慮到這部分污水。希望 AECOM 能夠對此進行說明、澄清，以應有的專業水準，對可能產生的污染進行評估。</p> <p>7)未見對廠區雨水排放的任何評估和說明。儘管垃圾焚燒廠內的危險物品比較少，但根據我們的經驗和行業一般規則，廠內排水一定要做到兩汙分流，且雨水應排入市政雨水管網，經處理後方可排入自然水體。</p> <p>4. 參照設計工藝技術不夠先進</p> <p>儘管未能獲得香港環評報告中所述的由 AECOM 編寫的參照設計方案，但從香港環評報告中可以看到，脫硝採用選擇性催化脫硝 (SCR)工藝、去除二噁英類採用活性炭吸附工藝、鍋爐補給水系統採用離子交換法、飛灰處置採用水泥固化、化學穩定後填埋方案等，上述工藝早在十幾年甚至更早一些時間，被廣泛應用，並可能會在一定時期內繼續被採用，但由於上述工藝存在不同程度或不同方面的問題，已經逐步地、有條件地被更佳的工藝所代替。因此，我們建議至少不要放棄選擇其他更適合本項目的、更先進的處理工藝的機會和可能。例如:採用氧化、吸收法與選擇性催化脫硝 (SCR)技術的組合工藝脫硝、採用更高效、更環保的催化分解工藝去除二噁英類有機物、採用酸洗飛灰工藝處理飛灰、採用電去離子 (EDI)代替離子交換法制去離子水等。</p> <p>從香港環評報告報告中所述每噸垃圾產生 40 公斤飛灰還可以推斷出，其煙氣處理工藝較為落後，過多地依賴加大石灰用量而達到煙氣脫酸效果，這樣會較多地浪費資源、增加運營成本，同時產生過多的危險廢物。如果採用目前較先進的脫酸工藝，每噸垃圾產生的飛灰量可降</p>		

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	<p>於 10 公斤，並可以通過適當的處置工藝，去除飛灰中的重金屬，降低其可能造成的危害性。另外，為保證焚燒系統能夠採用最佳可用技術，建議政府對焚燒爐的熱效率提出明確的最低要求，為香港建設一個即環保又高效的現代垃圾焚燒廠，減輕政府和市民的經濟負擔。</p> <p>5. 對減輕環境影響的措施不到位</p> <p>對於飛灰的處置，在香港環評報告報告中，僅提出固化穩定化後去填埋，我們建議首先考慮採用先進的工藝，減少飛灰的產生量，並對飛灰進行無害化處理，如果一定要採用固化穩定化工藝處置飛灰，建議將處理後的飛灰送到指定填埋場的指定區域，而不宜與爐渣一同混合填埋，且填埋場應有足夠的防止滲透措施，立需要隨時或定期檢測填埋場的滲透狀況，以防止出現重金屬類污染事故，除鹽水廠的濃鹽水直接排入海中，其理由是因為排水量較小，我們認為，這不符合污水零排放的原則，且為將來的運營監管留下隱患。我們建議採用更先進的海水淡化工藝，盡可能減少或避免排出濃鹽水，如果一定要產生濃鹽水且要排入大海，我們建議在濃鹽水排出口安裝即時監控設施，確保海水不受到污染對於廠內噪音的控制，香港環評報告報告中有建議意見，如噪音源應避開噪音敏感區所在方向，但所述的噪音敏感區中未含可能存在魚類棲居的水域，存在對魚類的安全隱患。</p> <p>建議：</p> <p>我們建議在處理地區反對聲音問題上，能否以支付轉移的方式，在環評中劃分出垃圾焚化爐所在的區域及範圍，以特定的電費、水費優惠等適度補貼區域內的居民；另一種方法是以垃圾焚化發電廠的售電收益去回饋當地的居民，爭取地區支持這項「清潔能源」，或可從而發展再生資源產業，達至一種互惠互利的各方可接受的結果。</p> <p>所以，我們建議在環評報告中應有一個章節以科學的方式界定將受實施綜合廢物管理設施影響的地域及所在範圍受影響市民的人數。我們知道任何一個廢物管理設施對環境是一定會產生一些影響，環評報告應該把受影響的地區以等級制的方式去劃分，讓市民清楚知道設施對附近地區的實際影響，也可成為補貼、回饋受影響區域居民的依據。再者，環評報告中亦應該包括出現特發意外時可能對附近環境構成的影響，令市民大眾有所了解。</p> <p>但單靠這個綜合廢物管理設施項目，恐怕難以處理香港日益增加的垃圾。基於焚化技術的進步，現今新建的垃圾焚化廠已能有效控制二噁英等污染物排放，我們建議政府在不能擴建堆填區的前提下，可考慮在不時的地區，建設多個這類型的綜合廢物管理設施，達到污者自付及降低跨區運輸帶來的污染問題，同時亦可收培育全港市民減廢的意識之效，做到真正的環保。</p> <p>我們是專業的垃圾焚燒發電專案系統運營商，致力追求零排放的目標，現時不僅擁有垃圾焚燒發電領域的專家和先進的技術儲備，而且在針對亞洲人口高密度城市的方案規劃、基礎建設、設備選型、環保評估、項目管理、商業運營、人才培訓等方面積累了豐富的專業經驗，並以 BOT、BOO 等方式與各個國家和地區展開相關的商業合作。以垃圾焚燒發電項目作為基礎，我們還提供基於環保標準的城市廢棄物綜合處置服務，在中國廈門及泰國曼谷設立有地區性的運營中心，並在土耳其、越南等地設立有業務發展中心。目前，在中國大陸地區已經運行以及正在規劃建設中的垃圾焚燒發電廠有十座。以我們的經驗，不同的城市都有著一些的特色、獨特的垃圾處理方法及不同市民的反應。我們作為一間香港本地的公司，看到所在的城市向新的垃圾環保技術踏出這重要的一步，我們有興趣、義務及責任參與本地垃圾處理的發展。若貴處在技術上、規劃等領域需要聆聽更多的意見，我們誠意分享我們在城市垃圾廢物處理的經驗，</p>		
PC167	即使環評順利通過，屯門的曾咀煤灰湖和毗鄰石鼓洲的一個人工島都能同時興建，分別的建成	為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於	ES:S1.1.1.3.

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	<p>啓用的日期為 2016 和 2018 年，那時，基本上所有的堆填區以飽和，而兩個綜合焚化廠能處理的垃圾量合共都是每日 6,000 公噸，小學生都懂的數學 每日約 13,300 公噸 - 每日 6,000 公噸 = 每日 7,300 公噸，堆填區已滿，這剩餘的垃圾堆在那裡呢？這個不知所謂的“綜合廢物管理設施第一期：工程及環境研究-可行性研究”幾時先會有第二期呢？基於通過對垃圾處理仍是沒有幫助的原因，我否決有的環評報告。</p> <p>環評報告首要的是評估對環境及生態的影響，而石鼓洲人工島方案明顯對環境及生態會造成不可逆轉的負面影響，填海工程對海洋生態如珊瑚、漁業和江豚等都會有著重大的破壞，為何這個方案會被視為較屯門的更佳呢？故此，我堅決反對通過這個環評報告。</p>	<p>2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》（以下簡稱《政策大綱》）所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <p>(a) 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳；</p> <p>(b) 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。</p> <p>(c) 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經濟誘因；及</p> <p>(d) 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施（包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物／有機廢物的有機資源回收設施）和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。</p> <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦提出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門會咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p> <p>毗鄰石鼓洲的人工島選址不在法定或擬議的生態保護區，環評研究顯示石鼓洲附近的海域不是中華白海豚經常出沒的區域，在大嶼山和南丫島以南的海域，包括石鼓洲附近地區，是江豚（<i>Neophocaenophocaenoides</i>）的重要生境。擬建的人工島可能令江豚永久失去 31 公頃生境。其實，江豚出沒的區域非常廣闊，夏天及秋天較多在蒲台島附近出沒，而冬天及春天較多在大嶼山以南（包括索罟群島、石鼓洲、長州、及近大嶼山等附近的海域）和南丫島以南的海域出沒。雖然如此，為了緩解 31 公頃生境損失，環評研究建議在石鼓洲和索罟群島之間的海域內，劃出約 700 公頃的合適範圍作為海岸公園。為此我們會進行一項海岸公園研究，以便找出設立海岸公園的適當地點和範圍，並決定在擬建的海岸公園內應該實施的海洋生態改善措施，例如放置人工魚礁和釋放魚苗等。</p> <p>此外，環評研究也建議了多項措施，緩解綜合廢物管理設施在施工和運作階段可能對江豚造成的間接影響。這些措施包括避免在江豚最活躍的季節進行高噪音工程、對專用區進行監察、採用固定的交通航線，以及在較多發現江豚的地區限制船隻時速在十海里以內等。在實施各項建議緩解措施後，本工程項目對江豚造成的不良影響會被降低至可接受水平。</p>	<p>S1.1.1.4</p> <p>ES: S4.3.5</p>

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		<p>在毗鄰石鼓洲的人工島發展綜合廢物管理設施，需要進行約 16 公頃填海工程。為了盡量減少填海挖泥和填土工程及其環境影響，我們已將填海面積比原先的建議減少約四成，環評研究亦建議以“格孔式圍堰”的填海方法來取代斜坡式海堤。所謂“格孔式圍堰”，即是先以筒狀的金屬物料興建圍堰劃定填海範圍，再注入填料進行填海的方法，使人工島防波堤的建造工程無需進行大規模的沉積物挖掘。此外，我們在工程期間會使用隔泥幕系統、控制挖泥和填土速度等多項緩解措施，減少工程影響海洋水質。長遠來說，更重要的一點是未來的設施將會做到零排放的目標，在廢物處理過程所產生的污水經處理後會全部回用。</p> <p>環評研究據此進行了水質影響的定量評估，結果顯示在實施緩解措施的情況下，工程所產生的水質影響會是局部和輕微的，對附近海域捕漁業造成的間接影響亦只是輕微的和暫時性質的。而預計興建人工島的填海工程不會影響養魚區的水質及其運作。施工及運作期間會進行嚴密的水質監察，並在互聯網上公布監察結果，以維持高度透明。</p> <p>因興建人工島發展綜合廢物管理設施，香港南部海域會永久失去 31 公頃捕漁區。環評研究顯示該海區只支持低至中等的漁業產量(每公頃約 100-200 公斤)，加上會永久失去的 31 公頃只佔香港整體捕漁區的極小部份，因此綜合廢物管理設施項目應不會對香港整體的漁業產量構成任何重要的影響，項目對漁業造成的影響會在可接受水平。上面提及的江豚生境生態緩解措施，亦助提昇漁業資源。</p>	ES: S4.3.5 & S4.3.6
PC168	<p>I am in support of the urgent need to build an incinerator as part of the solutions to handle our ever increasing municipal wastes. My only concern is to employ the right technology and find a site such that the waste to energy incineration facility as a whole is not only environmentally, ecologically, economically and socially acceptable but has the least impact.</p> <p>The Environmental Impact Assessment (EIA) Report on the proposed IWMF including a 3,000 tonnes/day incineration facility is still undergoing the 30-day public inspection (closed on 18 March) as part of the mandatory process stipulated in the EIA Ordinance. However, the on-going Government campaign has given the community an impression that the IWMF will be built on an artificial island off Shek Kwu Chau scheduled for operation by 2018, despite its obvious drawbacks, such as large reclamation area, substantial higher capital cost and 2 years longer to build.</p> <p>I wish to bring to your attention that EIA Report has failed to (a) adopt the new Air Quality Objectives Standards championed by the Government in a public consultation document issued in 2009 and (b) take consideration of the cumulative effects of all known/planned infrastructures (e.g. the 3rd airport runway) to assess the acceptability of emissions from the proposed IWMF. The EIA Report has also failed to give a comprehensive comparison of all impacts of all shortlisted sites and to come up with a preferred site with least impacts.</p> <p>I trust the Advisory Council for the Environment will brush aside all political pressure, examine the EIA Report impartially, and make credible deliberations as expected by the community</p> <p>In passing, I have to emphasis that the impressive wastes recycle rate of nearly 50% achieved in Hong Kong is actually the “Collection Rate” as most of the collected wastes are sent to the Mainland for processing/dumping. The way forward is to reduce the production of wastes, and the most effective measure is to go for mandatory charging scheme on wastes. The first step is to charge the disposal of commercial and industrial wastes and this should be done on an urgent basis.</p>	<p>Up to the present moment, meeting the existing AQOs remains the statutory requirements under the EIA Ordinance.</p> <p>The EIA has included existing as well as firmed planned projects in the cumulative impact assessment. Regarding the 3rd runway, it is one of the options being considered by the airport authority amongst other options. These options are under public consultation, whether or not there would be any 3rd runway development is not yet decided. A comprehensive comparison of all impacts of two proposed sites has been presented in Table 15.1, Section 15 of the EIA report.</p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the “Policy Framework for the Management of Municipal Solid Waste (2005-2014)” (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ol style="list-style-type: none"> revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little</p>	EIA: Table 15.1 ES:S1

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		suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.	
PC169	<ol style="list-style-type: none"> 1. The practice of using the PATH model with a projected emissions inventory to forecast future air quality is bringing Hong Kong's EIA process into disrepute. This methodology has now been used in a number of recent air quality impact assessments, including the assessments for the Hong Kong-Zhuhai-Macau Bridge projects (where it is currently being challenged in a judicial review), the proposed Organic Waste Treatment Facility as well as the IWMF. It is impossible to evaluate the reliability of the predictions that this methodology produces. 2. The PATH model simulates the complex chain of photochemical reactions that affects the dispersal of air pollutants across the PRD, taking into account topography, meteorology and the size and location of the major polluting sources in the region. PATH is a Eulerian model, which means that a change in any of the input parameters will affect all of the calculations being processed by the model in ways that are far too complex to predict. This would seem to make PATH unsuitable for generating the kind of reasonably worst case quantitative assessments that SB s. 3.4.1.4(iv)(b) requires. 3. The main problem with PATH is the difficulty of coming up with an accurate inventory of emission sources for the relevant assessment year. Because of the voluminous input data and large number of variables affecting the results, even small uncertainties about the accuracy of the input data will be compounded by the model and give rise to large uncertainties about the resulting predictions. All predictions should come with a margin for error to indicate their reliability but I have never seen any attempt being made in the EIA studies that use PATH to quantify the margin for error associated with the predictions being presented. Without a quantified margin for error, an EIA study that uses PATH can hardly constitute a quantitative air quality impact assessment. 4. EIA consultants that use PATH to predict future air quality have tried to convince us that their predictions are safe because they use conservative emission inventories that are likely to overestimate the total quantity of pollutants that will be emitted in the assessment year. This approach, they argue, ensures that the PATH predictions are based on a reasonably worst-case scenario as required by SB s. 3.4.1.4(iv)(b). Not so. Whilst using conservative assumptions about the total quantity of emissions likely to be emitted across the region will tend to produce predictions that are on average reasonably conservative, we cannot say that a prediction for a particular ASR will necessarily be conservative. 5. The predicted emission inventories used in these assessments are not in fact conservative at all. They tend to be extremely optimistic, assuming that regional air will improve significantly over the next few years as a result of general efforts by the HKSAR and the Guangdong Governments to reduce regional emissions. Although the two governments have been working on these measures for the past seven years, there is little sign of regional air quality improving. Ground level ozone, a key contributor to the formation of photochemical smog, is getting steadily worse, producing more and more hazy days each year. Indications are that the Guangdong Government 	<p>PATH model was used to quantify the background air quality during operation phase of the Project. It is one of the accepted air quality models listed in EPD's "Guidelines on Choice of Models". With regards to the emission inventory adopted in the PATH model, the emission sources including those in Pearl River Delta Economic Zone, roads, airport, power plants and industries within Hong Kong are all considered in the PATH model. The emission inventories for the PATH model are established based on the confirmed information and reasonable conservative assumptions. For the emission from the proposed third airport runway project, the project is still in conceptual stage and its environmental impact will be studied and addressed under a separate EIA report. The details of the emission inventories are discussed in the S3a.6.2.19 to 3a.6.2.39 of the EIA report and summarized in Appendices 3.5 & 3.6. In general, the PATH emission inventory has been developed from the worst emission year for relevant emission sources and consider as conservative approach. For example, in estimating the vehicle emissions over the HKSAR, the required traffic data for Years 2015, 2020 & 2030 was predicted by the 2006-based Base District Traffic Model (BDTM) traffic model. The 2006-based BDTM traffic model is recently developed by the Transport Department (TD) with the latest planning data and transport network and was just released publicly in January 2011. For part of the North Lantau area, an area-specific traffic impact assessment had been conducted and the predicted total traffic flow of some major roads in the North Lantau area for Year 2031 were presented in the HZMB-BCF EIA Report. A comparison of the total traffic flows for those major roads in North Lantau area as presented in the BDTM model and the HZMB-BCF EIA indicates that the traffic flows presented in the HZMB-BCF EIA are higher. For the sake of conservative assessment, the higher traffic flows data for those major roads as presented in the HZMB-BCF EIA for Year 2031 had been used to estimate the traffic flow for those major roads for different assessment years in the IWMF EIA. This approach would result in conservative estimates of vehicle emissions from those major roads in North Lantau for different assessment years to a different degree.</p> <p>With regards to other potential limitations of the PATH model, as discussed in para. 107 of the Judgment of the Court of First Instance for the case of HZMB EIA, the limitations of the PATH model are common to other dispersion models and these model drawbacks in the PATH model should not hold the EIA report to be non-compliant with the EIAO-TM or EIA Study Brief.</p> <p>Air pollution control and stack monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the proposed target emission limits that is more stringent than those stipulated in Hong Kong and the European Commission for waste incineration. With reference to the S3a.8.2.2 of the EIA report, all the representative ASRs would comply with the AQO limit and thus no further mitigation measure would be required.</p> <p>For ozone, the Project itself will not generate ozone. The formation of ozone involves a complex interaction between a large number of chemical substances such as NOx and VOC when meteorological conditions (e.g. sunlight, temperature) "favour" such interaction. Therefore, ozone is not directly generated by the Project. The ozone formation by photochemical reaction would take several hours and anticipated that ozone recorded in HKSAR would be attributed to VOC and NOx emissions generated from place afar. The NOx generated from the Project would quickly react with the ozone in the background to form NO2.</p>	EIA: S3a.6.2.18 to 39 S3a.6.2.3, S3a.8.2.2

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	<p>has not been able to meet its 2010 emissions reduction target, yet the emissions inventory used in the IWMF study assumes that, by 2015, emissions in Guangdong Province will not only have met, but will have significantly surpassed, the 2010 target.</p> <p>6. Even if this optimistic forecast were achieved by 2015, what effect it will have on air quality at the identified receivers in Hong Kong cannot be predicted without knowing how emissions at individual polluting sources across the region will change. Air quality is affected not only by the total quantity of pollutants that are emitted into the atmosphere but also where they are emitted. Using predicted emissions inventories does not solve the problem of having to tie the predicted total emissions for the region in 2015 to ascertainable sources of pollution that can be mapped on the grid squares of the PATH model. The EIA report for the IWMF offers no information on how the EIA consultant tackled this problem.</p> <p>7. Section 3.4.1.4(v)(a) of the SB requires EIA reports to document the methodology used in sufficient detail to allow readers of the report (including non-specialists) to understand how the models were set up to simulate the situation under study. More specifically, section 3.4.1.2 requires the EIA report to list the major existing, planned or committed air pollutant emission sources that may have a bearing on the environmental acceptability of the IWMF and set out their individual emission rates in a table. This generally done for emission sources in Hong Kong such as the power stations, the airport and marine and road traffic but no specific information is provided about sources in Guangdong Province, where most of the emission reductions are forecast to be achieved.</p> <p>8. The failure of the EIA report for the IWMF to identify where and how the assumed emission reductions in Guangdong Province will actually be achieved gives rise to further violations of the SB's requirements. Section 3.4.1.4(ii)(b) requires the project proponent to confirm the validity of any assumptions about sources of pollution that are relevant to the assessment of the IWMF's impact on air quality with the appropriate government departments or other authorities and to document the confirmations that are received. If the project proponent is relying on mitigation measures to reduce the emissions from any of these sources, SB s. 3.4.1.4(vi) requires it to agree with the appropriate government authorities on what mitigation measures will be taken so that the project's proponent can demonstrate that the measures are reasonable, practicable and sufficient to avoid a breach of the AQOs and other air quality criteria stipulated in the TM. The IWMF study simply ignored these requirements, raising considerable doubt as to whether the responsible government agencies are even aware of what assumptions are being made in EIA studies about their future policies.</p> <p>9. The EIA reports for the IWMF and the HZMB projects do not comply with section 3.4.1.4(ii)(b) even in relation to some major emission sources in Hong Kong. For example, all these reports assume that emissions at Hong Kong International Airport will not increase after 2020, when the airport is expected to reach its current full operating capacity but do not reveal whether this important assumption has been reviewed and endorsed by the responsible agencies of the HKSAR Government. In view of the billions of dollars of investment being committed to the HZMB projects to bolster HKIA's position as the leading air transport hub for the region, it seems unlikely that the HKSAR Government has ruled out the possibility of further expansion at the airport.</p>	<p>The predicted NO₂ concentration is already presented in the EIA report.</p>	

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	<p>10. This issue illustrates one of the main problems of relying on predicted emissions inventories. Section 3.4.1.4(ii)(b) may force the Government into revealing future policy in relation to such important matters before it is ready. If the EPD accepts the assumption of no further expansion at HKIA and the Airport Authority then announces its plans to construct a third runway, the Government looks dishonest.</p> <p>11. When the EPD is the responsible department for approving assumptions, readers of the EIA report naturally assume that the Director's provisional approval of an EIA report under section 6(3) of the EIA Ordinance means at least that assumptions about EPD policies will have been carefully vetted and found to be accurate. Unfortunately, this is not the case. The EIA study for the IWMF predicts that emissions from power plants in Hong Kong will be capped at the level of their allocated emission allowances for the year 2015. As the responsible agency for allocating these allowances under the APC Ordinance, the EPD should be well aware that allocated emission allowances are not a cap. They only determine the emissions threshold beyond which additional emissions have to be backed by emissions credits acquired under a recognized emissions trading scheme.</p> <p>12. The same casual attitude is exhibited by other government departments that have reviewed and apparently endorsed the assumptions underpinning the air quality impact assessment. How else to explain how the Transport Department confirmed an assumption in the EIA reports for the HZMB projects in 2009 that NOx emissions from road traffic in North Lantau would double over the period 2015-2031 and then, little more than 12 months later, confirmed an assumption in the EIA report for the IWMF that NOx emissions from road traffic in the same area would fall by half over the same period?</p> <p>13. It is not only input assumptions that are being manipulated. Relevant output from the PATH model is being suppressed. The PATH model simulates the formation of ozone in the atmosphere but the predicted ozone concentration has not been disclosed. Ozone is a criteria pollutant covered by the AQOs whose concentration is currently 40% over the current AQO and is getting worse. As the Authority under the APC Ordinance, the Director of EPD has a statutory duty to aim to bring ozone concentrations in Hong Kong at least into line with the relevant AQO as soon as is reasonably practicable but ozone is regularly ignored in air quality impact assessments. This may explain why Hong Kong's ozone levels are getting worse. Ground level ozone is dangerous to public health and, unless it is assessed, the project proponent cannot conduct a proper health impact assessment of aerial emissions from the IWMF in accordance with section 3.4.8 of the SB. Although ozone is a secondary pollutant that will not be emitted directly from the incinerator's smoke stacks, so is NO2, which is being assessed. Both pollutants are produced in the same chain of photochemical reactions involving pollutants that will be emitted from the incinerator's smoke stacks.</p> <p>14. Ozone is not only a relevant pollutant in its own right. It is also a relevant indicator of the reliability of the other predictions presented in the EIA report. If the ozone levels calculated by PATH are out of line with the ozone concentrations that can reasonably be expected in 2015 or out of line with the predicted level of the other pollutants that are being assessed in the study, then we should be very suspicious of all of the PATH predictions. Unlike Gaussian plume models, which deal with pollutants one at a time, PATH produces consistent predictions for all of the pollutants that are included in the model. If any of the PATH predictions is out of line with</p>		

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	<p>the others, that may indicate that the PATH model is not being used to conduct an honest and objective assessment but is simply presenting carefully selected information to support a preordained conclusion. To allay any suspicions of this kind, the EIA report should present the full results of the PATH model, including its ozone predictions.</p> <p>15. The most fundamental problem with relying on PATH to conduct air quality impact assessments is that it makes the assessment impenetrable to the general public, which has a right to be consulted on the assessment under section 7 of the EIA Ordinance. The critical assumptions underpinning the assessment are buried away in electronic files that are given only to the EPD to review. Even if particular assumptions discussed in the EIA report are shown to be wrong, it is still open to EPD officials to say that, having regard to the totality of the assessment, the report's conclusions are still sound. Short of obtaining a copy of the PATH model and rerunning it with the correct input data, which is hardly a practicable remedy, members of the public are in no position to challenge that argument.</p> <p>16. The EPD seems to be extremely reluctant to disclose the results of sensitivity studies showing how the results of the PATH model are affected by changes in the input assumptions. Running sensitivity studies is standard practice when using computer models. Sensitivity runs must have been done in the IWWMF study to arrive at the extraordinarily low NOx emission rate (a rate that is 50% better than the BPM standard set by the EPD in 2008) that has to be achieved by the incinerator to avoid a breach of the AQOs, but they have not been disclosed. Unless the results of the sensitivities are made public, only the EPD and the project proponent are in a position to know how robust the conclusions of the air quality impact assessment are. Members of the public are denied the opportunity to make any meaningful comment on the reliability of the predictions presented in the EIA report. They even suspect that the sensitivities are being kept from them deliberately to prevent them from challenging the input assumptions to avoid the risk that the whole house of cards will fall, necessitating a new study, a new EIA report and a new public consultation. A consultation process in which the decision maker is inhibited from keeping an open mind about the assumptions underpinning the study and that is designed to prevent consultees from making meaningful comments on the assumptions is fundamentally unfair and does not constitute a valid consultation process at common law. <i>R v Brent London Borough Council, ex parte Gunning</i> (1986) 84 LGR 168 at 189.</p> <p>17. The correct methodology for predicting a project's cumulative air quality impact is still the one recommended in Appendix B2 of the SB. Paragraph 3.1 of this Appendix states that "in view of the difficulties in estimating background air quality using the air quality models currently available," the long-term (5-year) averages of the most recent monitored air quality data as the starting point from which to calculate a project's cumulative effects on air quality. Whilst this recommendation goes on to suggest that superior modelling efforts such as PATH may eventually replace or supplement the recommended practice of using present air quality as the baseline, "the present approach is based on measured data and their long-term regional averages." As long as PATH cannot produce reasonably worst case predictions that the general public can understand and meaningfully comment on, the use of PATH will be incompatible with the basic objectives of Hong Kong's EIA process.</p>		
PC170	The steel piled cofferdams are totally impractical for the following reasons :-		

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	<p>They will be impossible to build during the north east monsoon period. The wave climate here is much more severe than at the HK/Zuhai/Macao site and the construction requires calm conditions. Preliminary estimates from wave modeling studies show 2m significant waves for 5% of the time. This also implies that 1% of these waves will be about 3.5m in height. Hence any uncompleted cells will be damaged under these conditions. It will even be difficult to construct during 1m significant waves which will occur for about 15% of the time during the NE Monsoon period.</p> <p>The cells will be damaged, both during construction and in the permanent condition by typhoon waves. Preliminary wave modeling shows the cells will be subject to 5m significant waves, 8m maximum waves during typhoons. To resist these waves it will be essential to either have a concrete unit armoured breakwater or a concrete caisson breakwater. A cellular cofferdam breakwater has recently failed in Indonesia with far smaller waves than these.</p> <p>The waves will generate much larger reflected waves from the vertical structure which will induce strong vortices at the sea bed. Hence a very robust and wide scour blanket will be required.</p> <p>Should the breakwater fail the environmental damage from loss of fill will be far worse than that caused by construction or a more robust breakwater design.</p> <p>The steel cofferdams will rapidly corrode in the tropical marine environment. Even with cathodic protection the steel in the tidal and splash zones will corrode because most systems are not effective here.</p> <p>The steel cofferdams offer no benefits to benthic species. Studies at High Island dam have shown the voids within the concrete armour units to be effective fish nurseries and a proliferation of species has been recorded there.</p> <p>The silt curtains are also impractical for the same reasons as the cofferdams. They will be very difficult to keep in place during the NE Monsoon let alone work effectively. During a typhoon they will get destroyed and be a hazard to both marine life and to shipping.</p> <p>I believe the construction method proposed is flawed. Therefore the environmental impacts of this scheme have not been adequately addressed</p>	<p>North, east and northeast monsoon usually affects Hong Kong during the winter season. As the reclamation and construction of breakwater will take place between June and November to avoid the peak Finless Porpoise season, the potential impact of north / east monsoon to the construction of cofferdam would not be significant.</p> <p>Cellular cofferdams are self-supporting gravity structures. As circular cells will be backfilled after the sheet piles reach the design depth, they will be stabilized during both construction and permanent condition.</p> <p>To reduce scouring of the seabed, 5-10m wide anti-scouring layer will be placed along the cofferdam at the seabed after the installation of the cofferdam.</p> <p>The highest corrosion rate is usually found in the splash zone or at the low water level in tidal waters. Therefore, surface coating in the high corrosion zones, combined with cathodic protection, will be applied to the sheet piles to provide protection and retard the corrosion process.</p>	<p>EIA S2.4.3.7</p> <p>EIA S2.4.3.9</p>
PC171	Note: Comment is identical to PC166.		
PC172	<p><u>(Comment Part 1)</u></p> <p>I am writing to object to the proposed Integrated Waste Management Facilities (i.e. incinerator) on Shek Kwu Chau.</p> <p>It is evident that the Government has not fully considered the impact on ecology surrounding the proposed site.</p> <p>The projected permanent loss of 31 ha of important habitat for Finless Porpoise is an unacceptable tradeoff to building a waste management facility. Does the Government plan on replacing this important habitat elsewhere? And if so, how would this happen as construction of the incinerator is</p>	<p>The EIA study on IWMF was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also</p>	

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>projected to last for more than 5 years? The proposed marine park would not be in operation until 2018, which by then the Finless Porpoise might have migrated elsewhere or be eliminated due to erosion of its natural habitat. The treatment of corals should also be considered as translocation often involves many unknown issues during the process.</p> <p>Another point of contention to the proposal is the landing portal at Cheung Sha. It would be very interesting to know the exact location and the reasoning behind the low ecological value mentioned within the EIA Executive Summary. Any physical and environmental alterations to the coastline of Cheung Sha are of concern. The Government needs to address this issue to mitigate any irreversible damage to the natural environment in Cheung Sha, and South Lantau as a whole.</p> <p>It is apparent that the Government has not exhausted all other options handling this matter and in general, waste.</p> <p>Garbage disposal and waste management has not been high on the Government's agenda. The Government should encourage recycling and make waste division mandatory for all users.</p> <p>As a final thought, in suggesting an incinerator, has the Government decided that it is a sustainable method in the long run? The proposed incinerator will only be able to handle 20% of Hong Kong's waste, which to me seems to be minimal taking into consideration the time and effort for execution. Despite landfills nearing capacity, surely there must be other peripheral sites that can be explored before resorting to building an artificial island for burning garbage.</p> <p><u>(Comment Part 2)</u></p> <p>I am writing on behalf of the owner of xxx to object to the proposed Integrated Waste Management Facilities (i.e. incinerator) on Shek Kwu Chau.</p> <p>It is evident that the Government has not fully considered the impact on ecology surrounding the proposed site.</p> <p>The projected permanent loss of 31 ha of important habitat for Finless Porpoise is an unacceptable tradeoff to building a waste management facility. Does the Government plan on replacing this</p>	<p>recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures.</p> <p>The EIA report indicates that the construction of modern incineration facilities is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>The key potential direct impact identified under the Project include permanent loss of 31 ha of important habitat for Finless Porpoise, covering the reclamation and the embayment area within breakwater. Mitigation measures proposed to mitigate the loss include firm commitment from the Project Proponent to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance by 2018, in order to tie in with the operation of the IWMF at the artificial island near SKC. Deployment of artificial reef and release of fish fry have also been proposed as additional enhancement measures for the loss of important habitat for Finless Porpoise and fisheries resources. For the indirect impacts on Finless Porpoise, such as acoustic disturbance, collision with vessels, and alteration of behavioural pattern during construction and operation phases, mitigation measures proposed include avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, marine mammal watching plan, adoption of regular traffic route, and limitation of vessel speed to ten knots at areas with high Finless Porpoise sighting density. With the implementation of the proposed mitigation measures, adverse impacts on Finless Porpoise would be mitigated to acceptable level.</p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ol style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p>	<p>ES:4.3.5.2</p> <p>ES:S1</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>important habitat elsewhere? And if so, how would this happen as construction of the incinerator is projected to last for more than 5 years? The proposed marine park would not be in operation until 2018, which by then the Finless Porpoise might have migrated elsewhere or be eliminated due to erosion of its natural habitat. The treatment of corals should also be considered as translocation often involves many unknown issues during the process.</p> <p>Emissions are also of concern from both construction and operation of the proposed incinerator. Has the Government conducted a serious study on the potential air quality impacts of Shek Kwu Chau and to a larger extent, South Lantau?</p> <p>Another point of contention to the proposal is the landing portal at Cheung Sha. It would be very interesting to know the exact location and the reasoning behind the low ecological value mentioned within the EIA Executive Summary. Any physical and environmental alterations to the coastline of Cheung Sha are of concern. The Government needs to address this issue to mitigate any irreversible damage to the natural environment in Cheung Sha, and South Lantau as a whole.</p> <p>It is apparent that the Government has not exhausted all other options handling this matter and in general, waste.</p> <p>Garbage disposal and waste management has not been high on the Government's agenda. The Government should encourage recycling and make waste division mandatory for all users.</p> <p>As a final thought, in suggesting an incinerator, has the Government decided that it is a sustainable method in the long run? The proposed incinerator will only be able to handle 20% of Hong Kong's waste, which to me seems to be minimal taking into consideration the time and effort for execution. Despite landfills nearing capacity, surely there must be other peripheral sites that can be explored before resorting to building an artificial island for burning garbage.</p> <p>I wish the above comment could be handled and discussed probably. Should you need any more information, please feel free to contact the undersigned at xxx. Thank you.</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures.</p> <p>The EIA report indicates that the construction of modern incineration facilities is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>The key potential direct impact identified under the Project include permanent loss of 31 ha of important habitat for Finless Porpoise, covering the reclamation and the embayment area within breakwater. Mitigation measures proposed to mitigate the loss include firm commitment from the Project Proponent to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance by 2018, in order to tie in with the operation of the IWMF at the artificial island near SKC. Deployment of artificial reef and release of fish fry have also been proposed as additional enhancement measures for the loss of important habitat for Finless Porpoise and fisheries resources. For the indirect impacts on Finless Porpoise, such as acoustic disturbance, collision with vessels, and alteration of behavioural pattern during construction and operation phases, mitigation measures proposed include avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, marine mammal watching plan, adoption of regular traffic route, and limitation of vessel speed to ten knots at areas with high Finless Porpoise sighting density. With the implementation of the proposed mitigation measures, adverse impacts on Finless Porpoise would be mitigated to acceptable level.</p> <p>There were successful cases of coral translocation including the one for Proposed Extension of Public Golf Course at Kau Sai Chau Island, Sai Kung (HKJC, 2005). A total of 89 coral colonies were transplanted to a nearby site in late November 2006 due to construction works. The recipient site is 80 m to the south of a ferry pier where corals of similar species composition were already present on the bedrocks. Coral monitoring surveys for transplanted colonies were conducted quarterly for one year (4 surveys in total: from December 2006 to September 2007). According to the Environmental Monitoring and Audit (EM&A) reports during the coral monitoring period between December 2006 and September 2007, by the end of the monitoring period, 86 out of 89 transplanted corals were recovered and their condition remained similar with the baseline condition before transplantation. Only a total of 3 colonies went missing; and within the 86 remaining colonies, only 3 colonies showed some degree of mortality (30-80%). No signs of mortality nor bleaching were noted in the rest of the 83 transplanted coral colonies (ibid.). With over 93% of transplanted corals remained in the same condition before transplantation, and no trigger of Event and Action Level, coral translocation is considered to be an effective measure to avoid direct loss of corals under this Project.</p> <p>Potential air quality impacts from the construction works for the Project would mainly be related to construction dust from excavation, materials handling, filling activities and wind erosion. With the implementation of mitigation measures specified in the Air Pollution Control (Construction Dust) Regulation, dust impact on air sensitive receivers would be minimal.</p> <p>For the operation phase, the IWMF will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen</p>	<p>ES:4.3.5.2</p> <p>EIA: S7b.2.6.14</p> <p>EIA: S3b.7.1</p> <p>ES: S4.3.1.3 to S4.3.1.4</p>

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		oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF. Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQO parameters at all concerned air sensitive receivers with the corresponding AQOs.	
PC173 – PC175	Note: Comments are identical to PC158		
PC176	<p>Note: Comments are similar to PC158. Additional comment is listed as follows:</p> <p>作為長洲居民，並會直接受影響，政府的諮詢一直靜悄悄的進行，難免再次給人意圖混水摸魚，糊塗過關之感，政府是否不顧公信力和形象？反正市民沒奈何，諮詢只是做樣？請不要企圖用公園休憩的形象包裝焚化爐成無害的設施，我們也不需要建在焚化爐邊的公園，政府如連設施的基本用處都未搞清楚，請先反省公帑是否應這樣浪費，長洲或許是鄉下地方，我們不是傻子。</p>	<p>我們一直就擬建的綜合廢物管理設施與相關的區議會及地區人士保持聯絡，希望能令地區人士更了解現代廢物焚化處理方法，如在 2008 年 3 月，我們曾向離島區議會介紹在本港發展綜合廢物管理設施的最新進展和選址研究的結果，並分別在 2008 年 4 月及 5 月出席長洲鄉事委員會及其舉辦的居民大會，聽取市民的意見。在 2009 年，我們聯同屯門和離島區共 26 位議員到東京和大阪，實地考察日本當地如何利用先進的焚化技術來處理當地的廢物及污泥。我們亦於 2010 年 11 月 15 日、2011 年 2 月 21 日向離島區議會和 2011 年 3 月 8 日、3 月 10 日、3 月 17 日、3 月 29 日、4 月 11 日、4 月 12 日、4 月 14 日向長洲鄉事委員會、長洲地區組織及居民介紹在本港發展綜合廢物管理設施的最新進展。</p>	Not under the jurisdiction of EIAO
PC177	<p>I would like to object to the incinerator at Shek Kwu Chau with the following justifications</p> <ol style="list-style-type: none"> (1) Shek Kwu Chau (SKC) is recommended by the HKU Ecological Survey in 2000 as an ecological hotspot due to the presence of an endemic lizard, i.e. the Bogadek's Burrowing Lizard. The EIA report fails to report the ecological significance of SKC. (2) According to the South West NT Development Strategy Review by the Planning Department, HKSAR, the planning objective of South Lantau is considered as "Conservation and Sustainable Recreation" as this area is of high ecological and scenic value. The current proposed incinerator is definitely not a compatible use to the existing natural setting of South Lantau. It will spoil the natural setting at South Lantau permanently and irreversibly. EPD should clarify the justification of why the SWNT Development Strategy recommended by Plan D can be ignored and overthrown. (3) Also, SKC itself is recommended as "Conservation Area" under this Development Strategy Review. It is not an ecologically friendly option of locating an incinerator in adjacent to an ecological hotspot. I would like to know the justification behind. (4) EPD should also clarify the construction and running costs of two options. As an artificial island and breakwater have to be formed at the SKC option, the cost of the SKC option must be expensive than the Tsang Tsui option. EPD should clarify why we have to waste tax-payers money on a remote, ecologically unfriendly option at SKC, of which there is virtually no supporting infrastructure. Money from tax-payers should not be wasted due to the short-sighted vision of policy makers. (5) Unlikely SKC, another option, Tsang Tsui at Tuen Mun, is much preferable as supporting infrastructures are present. Also, it is adjacent to the WENT landfill and the sludge treatment centre. Therefore, there are strong justifications to group all waste treatment facilities into a single area. EPD should clarify why one waste treatment facility is suddenly situated on a natural area and is isolated from other waste treatment facilities. (6) The natural beauty of South Lantau and the existing planning principle should not be ruined due to strong local objection and short-sighted vision of policy makers. Should the 	<p>(1) The Section 7b.4 'Description of the Environment' under Section 7b has provided baseline ecological condition of Shek Kwu Chau, including information from previous literature and relevant studies. Previous record of Bogadek's Burrowing Lizard at Shek Kwu Chau has been covered.</p> <p>(2 – 3, 6) It is noted that the South West New Territories Development Strategy Review (SWNT DSR) proposed SKC to be conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel. To provide better service to the community, the IWMF will include facilities for environmental education and leisure tourism. The objectives of environmental education centre are to promote environmental awareness to the society and attract tourists. This would be in line with the strategy of promoting environmental awareness and leisure tourism of the nearby area as mentioned out in the South West New Territories (SWNT) Development Strategy Review.</p> <p>Considering the previous record of the rare Bogadek's Burrowing Lizard at Shek Kwu Chau, the IWMF has avoided the construction of IWMF on the island. Avoidance approach has also been adopted during the design of the sitting of the IWMF. The project has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users. The project has also considered the high ecological value of the marine habitats surrounding Shek Kwu Chau, the project would avoid the addition of pollution loading into the marine environment via adoption of zero discharge scheme during the operation phase. No significant adverse impact on the marine environment is expected to arise. Other mitigation measures are also proposed to minimise potential impacts to acceptable levels.</p> <p>(4 - 5) The IWMF will adopt an aesthetic design with a view to enhance the aesthetic quality and to blend in the proposed works into the natural surroundings, at the same time reducing the visual mass of the structure. This will be achieved by rooftop and vertical greening along the building façade, use of natural materials</p>	<p>EIA: S7b.4.5</p> <p>EIA S2.4.1.2</p> <p>EIA: S7b.8</p> <p>EIA Table 10b.15</p>

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	<p>Tsang Tsui option not be considered due to the political decision, EPD should re-consider another option which is situated in less ecologically sensitive area.</p> <p>(7) Only two options are provided in the EIA, but these two options are both accepted. In this case, we would like to know whether the site selection part can be dismissed under the EIAO TM as there are, in fact, no actual sites for the public to comment and consider.</p> <p>(8) EPD has explained that the SKC option is justified due to a shorter distance to key rubbish reception points in HK. This justification is rather weak and factually unsound. In fact, it is just only one part of the traveling footprint. Ashes from the incinerator have to be shipped back to the existing landfills. Therefore, it is economically unsound to split the waste treatment system into two different unconnected areas. EPD should compare the overall traveling footprint of the whole waste treatment process under the incinerator scheme.</p> <p>(9) There is no impact assessment of Bogadek's Burrowing Lizard in the EIA. Although there is no record during the survey, the EIA report should clarify whether this species will be driven to extinction due to the proposed incinerator. Also, there is no monitoring, mitigation or compensation plan in case the Bogadek's Burrowing Lizard is affected by the incinerator during construction and operation phases.</p> <p>(10) Introduction of rats to island is known to be an ecological problem. A classic example is the extinction of Dodo in Mauritius due to rat introduction. I am concerned that the Bogadek's Burrowing Lizard will extinct in the world due to the frequent disturbance from rats introduced during the incinerator associated marine traffic, especially the garbage vessels. At the SKC option, a list of pest management measures is proposed. These measures are rather ineffective to completely tackle the pest problem. As rats are known to be good swimmers, it is suggested that the incinerator island should be much further away from SKC. EPD should revise the SKC option. The current option of the artificial island is extremely close to SKC, which will facilitate the landing of rats on SKC from the artificial island.</p> <p>(11) The EIA fails to assess impacts on the nesting of a pair of White-bellied Sea Eagles at SKC. The EIA does not mention whether waters in the proposed artificial island at SKC is currently the feeding habitat of nesting White-bellied Sea Eagle. The artificial island may result in loss of feeding habitats of this bird.</p> <p>(12) As the current EIA is Phase 1, please clarify what is Phase 2 or 3 if there is such subsequent work.</p> <p>(13) From the public pt of view, the role of EPD in this EIA approval under the EIAO is extremely puzzled. EPD on one hand is the project proponent; on the other hand, it is also the decision maker under the EIAO. Please clarify the role of relevant sections in EPD in the approval process under the EIAO. Also, I would like to know how ACE and the EIA-subcom will involve in the process.</p> <p>Thank you for your attention.</p>	<p>with recessive colour, provision of sky gardens between the stacks, provision of observation deck to diminish the feeling of chimney, etc. To maximize visual compatibility between the existing natural shoreline of SKC and the IWMF site, natural rocks with similar colour as the SKC rocky shore will be used for the construction of breakwater and artificial shoreline to improve the visual quality.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>(6) The EIA report indicate that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>(7) & (8) The objective of this EIA study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project at both sites. The EIA examined the overall acceptability of any adverse environmental consequences that is to arise as a result of the Project and the associated activities of the Project, the conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences, and the acceptability of residual impacts after the proposed mitigation measures are implemented. With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.</p> <p>(9) The proposed project would be located off the Shek Kwu Chau island, and Bogadek's Burrowing Lizard is known to live in soil, or under sheltered microhabitats such as rotting wood lying on the forest floor; no impact was therefore predicted to arise due to the propose construction of IWMF on an artificial island off Shek Kwu Chau, and no monitoring, mitigation or compensation plan were considered required.</p> <p>(10) The concern on pest has been considered, where measures for pest control has been proposed in the EIA report (for details please refer to 'Section 6b Waste Management Implications'):</p> <ul style="list-style-type: none"> • Transportation of wastes in enclosed containers 	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES:S5</p> <p>ES:S1.2.1.2, S5.1.1.2</p> <p>EIA: S7b.1.1.2, Table 7b.63</p> <p>EIA S7b.4.2.1, 7b.8.3.48</p>

No.	Comments	Proponent's Response	EIA Report Ref.
		<ul style="list-style-type: none"> • Waste storage area should be well maintained and cleaned • Waste should only be disposed of at designated areas • Timely removal of the newly arrived waste • Removal of items that are capable of retaining water • Rapid clean up of any waste spillages • Maintenance of a tidy and clean site environment • Regular application of pest control • Education of staff the importance of site cleanliness <p>It should be noted that Shek Kwu Chau is currently occupied by an operating rehabilitation centre for drug abusers. The centre has been operating at Shek Kwu Chau since 1961. Currently vessels for staff, visitors and resource go in and out of the island on daily basis. Staff and users of the centre live their daily life on Shek Kwu Chau, producing garbage and waste.</p> <p>The proposed mitigation measures for pest control are considered effective in avoiding additional pest problem at Shek Kwu Chau.</p> <p>(11) The report presented that although one adult WBSE was recorded among shrubland habitat near rocky shore within the study area during site observation, nevertheless, no foraging or breeding behaviour was noted within the study area during site observation.</p> <p>The EIA report has considered that increase in disturbance may cause the avoidance of works area and decrease in feeding opportunities, hence affecting the health and may be breeding success of avifauna which utilises the nearby areas. Considering the high mobility of avifauna, they can utilise the similar habitat in the vicinity; the temporary nature of construction works is therefore not expected to have significant adverse impact on avifauna in terms of habitat utilisation.</p> <p>(12) Hong Kong currently disposes of about 9000 tpd MSW to the landfills. Even with further enhanced waste reduction and recycling as well as the development of OWTF, it is anticipated that there would be some 8000 tpd of MSW requiring treatment and disposal in the future, much more than the capacity of 3000 tpd for the first IWMF. In order to cater for the long-term needs of Hong Kong, the Government will take account of progress and effectiveness in waste reduction measures as well as other possible options on waste treatment to consider plans for further development of IWMF.</p> <p>(13) The EIA report was processed in accordance with the procedures and requirements under the EIA Ordinance.</p>	<p>EIA: 7b.4.3.8, 7b.6.2.87</p> <p>Not under the jurisdiction of EIAO</p> <p>ES:S1</p>
PC178	<p>Joint Statement by xxx</p> <p>In February 2011, the Hong Kong Government launched a one-month public consultation regarding the choice of sites for a waste incinerator. Two options were given: ash lagoons at Tsang Tsui, Tuen Mun; and an artificial island to be constructed off southwest Shek Kwu Chau. The latter was the government's preferred option.</p> <p>2011年2月，香港政府推出了為期一個月的公眾諮詢有關興建焚化爐的選址。兩個選址：屯門曾咀煤灰湖或石鼓洲建一個人工島。政府傾向後者。</p>	<p>To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p>To provide better service to the community, the IWMF will include facilities for environmental education and leisure tourism. The objectives of environmental education centre are to promote environmental awareness to the society and attract tourists. This would be in line with the strategy of promoting environmental awareness and leisure tourism of the nearby area as mentioned out in the South West New</p>	<p>EIA S2.4.1.2</p>

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	<p>Though there is a pressing need to greatly reduce the volume of waste being sent to Hong Kong's landfills, the choice of Shek Kwu Chau does not appear justified on any scientific basis, and is environmentally unacceptable. Its selection directly contradicts the government's Southwest New Territories Development Strategy Review, which recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism: Shek Kwu Chau was designated as a conservation area.</p> <p>雖然減少廢物被送往堆填區有迫切性需要，但石鼓洲的選址是沒有任何合理的科學依據，更對環保影響是不能接受的。政府的選址完全違背了它的新界西南發展策略：建議保護大嶼山南部及附近島嶼的自然保育區及發展休閒旅遊。石鼓洲被指定為保護區之一。</p> <p>Though the environmental impact assessment strives to make Shek Kwu Chau appear a suitable site for an incinerator, various factors show this is not the case. Among these:</p> <p>雖然環境影響評估總結出石鼓洲為一個非常合適興建焚化爐的地點，但各種因素顯示並非如此。其中包括：</p> <p>Cost Constructing an island for an incinerator – which will be a substantial industrial facility – will be expensive. Infrastructure is currently lacking.</p> <p>成本 為焚化爐構建一個人工島將是一個重大的昂貴工業設施。基礎設施是當前缺乏的。</p> <p>Timing As an island must be built, the incinerator cannot become operational until 2018 at the earliest. This may well be after existing landfills are full.</p> <p>時機 如要建做一個人工島，焚化爐最早要到 2018 年才能運作使用。這時堆填區已滿了。</p> <p>Potential air pollution Available information shows that pollution from the incinerator will not only affect the immediate vicinity, including Cheung Chau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon. Given the incinerator will be built on an artificial island, it may not be possible to build a first-rate incinerator, with full waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements.</p> <p>潛在空氣污染問題 有資料表明，從焚燒爐的污染不單只會影響附近，包括長洲，而且還將會擴散到東部和北大嶼山，甚至香港其他地區包括九龍。鑑於焚化爐將建立在一个人工島上，它不可能成爲一個先進一流的能完全將廢物分類和除濕的焚化爐。因爲它有先天的物理條件限制。</p>	<p>Territories (SWNT) Development Strategy Review.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented. The executive summary and the EIA report indicate that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p><u>Potential air pollution</u></p> <p>The IWMF will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF. Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQO parameters at all concerned air sensitive receivers with the corresponding AQOs.</p> <p><u>Terrestrial biodiversity</u></p> <p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p><u>Marine biodiversity</u></p> <p>The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES S4.3.1.3 to S4.3.1.4</p> <p>EIA: S7b.1.1.2,S 7b.8</p> <p>EIA: S7b.8</p>

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	<p>Terrestrial biodiversity Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – are unique to the island. Shek Kwu Chau is one of only three islands in the world that are home to Bogadek's legless lizard. The butterfly diversity is amazing, with around two-thirds of Hong Kong's species recorded. This is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>陸地生物多樣性 石鼓洲具有顯著的生物多樣性。蛇類如亞物種- Hollinrake's racer 和玉葡萄樹蛇 Jade Vine Snake - 是該島獨有的。石鼓洲也是世界三個島嶼其中之一- Bogadek 無腿蜥蜴的家園。蝴蝶多樣性是驚人的，大約有三分之二的香港物種在那處可找到。它也是香港土生土長白腹海雕的繁殖地。</p> <p>Marine biodiversity Marine biodiversity is high, reflected in the waters of southwest Shek Kwu Chau being the best fishing ground near Cheung Chau, and 15 species of hard coral being found. This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. Reclamation of around 16 hectares plus breakwaters and berthing area will cause significant and unacceptable destruction and damage to the marine environment.</p> <p>海洋生物多樣性 石鼓洲的西南水域長洲附近，發現到 15 種硬珊瑚。這反映出高海洋生物多樣性。它也是香港三個主要瀕臨絕種海洋哺乳動物黑江豚生活的水域之一。16 公頃填海加防波堤和停泊區將造成嚴重破壞和損害海洋環境。</p> <p>Scenic value As acknowledged in the Southwest New Territories Development Strategy, Shek Kwu Chau is in a scenic area of islands and coastline, including south Lantau, the Soko Islands, and Cheung Chau. The EIA rejected potential sites in Sai Kung islands and on Lamma in part because of scenic value; Shek Kwu Chau should likewise be rejected on this basis.</p> <p>景觀價值 在新界西南發展策略藍圖中，包括南大嶼山，索罟群島，長洲、石鼓洲都是風景名勝區和海岸線優美的島嶼。環境影響評估駁回在西貢島嶼和南丫島選址的部分原因就是景觀價值；那麼石鼓洲也應在此基礎上予以駁回。</p> <p>Tourism value Cheung Chau and south Lantau are highly important for tourism, serving as major leisure areas for Hong Kong people, and destinations for overseas visitors. Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines.</p> <p>旅遊價值 長洲及大嶼山南部是香港市民和海外遊客主要旅遊和休閒區。活動包括遠足，游泳，吃海鮮，欣賞美景。石鼓洲也是一個重要的景觀區，這裡的水域已經是人們和遊艇常到的休閒樂園。</p>	<p>including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p>Scenic value The artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. For example, Cheung Chau is located to the northeast of Shek Kwu Chau, the buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. Viewing from these areas, IWMF will be partially blocked by the Shek Kwu Chau. Besides, with the introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, this can fuse IWMF into the surrounding natural environment.</p> <p>The islands in Sai Kung were not shortlisted for IWMF development in the site search study. It is because the islands and their adjoining waters are of existing and planned uses that are not compatible with the IWMF development. The Sai Kung islands and waters are popular locations for recreation activities as well as areas planned for landscape protection and conservation. For example the Kiu Tsui beach and Hap Mun Bay beach at the Kiu Tsui Island are gazetted bathing beaches. The northern Kau Sai Chau is a public golf course. The southern parts of Kau Sai Chau and Jin Island have been proposed as Landscape Protection Areas and are to be used for seabirds/ other wildlife conservation. In addition, the Bluff Island and the Basalt Island are gazetted sites of Special Scientific Interest. Fish culture zones are located at various Sai Kung islands and the adjoining waters, including Leung Shuen Wan, Tai Tau Chau, Kau Sai and Kai Lung Wan. The islands are also viewed by the nearby Sai Kung East Country Park, Sai Kung West Country Park, Kiu Tsui Country Park and Clear Water Bay Country Park.</p> <p>Shek Kwu Chau (SKC) and its adjoining water is not a popular location for recreation. It is not a site of Special Scientific Interest nor fish culture. While Cheung Chau is a popular recreational location, it is considerably distanced (more than 3.5 km) from the proposed IWMF site at the artificial island near SKC. The IWMF operation at this artificial island site would not cause any adverse impact on the recreational activities in Cheung Chau.</p> <p>Ex-Lamma Quarry was not selected for the development of the IWMF because the development of the IWMF would not be compatible with the future planned development for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p> <p>Tourism value The IWMF under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWMF may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p>	<p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p> <p>ES:3.1.3.5</p> <p>Not under the jurisdiction of EIAO</p>

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	<p>Further Discussions Needed</p> <p>The consultation has been rushed, even though the government's preferred option cannot become operational until 2018 at the earliest. Further public discussions are required.</p> <p>An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p> <p>需要進一步討論</p> <p>即使政府的首選選址不能 2018 年前投入使用，諮詢期只有一個月是在太急，進一步的公眾討論是必需的。</p> <p>政府也必需在石鼓洲以外地方，找合適建焚化爐的方案。</p>		
PC179	<p>The Hong Kong Government has given two options for the planned waste incinerator: ash lagoons at Tsang Tsui, Tuen Mun; and an artificial island to be constructed off southwest Shek Kwu Chau. We are told the latter is the preferred choice, and a public consultation began last month.</p> <p>This public consultation is too short: the issues merit further discussions by Hong Kong people. Yes, landfills will fill up soon, yet the government's policies have contributed to this, making Hong Kong one of the world's most throwaway societies. Any sense of urgency must be countered by the fact the "preferred" option cannot become operational until 2018 at the earliest.</p> <p>The choice of Shek Kwu Chau is not appear justified on any scientific basis, and is environmentally unacceptable.</p> <p>Shek Kwu Chau Selection Contradicts Government Plans</p> <p>The selection of Shek Kwu Chau (really, waters to the southwest, where an artificial island will be constructed) is in direct contradiction to the intent of the government's Southwest New Territories Development Strategy Review. This recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism. Shek Kwu Chau was designated as a potential conservation area.</p> <p>Badly Biased Environmental Impact Assessment</p> <p>Reading the environmental impact assessment, it is clearly biased towards making Shek Kwu Chau appear environmentally acceptable as a site for the incinerator. Note, for instance, different approaches taken to "assessing" Sai Kung islands and Lamma sites, and Shek Kwu Chau: with the former, factors are covered that reject these sites; yet though similar factors can apply to Shek Kwu Chau, they are barely mentioned, and the EIA highlights supposed factors in favour of Shek Kwu Chau.</p> <p>This would appear to result from an overarching political imperative, and the EIA consultants seeking</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p><u>Shek Kwu Chau Selection</u></p> <p>During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chau as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p><u>Potential air pollution</u></p> <p>Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the target emission limits that is the same as or more stringent than those stipulated in Hong Kong and the European Commission for waste incineration.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project taking into account the</p>	<p>EIA S2.4.1.2</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES S4.3.1.3 to S4.3.1.4</p>

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	<p>to do their paymasters' bidding.</p> <p>Among factors that make Shek Kwu Chau unacceptable:</p> <p>Location An artificial island with no infrastructure does not seem a sensible choice for locating a complicated, substantial industrial complex. Plus, Shek Kwu Chau is exposed to the elements, including tropical storms and typhoons.</p> <p>Cost Even before building the incinerator, massive funding will be required for constructing the artificial island together with necessary infrastructure.</p> <p>Timing Building the island will take time, additional to the time needed for constructing the actual incinerator. The incinerator cannot become operational until 2018 at the earliest. Hence, it may not be available until after existing landfills are full. And, there may be pressure to rush the project, reducing efficiency and increasing pollution once it does begin operating.</p> <p>Potential air pollution Especially given the location, it is unlikely to incinerator will operate at anything approaching the efficiency possible with waste incinerators, which are complex, with potential for releasing a range of toxic chemicals that have been proven to cause cancer and other illnesses. For instance, dioxins are readily created by incineration, particularly if there is inadequate waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements.</p> <p>Pollutants will not only affect the immediate vicinity, including Cheung Chau and south Lantau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon and Tuen Mun.</p> <p>Terrestrial biodiversity Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – have been found nowhere else on earth. Shek Kwu Chau is one of only three islands in the world, all near Lantau, that are home to Bogadek's legless lizard. Around two-thirds of Hong Kong's species have been recorded: an astonishing diversity for such a tiny island. Plus, Shek Kwu Chau is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>Marine biodiversity Marine biodiversity is high around Shek Kwu Chau. The waters to the southwest of the island are the best fishing ground near Cheung Chau. Some 15 species of hard coral have been found.</p> <p>This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. <i>This fact alone should make Shek Kwu Chau an unacceptable location for the incinerator.</i></p> <p>Reclaiming around 16 hectares of land, plus breakwaters and berthing area will cause significant,</p>	<p>emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p>Location and Cost Developing the first modern IWMF on the artificial island near SKC will require a relatively longer construction period and a higher capital cost. On balance, it is considered important to achieve a more balanced distribution of waste facilities and more efficient interface with the refuse transfer station network. It would further minimize the impact on air quality, and reduce greenhouse gas emissions. The reclamation works will absorb a couple of million tonnes of construction waste, which would otherwise occupy space at the fill banks.</p> <p>Terrestrial biodiversity The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p>Marine biodiversity The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p>Scenic value The artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. For example, Cheung Chau is located to the northeast of Shek Kwu Chau, the buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. Viewing from these areas, IWMF will be partially blocked by the Shek Kwu Chau. Besides, with the introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, this can fuse IWMF into the surrounding natural environment.</p> <p>Sai Kung was not shortlisted for further site evaluation in the site search study. In addition to the facts that Sai Kung and the nearby waters are popular locations for various recreational activities and some areas have been proposed as Landscape Protection Areas, Sai Kung is located at the upstream location of the prevailing wind direction. Hence, Sai Kung is not a favorable place for the development of the IWMF.</p> <p>Ex-Lamma Quarry was not selected for the development of the IWMF because the development of the IWMF would not be compatible with the future planned development for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p>	<p>EIA: S7b.1.1.2,S 7b.8</p> <p>EIA: S7b.8</p> <p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p> <p>ES:3.1.3.4</p>

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	<p>irreparable and unacceptable destruction and damage to the marine environment.</p> <p>Scenic value As the Southwest New Territories Development Strategy acknowledges, Shek Kwu Chau is located in an area of islands and coastline with great scenic value, including south Lantau, the Soko Islands, and Cheung Chau.</p> <p>The EIA cited scenic value as an important reason for rejecting potential sites in Sai Kung islands and on Lamma. Shek Kwu Chau should also be rejected because of the landscape value.</p> <p>Tourism value Tourism – particularly involving people from urban areas in Hong Kong, as well as overseas visitors – is very important for nearby Cheung Chau and south Lantau. Indeed, for Hong Kong city people visits to these areas give them a chance to escape the “concrete jungle”, and enjoy greenery, scenery, and fresher air.</p> <p>Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines. This situation is similar to the Sai Kung islands – and yet the EIA used leisure activities as a reason for rejecting the Sai Kung islands as a potential site, but not Shek Kwu Chau.</p> <p>There is potential for increased tourism to waters around Shek Kwu Chau.</p> <p>However, it is absurd to suggest (as some proponents have done) that an incinerator island by Shek Kwu Chau No one visiting Cheung Chau or south Lantau is intent on seeing an industrial complex with giant chimney belching fumes.</p> <p><i>Better Alternatives</i></p> <p>As the EIA makes clear, the site at Tsang Tsui ash lagoons is far better than Shek Kwu Chau on environmental grounds. If an incinerator were to be built here, there would be far less constraints on land area than at Shek Kwu Chau, and it would be possible to also use money “saved” (by not constructing an island) to maximise incinerator efficiency – such as using burning at temperatures of 1350C and above, rather than 850C as currently planned.</p> <p>Also, Green Island Cement has an alternative proposal, which would appear to have several benefits: far lower cost – partly as industrial land with infrastructure is already available; tried and proven in Hong Kong; higher capacity; trial operations yielded waste emissions substantially lower than government standards – for instance, dioxin levels 99 percent lower than the BMP standard.</p> <p>The government should also consider transforming existing Refuse Transfer Stations into Waste Processing Centres (including incinerators). The merits of this alternative is that i) we do not add any dirty facility to any district; ii) we are proposing improving the RTSs; iii) we avoid double-handling of wastes; iv) each district (LegCo district) solves their own problems and bears the same responsibility; v) if the incinerator can generate electricity, it can be provided free to all government facilities in the district directly.</p>	<p><u>Tourism value</u> The IWmf under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWmf may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p> <p><u>Alternative Scale</u> As recommended by the Advisory Committee on the Environment (ACE), IWmf would be implemented in phases. When deciding the scale of the Phase 1 IWmf, the Government has considered the factor of economies of scale and made references to the experiences of other densely-populated cities with demographic and geographic similarities as Hong Kong. It is concluded that the first IWmf should have a daily handling capacity of about 3,000 tonnes.</p> <p><u>Incineration Technology</u> The temperature of 1350°C is actually the temperature at which syngas produced from gasification technology is burned to melt fly ash, not the temperature at which waste is burned. A technology review in 2009 showed that the operation cost of the ash melting is very high and therefore not widely used internationally. The gasification technology, as of 2008, has only been used in about 90 worldwide gasification facilities to handle municipal solid waste, much less than the number of moving grate incineration facilities in the world (with more than 900 moving grate incineration facilities). In addition, the gasification technology is not suitable for dealing with different size and quality of mixed municipal solid waste, and it is often necessary to pre-shred the waste into small pieces. At present, this technology is only used in relatively small-scale municipal solid waste (i.e. less than 530 tonnes per day). The technology review also found that some of the major supplier of gasification technology has recently withdrawn from the international market. In view of its limited track record in dealing with large scale municipal solid waste treatment, its lack of capacity in handling a mix of different sizes and types of waste, and the fact that the number of suppliers is limited (less than five major international suppliers), the technology review considered that it is not suitable for gasification technology to be used in the proposed integrated waste management facilities development plan.</p> <p><u>Eco-Co-Combustion System</u> In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in Hong Kong, the IWmf should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWmf in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries</p>	<p>Not under the jurisdiction of EIAO</p>

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	<p>Plus, should proponents of the Shek Kwu Chau site really believe it will benefit tourism: build it at Disneyland. Here, there is land available, transport will be easier, and Disneyland needs more attractions. [No, this is not a serious proposal; yet it helps highlight the absurd nature of plans for "Incinerator Island" by Shek Kwu Chau.]</p> <p>Woefully Inadequate Public Consultation</p> <p>To date, public consultation has been woefully inadequate. Even the information on the EPD website has been barely updated. A meeting on Cheung Chau involved EPD officials and AECOM consultants talking, hearing a multitude of complaints and questions, but giving no substantial answers: nor have answers been conveyed to participants.</p> <p>The government has produced propaganda videos, only in Chinese – even though English is an official language in Hong Kong, and this issue affects everyone in Hong Kong. At least one shows a pretty girl happily talking about the situation in Japan, in a manner recalling a beauty products company promotion.</p> <p>Further discussions, and genuine public consultations are needed. An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p>	<p>and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p> <p><u>Local Consultation</u></p> <p>The Government has kept in touch with the respective District Councils (DCs) and local communities so as to enable them to have a better understanding of the modern incineration technology for waste treatment. For example, the Island DC was briefed on the latest progress of developing the IWMF in Hong Kong and the outcome of the site selection in March 2008; the meeting of the Cheung Chau Rural Committee (CCRC) and the public forum organized by CCRC were arranged in April and May 2008 respectively to listen to public views. In 2009, a delegation comprising representatives from the EPD and 26 members of the Tuen Mun and Islands DCs conducted a study visit to Tokyo and Osaka to inspect the use of advanced incineration technologies for waste and sludge treatment in Japan. The Government also briefed the Island DC on 15.11.2010, 21.2.2011 and 21.3.2011 as well as CCRC and residents on 8.3.2011 and 10.3.2011 on the latest progress of developing the IWMF in Hong Kong. From February to April 2011, more than 25 meetings have been arranged, meeting more than 1000 people and about 40 groups/organizations, to further explain the project and the responses to the questions. The Government will continue discuss with the professional institutes, environmental groups, local concern groups, business and academic to gain understanding and to respond to comments.</p>	
PC180	Note: Comment is identical to PC179		
PC181	<p>I am writing to voice our severe concerns related to proposal to place on incinerator on Shek Kwu Chau and of the rushed EIA and public consultation that has been undertaken ..</p> <p>The waters to the southwest of the island are the best fishing ground near Cheung Chau. Given the current efforts to ban trawling in Hong Kong waters this proposal to reclaim and lose further fishing grounds is of real concern at this time. Some fisheries groups are stating that the ban on trawling and other fisheries management efforts are a clear excuse to avoid paying future compensation for loss of fishing ground.</p> <p>It is know that there are 15 species of hard coral that have been found at this location. This is also one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. <i>This fact alone should make Shek Kwu Chau an unacceptable location for the incinerator.</i></p> <p>Reclaiming around 16 hectares of land, plus breakwaters and berthing area will cause significant, irreparable and unacceptable destruction and damage to the marine environment.</p> <p>Whilst I understand the need for a new incinerator I implore the government to reconsider the placement of the incinerator at Shek Kwu Chau. I understand that there are other options that will be less environmentally damaging and a full, fair, like for like comparison and assessment is needed between all options.</p>	<p>With the implementation of the proposed mitigation measures including designation of a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, deployment of artificial reef and release of fish fry for the loss of important habitat for Finless Porpoise and fisheries resources, adverse impacts on Finless Porpoise, fishing spawning and nursery ground would be mitigated to acceptable level.</p> <p>The impact to the coral could be effectively mitigated through water quality control measures such as deploy silt curtain system control of dredging and filling rates etc. With the implementation of the proposed measures, unacceptable impacts on corals are not anticipated.</p> <p>To conclude, adverse ecological impacts due to the construction and operation of the proposed Project would be acceptable.</p>	ES: S4.3.5

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PC182	Note: Comment is identical to PC179		
PC183	<p>We are writing to express my opposition to the proposal to site a waste incinerator at this location.</p> <p>The use of any greenfield site for waste incineration, let alone one located on a relatively unspoiled island, is at best debatable, and in this case indefensible.</p> <p>We deplore the failure to tackle the problem of waste production, and the seeming enthusiasm with which we rubbish our few remaining places of natural beauty.</p> <p>We urge reconsideration of this proposal.</p>	<p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ul style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p>	<p>ES:S1</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p>
PC184	Note: Comment is identical to PC178		
PC185	<p>Shek Kwu Chau is an amazing little bit of the Earth. Steep-to and rugged, it has been spared ecologically devastating development and retains a rich flora and fauna. More than two-thirds of all the butterflies known from the entire Hong Kong Territory occur there. The bird life is rich and varied. My specialty is amphibians and reptiles and we have found two species of frogs and 22 species of reptiles on Shek Kwu Chau (see Memoirs of the Hong Kong Natural History Society, volume 25, 2002): Amazing diversity for an island of only 120 hectares.</p> <p>Among Shek Kwu Chau's rich fauna are two kinds of elegant, harmless snakes as yet found no where else on Earth: a jade-green vine snake and a slender, striped racer (details in the Memoir cited above). There is also the best-known population of a weird, blind, legless, burrowing lizard named for Fr.</p>	<p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p>	<p>EIA: S7b.6.4.1</p>

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	<p>Anthony Bogadek of St. Louis School, Hong Kong; this species occurs on only two other small Hong Kong islands (details also in the Memoir cited above).</p> <p>Shek Kwu Chau is a wonderful place and needs to be carefully preserved as a rich scientific treasure trove.</p>		
PC186	<p><u>環境局</u>在 2011 年 2 月 17 日，向傳媒發佈有關在長洲毗鄰的「石鼓洲選址」興建垃圾焚化爐。因事前未有諮詢和舒緩長洲居民情緒，因而產生的強大反響，實屬必然。凡此種種，特區政府都是難辭其咎。</p> <p>2008 年<u>環境局</u>決定，以現代化設備燃燒本港產生的固體垃圾，代替堆填方式。最後選擇<u>屯門曾咀</u>或<u>石鼓洲</u>興建焚化爐，並以「屯門曾咀選址」為優先選擇，因為建築成本和交通都比較便宜。當時長洲居民都不敢怠慢，紛紛陳以利害，反對在<u>石鼓洲</u>興建焚化爐。<u>環保署</u>助理署長亦承諾，等候「環境調查評估報告」完成後再作諮詢，之後大家都持樂觀態度。但在上月中，<u>環境局</u>在未有深入諮詢下，便向傳媒發佈在「<u>石鼓洲選址</u>」興建焚化爐。事情的發展，對廣大的長洲居民確是晴天霹靂，有被欺騙的感覺。本區的議員更無辜地當上箭靶，備受埋怨和批評。</p> <p>我想問一問<u>環境局</u>局長，您們的決定影響到 3 萬人的生活和健康，點解不作深入諮詢？您們做決定的時候是否已將良心埋沒，不理市民的感受？</p> <p>如果在「<u>石鼓洲選址</u>」興建焚化爐，將要開發大約 16 公頃人工島。開山填海，將徹底破壞該處魚場，未來數年都不會有魚種寄居。在近年來石油價格不斷上升，魚獲卻日漸不足的情況下，工程無疑對處於水深火熱的長洲漁民，給與致命一擊，苦不堪言。</p> <p>在交通運輸方面，路線重疊於本港最繁忙的航道上。每日來往港、澳和珠三角周邊城市的快速船；長洲前往香港和離島間的渡輪；運送貨物和建築材料的內河船；還有數百艘的漁船和小艇，使用同一航道，穿梭往來。如果出現意外廢物下沉海底，將令周邊的海岸受嚴重污染。</p> <p>在春夏間<u>香港</u>受颱風頻繁吹襲，如果因颱風而需要停航數天，垃圾如何處理？</p> <p>在比較上，「<u>屯門曾咀選址</u>」卻不存在上述困難。還有不用填海；節省建築運輸成本，更可提早完成工程，為此，整項工程可節省數以億元。局長為何取難舍易，放棄「<u>曾咀選址</u>」而選擇<u>石鼓洲</u>，是否基於長洲選票少，而作出一個污穢的政治決定？</p> <p>「<u>石鼓洲選址</u>」計劃附設一個海水淡化設備、污水處理設備和瞭望塔。七十年代的海水淡化廠，令市民記憶猶新，雖然停用了還要每年付出幾十萬元保養費。「選址」與長洲只有 3 公里距離，為什麼不利用長洲現有的設施？是否為求達到個人的好大喜功，而甘願浪費公帑？</p> <p><u>香港</u>發展的巨輪不斷前進，美麗可愛的綠洲已越來越少，「長洲人」在這個小島上，安居樂業已經數百年。現今，局長的決定令我們徹夜難眠，憂心著科學一旦被發現有問題；憂心著清新空氣和健康生活；憂心著下一代。</p>	<p><u>地區諮詢</u></p> <p>政府一直就擬建的綜合廢物管理設施與相關的區議會及地區人士保持聯絡，希望能令地區人士更了解現代廢物焚化處理方法，如在 2008 年 3 月，曾向離島區議會介紹在本港發展綜合廢物管理設施的最新進展和選址研究的結果，並分別在 2008 年 4 月及 5 月出席長洲鄉事委員會及其舉辦的居民大會，聽取市民的意見。在 2009 年，聯同屯門和離島區共 26 位議員到東京和大阪，實地考察日本當地如何利用先進的焚化技術來處理當地的廢物及污泥。亦於 2010 年 11 月 15 日、2011 年 2 月 21 日、3 月 21 日向離島區議會和 2011 年 3 月 8 日、2011 年 3 月 10 日向長洲鄉事委員會及居民介紹在本港發展綜合廢物管理設施的最新進展，以及回應與會者的疑問和關注。</p> <p>綜合廢物管理設施第一期的環評報告是根據《環境影響評估條例》的要求公開諮詢公眾意見，諮詢為期一個月，與其他由政府或私人倡議的發展項目相同。公眾可在期間提交意見，供環境評估科及環境諮詢委員會考慮，環境諮詢委員會亦會審議有關的環評報告。</p> <p><u>都市固體廢物運輸</u></p> <p>在水路妥善運送都市固體廢物方面，政府已經有約二十年豐富的經驗，亦已制定了相關應變措施應付遇上颱風時的惡劣天氣，例如預留足夠空間把固體廢物暫存在廢物轉運站內等。未來，所有運往綜合廢物管理設施的都市固體廢物，都會載於密封貨櫃內，由專用貨櫃船從現有的港島及九龍廢物轉運站送抵人工島選址，確保運送途中不會有污水流入海中和不會引起氣味滋擾。</p> <p><u>海水淡化</u></p> <p>擬建的綜合廢物管理設施將會設有海水淡化設備。由於它只為綜合設施供應淡水，遠比香港七十年代用來供應市民用水的海水淡化廠的規模為小。此外，它將會使用薄膜分離法，跟七十年代採用傳統的沸騰方法有很大分別。將來綜合廢物管理設施的海水淡化設備只佔用很少的空間，營運開支的需求亦不大，無需建造海底水管提供淡水與綜合設施。</p>	

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	<p>作出這樣顛倒是非的決定，令人十分失望，貴局枉稱「環境局」，應稱作「環境破壞局」。</p> <p>親愛的離島區居民，所謂唇齒相依，第一個焚化爐在長洲附近興建，我想，第二個亦可能在離島區興建，我請大家主持公道，一起反對這個計劃。</p> <p>Joint Statement by Concern Groups 關注團體的聯合聲明</p> <p>In February 2011, the Hong Kong Government launched a one-month public consultation regarding the choice of sites for a waste incinerator. Two options were given: ash lagoons at Tsang Tsui, Tuen Mun; and an artificial island to be constructed off southwest Shek Kwu Chau. The latter was the government's preferred option.</p> <p>2011年2月，香港政府推出了為期一個月的公眾諮詢有關興建焚化爐的選址。兩個選址：屯門會咀煤灰湖或石鼓洲建一個人工島。政府傾向後者。</p> <p>Though there is a pressing need to greatly reduce the volume of waste being sent to Hong Kong's landfills, the choice of Shek Kwu Chau does not appear justified on any scientific basis, and is environmentally unacceptable. Its selection directly contradicts the government's Southwest New Territories Development Strategy Review, which recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism: Shek Kwu Chau was designated as a conservation area.</p> <p>雖然減少廢物被送往堆填區有迫切性需要，但石鼓洲的選址是沒有任何合理的科學依據，更對環保影響是不能接受的。政府的選址完全違背了它的新界西南發展策略：建議保護大嶼山南部及附近島嶼的自然保育區及發展休閒旅遊。石鼓洲被指定為保護區之一。</p> <p>Though the environmental impact assessment strives to make Shek Kwu Chau appear a suitable site for an incinerator, various factors show this is not the case. Among these:</p> <p>雖然環境影響評估總結出石鼓洲為一個非常合適興建焚化爐的地點，但各種因素顯示並非如此。其中包括：</p> <p>Cost Constructing an island for an incinerator – which will be a substantial industrial facility – will be expensive. Infrastructure is currently lacking.</p> <p>成本 為焚化爐構建一個人工島將是一個重大的昂貴工業設施。基礎設施是當前缺乏的。</p> <p>Timing As an island must be built, the incinerator cannot become operational until 2018 at the earliest. This may well be after existing landfills are full.</p>	<p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity of Shek Kwu Chau.</p> <p>To provide better service to the community, the IWMF will include facilities for environmental education and leisure tourism. The objectives of environmental education centre are to promote environmental awareness to the society and attract tourists. This would be in line with the strategy of promoting environmental awareness and leisure tourism of the nearby area as mentioned out in the South West New Territories (SWNT) Development Strategy Review.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p><u>Potential air pollution</u></p> <p>The IWMF will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF. Cumulative air quality impact assessment has been undertaken for the Project taking into account</p>	<p>EIA S2.4.1.2</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES S4.3.1.3 to S4.3.1.4</p>

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	<p>時機 如要建做一個人工島，焚化爐最早到要 2018 年才能運作使用。這時堆填區已滿了。</p> <p>Potential air pollution Available information shows that pollution from the incinerator will not only affect the immediate vicinity, including Cheung Chau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon. Given the incinerator will be built on an artificial island, it may not be possible to build a first-rate incinerator, with full waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements.</p> <p>潛在空氣污染問題 有資料表明，從焚燒爐的污染不單只會影響附近，包括長洲，而且還將會擴散到東部和北大嶼山，甚至香港其他地區包括九龍。鑑於焚化爐將建立在一個人工島上，它不可能成爲一個先進一流的能完全將廢物分類和除濕的焚化爐。因爲它有先天的物理條件限制。</p> <p>Terrestrial biodiversity Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – are unique to the island. Shek Kwu Chau is one of only three islands in the world that are home to Bogadek's legless lizard. The butterfly diversity is amazing, with around two-thirds of Hong Kong's species recorded. This is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>陸地生物多樣性 石鼓洲具有顯著的生物多樣性。蛇類如亞物種- Hollinrake's racer 和玉葡萄樹蛇 Jade Vine Snake - 是該島獨有的。石鼓洲也是世界三個島嶼其中之一 Bogadek 無腿蜥蜴的家園。蝴蝶多樣性是驚人的，大約有三分之二的香港物種在那處可找到。它也是香港土生土長白腹海雕的繁殖地。</p> <p>Marine biodiversity Marine biodiversity is high, reflected in the waters of southwest Shek Kwu Chau being the best fishing ground near Cheung Chau, and 15 species of hard coral being found. This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. Reclamation of around 16 hectares plus breakwaters and berthing area will cause significant and unacceptable destruction and damage to the marine environment.</p> <p>海洋生物多樣性 石鼓洲的西南水域長洲附近，發現到 15 種硬珊瑚。這反映出高海洋生物多樣性。它也是香港三個主要瀕臨絕種海洋哺乳動物黑江豚生活的水域之一。16 公頃填海加防波堤和停泊區將造成嚴重破壞和損害海洋環境。</p> <p>Scenic value As acknowledged in the Southwest New Territories Development Strategy, Shek Kwu Chau is in a scenic area of islands and coastline, including south Lantau, the Soko Islands, and Cheung Chau. The EIA rejected potential sites in Sai Kung islands and on Lamma in part because of scenic value; Shek</p>	<p>the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQO parameters at all concerned air sensitive receivers comply with the corresponding AQOs.</p> <p>Terrestrial biodiversity The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p>Marine biodiversity The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p>Scenic value The artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. For example, Cheung Chau is located to the northeast of Shek Kwu Chau, the buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. Viewing from these areas, IWMF will be partially blocked by the Shek Kwu Chau. Besides, with the introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, this can fuse IWMF into the surrounding natural environment.</p> <p>The islands in Sai Kung were not shortlisted for IWMF development in the site search study. It is because the islands and their adjoining waters are of existing and planned uses that are not compatible with the IWMF development. The Sai Kung islands and waters are popular locations for recreation activities as well as areas planned for landscape protection and conservation. For example the Kiu Tsui beach and Hap Mun Bay beach at the Kiu Tsui Island are gazetted bathing beaches. The northern Kau Sai Chau is a public golf course. The southern parts of Kau Sai Chau and Jin Island have been proposed as Landscape Protection Areas and are to be used for seabirds/ other wildlife conservation. In addition, the Bluff Island and the Basalt Island are gazetted sites of Special Scientific Interest. Fish culture zones are located at various Sai Kung islands and the adjoining waters, including Leung Shuen Wan, Tai Tau Chau, Kau Sai and Kai Lung Wan. The islands are also viewed by the nearby Sai Kung East Country Park, Sai Kung West Country Park, Kiu Tsui Country Park and Clear Water Bay Country Park.</p> <p>Shek Kwu Chau (SKC) and its adjoining water is not a popular location for recreation. It is not a site of Special Scientific Interest nor fish culture. While Cheung Chau is a popular recreational location, it is considerably distanced (more than 3.5 km) from the proposed IWMF site at the artificial island near SKC. The IWMF operation at this artificial island site would not cause any adverse impact on the recreational activities in Cheung Chau.</p>	<p>EIA: S7b.1.1.2,S 7b.8</p> <p>EIA: S7b.8</p> <p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p>

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	<p>Kwu Chau should likewise be rejected on this basis.</p> <p>景觀價值 在新界西南發展策略藍圖中，包括南大嶼山，索罟群島，長洲、石鼓洲都是風景名勝區和海岸線優美的島嶼。環境影響評估駁回在西貢島嶼和南丫島選址的部分原因就是景觀價值；那麼石鼓洲也應在此基礎上予以駁回。</p> <p>Tourism value Cheung Chau and south Lantau are highly important for tourism, serving as major leisure areas for Hong Kong people, and destinations for overseas visitors. Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines.</p> <p>旅遊價值 長洲及大嶼山南部是香港市民和海外遊客主要旅遊和休閒區。活動包括遠足，游泳，吃海鮮，欣賞美景。石鼓洲也是一個重要的景觀區，這裡的水域已經是人們和遊艇常到的休閒樂園。</p> <p>Further Discussions Needed</p> <p>The consultation has been rushed, even though the government's preferred option cannot become operational until 2018 at the earliest. Further public discussions are required.</p> <p>An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p> <p>需要進一步討論 即使政府的首選選址不能 2018 年前投入使用，諮詢期只有一個月是在太急，進一步的公眾討論是必需的。</p> <p>政府也必需在石鼓洲以外地方，找合適建焚化爐的方案。</p>	<p>Ex-Lamma Quarry was not selected for the development of the IWMF because the development of the IWMF would not be compatible with the future planned development for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p> <p><u>Tourism value</u></p> <p>The IWMF under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWMF may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p>	<p>Not under the jurisdiction of EIAO</p>
PC187	Note: Comment is identical to PC186		
PC188	Note: Comment is identical to PC186		
PC189 – PC201	Note: Comments are identical to PC178.		
PC202	I oppose the plan for building an incinerator at Shek Kwu Chau, I've been around the waters of SKC recently: nice inhabited island, and what a nice surprise to see a group of 6-7 porpoises moving around, feeding and happy, flipping about their tails. Fishermen fishing, and some people enjoyed their holiday fishing around the rocks.	The EIA report identified the impacts included permanent loss of 31ha of habitat for Finless Porpoise. To mitigate such loss of habitat, the IWMF EIA proposes that a marine park of approximately 700 ha be designated in a suitable area in the waters between SKC and the Soko Islands. In this connection, a study to identify the suitable location and area for the proposed marine park and the marine ecological enhancement measures that should be implemented in the proposed marine park, such as deployment of artificial reef and	ES:4.3.5.2

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	<p>What a shame that you going to ruin this lovely island to make way for the biggest incinerator; so ignorant about the wildlife, and quiet life of the Cheung Chau peoples and surrounding areas, which will have air pollution created by what you called 'blend to nature' incinerator.</p> <p>I make Cheung Chau my home now and I'm proud to tell my son and my friends what Hong Kong can offers besides those big city images.</p> <p>Hong Kong has those lovely and beautiful hiking trails, hills, forest, wetland and wildlife to offer. What are we going to tell our future generations about those last habitats that we now can preserve and take care of!</p>	<p>release of fish fry, would be conducted. The EIA Study also proposed a number of measures to mitigate the potential indirect impacts on Finless Porpoises during construction and operation of the IW MF. These include avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, adoption of regular traffic route and limitation of vessel speed to 10 knots in areas with high Finless Porpoise sighting density.</p>	
PC203	Note: Comment is identical to PC178.		
PC204	<p>I would like to write to oppose the incinerator proposal on Shau Kau Chau island. It is currently a wildlife sanctuary for many animals and their whole ecosystem would be altered by this type of development. In addition there will be unpleasant gases that will blow over Cheung Chau Island and Lantau which will make it unpleasant for the inhabitants. It will also affect the tourist experience for not only the tourists to Cheung Chau but also to Lantau.</p> <p>Many foreign tourists that come to Hong Kong take the ferry to Macau and are treated to some Beautiful views of the South Coast of Lantau, however the image of Hong Kong will be tainted if there is their view is disturbed by that of an incinerator emitting fumes.</p>	<p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IW MF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p>The current location of the artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IW MF. Besides, with introduction of an architectural and landscaping design emphasizing nature as design concept to the IW MF, the compatibility of IW MF with the surrounding natural setting would be improved.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project at the artificial island near SKC. The cumulative air quality impact assessment has taken into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IW MF emission all complied with the corresponding AQOs.</p>	<p>EIA: S7b.8</p> <p>EIA Tables 10b.15</p> <p>ES:S4.3.1.4</p>
PC205 – PC207	Note: Comments are identical to PC178.		
PC208	<p>Living Islands Movement (LIM) wishes to comment on the Executive Summary of the above mentioned EIA Report and the accompanying Press Release as follows.</p> <p><u>Need for the Project</u></p> <p>While it seems likely that incineration will ultimately form part of comprehensive waste management strategy, we believe it unreasonable to put forward this element of the strategy, which many regard as a last resort, in isolation and ahead of other essential and even more pressing needs, particularly as it is so controversial. We have little confidence that the government has any real intention of vigorously pursuing what we consider the most important need, namely to reduce waste at source. As you know Hong Kong has the unenviable reputation as being the most wasteful city on the planet and the fact government fails to acknowledge this problem is deeply worrying.</p> <p>Indeed the statement in your Press Release that identifies Shek Kwu Chau as the preferred location</p>	<p><u>Need for the Project</u></p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <p>(a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling;</p> <p>(b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction;</p>	ES:S1

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	<p>for Hong Kong's first incinerator strongly implies that there are more to follow and this will reduce the incentive for Government to educate the public and take a strong lead. This is a shame as other countries are implementing waste reduction and management schemes which leave Hong Kong in the shade.</p> <p><u>Project Scope</u></p> <p>We note that a Mechanical Treatment facility for 300 tons per day is including in the project scope. We object to this on that grounds that waste should be sorted and the recyclable elements extracted before transportation over long distances for incineration. We also note that 300 tpd is only 10% of the Incinerator capacity. So the proposed MT Plant is either a waste of time and money or a precursor to massive expansion of the sorting plant later. The latter would be completely unacceptable, particularly in the case of Shek Kwu Chau (SKC). Later, paragraph 3.2.4.3 indeed refers to the possibility of putting in place a much larger scale MT facility in future.</p> <p>The "photo-montage" of SKC is an aerial view from the South East. It is therefore a misleading perspective on the true visual impact from key resident and visitor locations along the South Lantau Coast, which is to the West. It is further misleading as the potential expansion of the MT plants is not illustrated.</p> <p><u>Site Selection</u></p> <p>We believe Shek Kwu Chau should have been excluded from the search at the outset since it is located in the middle of a proposed Conservation Area, according to the SWNT Development Strategy Review.</p> <p><u>Key Findings of the EIA Study</u></p> <p>This section of the Executive Summary makes clear the very significant advantages of the Tsang Tsui Ash Lagoon (TTAL) site compared with SKC, including:</p> <p><u>Significantly lower construction costs</u> Much smaller land footprint No need for reclamation No breach of existing planning policies No impact on Scenery No loss of wildlife habitat Already degraded site Marine and Road transport access Convenience and lower cost of connecting to the grid for energy byproduct Convenience and lower cost of disposal of fly ash in the adjacent landfill Possibilities for later "mining" of the adjacent Landfill</p> <p>While the consultants are careful not to positively endorse the TTAL site on all these grounds, they go to great lengths not to rule out SKC.</p> <p>When contemplating for example the loss of 31 hectares of Finless Porpoise habitat, fishing grounds, White Bellied Sea Eagle nesting sites, coral colonies and submarine cable laying to Cheung Sha</p>	<p>(c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste.</p> <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p><u>Project Scope</u></p> <p>As stated above, the Government target to increase the waste recovery rate from the current 49% to 55% in 2015. In addition to achieve behavioral change among the public, the Government plan to coordinate hardware facilities to further increase the recovery rate. The implementation of Mechanical Treatment facility will not discourage source separation, but will help recover recyclable materials from MSW and further reduce the amount of waste to be incinerated / landfilled. The objectives of the Mechanical Treatment facility of the IWMF are to test the operational viability and cost effectiveness of sorting and recovering the recyclables from the MSW prior to the incineration process.</p> <p><u>Siting</u></p> <p>To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p>To provide better service to the community, the IWMF will include facilities for environmental education and leisure tourism. The objectives of environmental education centre are to promote environmental awareness to the society and attract tourists. This would be in line with the strategy of promoting environmental awareness and leisure tourism of the nearby area as mentioned out in the South West New Territories (SWNT) Development Strategy Review.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p>	<p>ES:S1 and S2.2</p> <p>ES:S2.1.1.3</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p>

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	<p>beach the words "mitigation" and "acceptable" appear over and over again. These statements are entirely subjective and unconvincing.</p> <p>The offer of the Sokos Islands area for a Marine Park in mitigation is deceptive since was agreed many years ago to designate this area as a Marine Park, but this has not been implemented. A similar promise was also made at the time of the EIA for the LNG Plant at Sokos in 2006. We object to the repeated use of this important natural resource as a "bargaining chip" when convenient to EPD.</p> <p>Regarding the Landscape and Visual Impact section again we have numerous subjective statements as to what are "insubstantial" or "moderate" and "acceptable" after mitigation.</p> <p>We believe the visual impact on the South Lantau coast beach resorts, arguably one of Hong Kong's our finest recreational assets, has been grossly underestimated. Please see the attached map showing the true orientation of the proposed SKC IWMF.</p> <p>Further, no mention is made of the intrusive Light Pollution we suspect will occur at night from 24/7 operations of the IWMF. We already have one very bad example of such light pollution at the High Explosives Depot at Kau Shat Wan, further up the South Lantau Coast between Mui Wo and Discovery Bay.</p> <p><u>Conclusions of the EIA and from the EIA</u></p> <p>The EIA makes no specific recommendations other than to say that both sites are "acceptable". Though, as we point above, it is impossible not to conclude that the degree of acceptability is overwhelming higher for the TTAL location.</p> <p>We therefore disagree profoundly with the EPD's view drawn from the EIA that Shek Kwu Chau is the best place for Hong Kong's first IWMF. We find the reasons given in the Press Release of February 17 both contrived and illogical:</p> <p><u>Distance from the RTS (on Hong Kong Island) is shorter thereby saving transport costs.</u></p> <p>This maybe a partial truth if one ignores the total picture of transport distances to and from all RTS and all Landfills, but it is the only point in favour of SKC versus TTAL, and a flimsy one at that. TTAL ticks 11 out of 12 of the EIA boxes. SKC ticks at best one. That is 11 out of 12 versus 1 out of 12.</p> <p><u>The population clusters are further away.</u> This is simply not true and/or irrelevant. The population cluster of Cheung Chau is just 3 km from SKU across open water while there are three mountain ranges between TTAL and Tsuen Mun Town, a completely distinct geographical area approximately twice as far away. Besides, if the facility as safe as the Administration believes, proximity of population is not an issue (within reason).</p> <p><u>There is synergy with community and tourism.</u> This is frankly a ridiculous claim. The scenic area of South Lantau Coast, Cheung Chau and Sokos Islands is a far greater asset for tourism, recreation and conservation than a single industrial installation no matter how "state of the art". Further, there is no comparative advantage to SKC, in fact the reverse given the easier access to TTAL.</p>	<p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p><u>Key Findings of the EIA Study</u></p> <p>The objective of this EIA study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project at both sites. The information include the overall acceptability of any adverse environmental consequences that is to arise as a result of the Project and the associated activities of the Project, the conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences, and the acceptability of residual impacts after the proposed mitigation measures are implemented. With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.</p> <p>A key potential direct impact identified under the Project is the permanent loss of 31 ha of important habitat for Finless Porpoise, covering the reclamation and the embayment area within breakwater. Mitigation measures proposed to mitigate the loss include firm commitment from the Project Proponent to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance by 2018, in order to tie in with the operation of the IWMF at the artificial island near SKC. Deployment of artificial reef and release of fish fry have also been proposed as additional enhancement measures for the loss of important habitat for Finless Porpoise and fisheries resources. For the indirect impacts on Finless Porpoise, such as acoustic disturbance, collision with vessels, and alteration of behavioural pattern during construction and operation phases, mitigation measures proposed include avoidance of noisy works during peak Finless Porpoise season, monitoring of exclusion zone, marine mammal watching plan, adoption of regular traffic route, and limitation of vessel speed to ten knots at areas with high Finless Porpoise sighting density. With the implementation of the proposed mitigation measures, adverse impacts on Finless Porpoise would be mitigated to acceptable level.</p> <p>The landscape and visual impact was assessed according to the methodology listed out in Section 10b.5 of the EIA. The methodology is well developed and widely adopted.</p> <p>The current location of the artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. The view of the IWMF will be partially blocked by the Shek Kwu Chau. Besides, with introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, the compatibility of IWMF with the surrounding natural setting would be improved.</p>	<p>ES:S1.2.1.2, S5.1.1.2</p> <p>ES: S4.3.5</p>

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	<p><i>It would achieve a balance through HK of such facilities.</i> This is a very strange concept. We cannot see how placing such a facility in an area slated for conservation and recreation is any way "balanced", since it negates the rationale for protecting certain parts of Hong Kong from industrial development. Simply spreading around the garbage facilities needed by the urban areas is to reduce all Hong Kong to the lowest common denominator. Again, to us, this is sending quite the wrong message -that HK's current wasteful behaviour patterns are somehow acceptable.</p> <p><u>Lack of Due Process</u></p> <p>As a final comment on the of the decision making process we note that the site selection has taken place before the capital costs and operating costs of the two sites has been calculated and evaluated. We find it extraordinary that a decision of this importance can be taken without considering the implications on the public purse.</p> <p>This, combined with the disregard of the objective findings of the EIA, suggests a failure of due process and accordingly we object strongly to the EPD's decision to site an IWMF at Shek Kwu Chau</p>	<p>While the IWMF will be operated on a 24-hour basis daily, the reception of MSW at the berth and reception hall of the incineration plant will be limited from 8 am to 8 pm. At the night time, the lighting will be kept to a minimum for security and safety purposes. Excessive lighting will be avoided.</p> <p><u>Conclusions of the EIA and from the EIA</u></p> <p>With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.</p> <p>The recommendations on mitigating the environmental impacts have been made and shown in S14 of the EIA report. With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.</p>	<p>ES: S5.1.1.2. EIA: S14</p>
PC209	<p>Designing Hong Kong Limited is a not-for-profit organization and our objects are:</p> <ol style="list-style-type: none"> 1 To promote the health, safety, convenience and the general, social, and economic welfare of the community of Hong Kong today, WITHOUT COMPROMISING the future; 2 To identify ways and means of enhancing the quality and sustainability of Hong Kong's living environment for the health, safety, convenience and welfare of residents and visitors; 3 To undertake research and studies into the design and development of Hong Kong's 4 living environment; 5 To educate and raise the awareness among the community on the need to protect and enhance the living environment of Hong Kong, and the ways and means to do so; 6 To form alliances among members of the community with a common interest in protecting and enhancing the living environment of Hong Kong, and 7 To undertake any and all lawful acts and deeds which are necessary and conducive to attaining our objectives <p>Our concerns towards the captioned project as below:</p> <ol style="list-style-type: none"> 1 The proposed IWMF will be erected on an artificial reclamation land opposite to southeast side of the Shek Ku Chau. It will affect the natural coastline. The area is an important habitat for Finless Porpoise, predominant ground of prime coral and breeding ground of White-bellied Sea Eagle. Although the EIA report recommends to designate a marine park between Soko Islands and Shek Kwu Chau before 2018 as compensation, where recognized as an important habitat for Finless Porpoise, we urge the government to designate the area as soon as possible as the ex-Chief Executive pledged in 20021. 2 The project involves reclamation and breakwater construction, which need to go through different legal procedures, such as Foreshore and Sea-bed (Reclamations) Ordinance and Harbour Protection Ordinance etc. This will extend the project completion time. and make the work fail in response to the closure of three existing strategic landfills in next few years2. 3 The need for reclamation, the construction of breakwaters, public utilities and cables, has already made the project more expensive. With the extension of construction period coming from going through different statutory procedure, the construction costs will rise further. The government refused to provide any data in comparing the construction costs takes place in 	<p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ol style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/ organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the</p>	<p>ES:S1</p> <p>ES 4, ES 5 and under various</p>

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	<p>Tsang Tsui Ash Lagoons and Shek Kwu Chau. Secondly, the comparative economic costs of transport of waste, ash, energy, parts and people for the two locations has not been provided, and thus the environmental performance of the two different options has yet to be ascertained. We recommend the Government to identify and disclose all relevant data, and to engage the public in making the choice between the two options (and any other options which may be identified).</p> <p>Government has introduced a package of waste management measures. in addition to the construction of modern incinerators. We urge that the Government speed up the implementation of all recommended measures in the Municipal Solid Waste Management Policy Framework (2005-2014) to further promote solid waste recovery and recycling, introducing Producer Responsibility Scheme and review the current waste management mechanism in long term. Herewith we so submit for your consideration.</p> <p>1 http://www.info.gov.hk/gia/general/200205/03/0503194.htm 2 Including the South East New Territories (SENT) Landfill, the North East New Territories (NENT) Landfill and the West New Territories (WENT) Landfill for the disposal of its MSW are now projected to approach their capacities in 2014, 2016 and 2018 respectively.</p>	<p>impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p>	<p>parts of EIA Reports</p>
PC210	<p>I reject your proposal to build the incinerator at Shek Kwu Chau.</p> <p>Shek Kwu Chau is an area of scenic beauty, and considerable environmental value. It and the waters around it contain many rare or endangered species.</p> <p>The suggestion that it would boost tourism is of course nonsense (why would tourists come here to see an incinerator), and if it were true, then it should surely be built in a more accessible place.</p> <p>The alternative site at Tsang Tsui is more convenient, and can be brought on-line more quickly, and it has no environmental concerns.</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>
PC211	<p>I object most strongly to the proposal to build an incineration facility at Shek Kwu Chau, and I reject the EIA.</p> <p>The choice of Shek Kwu Chau is environmentally unacceptable, and is unjustified on any cost basis.</p> <p>You at EPD have admitted that you have not worked out the capital or running costs of this facility. A sensible and proper site selection process would have looked at these matters first – in this case a site has been picked first and then the EIA has been drawn up to try and make it look acceptable.</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>

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	<p>Your EIA is riven with inaccuracies and contradictions, and the points you make all suggest that Shek Kwu Chau is NOT acceptable, and that Tsang Tsui is in fact better from every possible angle:</p> <ul style="list-style-type: none"> • Costs • Convenience • Quicker to bring on-stream • Already-degraded site – no environmental consequences. <p>All this suggests that the conclusions you draw in proposing Shek Kwu Chau have no validity and are imposed on you by outsiders, and it suggests that you have “slanted” your EIA in order to fit this pre-arranged outcome, regardless of environmental considerations.</p> <p>This is a shameful failure to follow your remit of Environmental Protection, and I therefore reject your EIA totally.</p>	<p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p>	
PC212	<p>The Hong Kong Branch of The Institution of Mechanical Engineers is in support of the urgent need to build a sizable incinerator as part of the long term solutions to address and resolve Hong Kong's ever increasing amount of municipal solid wastes. Our concern is to employ the right technology and find a most suitable site such that the waste to energy incineration facility as a whole is not only environmentally, ecologically, economically and socially acceptable but has the least impact to the community as a whole.</p> <p>The Environmental Impact Assessment (EIA) Report on the proposed IWMF including a 3,000 tonnes/day incineration facility is still undergoing the 30-day public inspection (closed on 18 March) as part of the mandatory process stipulated in the EIA Ordinance. However, the on-going Government campaign has given the community an impression that the IWMF will be built on an artificial island off Shek Kwu Chau scheduled for operation by 2018, despite this site's obvious drawbacks, such as large reclamation area, substantial higher capital cost and 2 years longer to build.</p> <p>We wish to bring the attention of the approving Authority that the EIA Report has failed to (a) adopt the new Air Quality Objectives Standards championed by the Government in a public consultation document issued in 2009 and (b) take consideration of the cumulative effects of all known/planned infrastructures (e.g. the 3 rd airport runway) to assess the acceptability of emissions from the proposed IWMF. The EIA Report has also failed to give a comprehensive comparison of all impacts of all shortlisted sites and to come up with a preferred site with least impacts.</p> <p>In view of the on-going heated debate on the pros and cons of the proposed IWMF, we trust the Advisory Council for the Environment and the approving Authority have the courage to brush aside all political pressure and sectorial interests, to examine the EIA Report impartially, to take due considerations of the views and comments of stakeholders and to make credible deliberations as expected by the community</p> <p>In passing, it is felt necessary to point out that the impressive wastes recycle rate of nearly 50% achieved in Hong Kong is actually the "Collection Rate" as most of the collected wastes are sent to the Mainland for processing/dumping. The way forward is to reduce the production of wastes, and the most effective measure is to go for mandatory charging scheme on wastes. The first step is to charge the disposal of commercial and industrial wastes and this should be done without any further delay.</p>	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>Up to the present moment, meeting the existing AQOs remains the statutory requirements under the EIA Ordinance. The EIA has included existing as well as firmed planned projects in the cumulative impact assessment. Regarding the 3rd runway, it is one of the options being considered by the airport authority amongst other options. These options are under public consultation, whether or not there would be any 3rd runway development is not yet decided. A comprehensive comparison of all impacts of two proposed sites has been presented in Table 15.1, Section 15 of the EIA report.</p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the “Policy Framework for the Management of Municipal Solid Waste (2005-2014)” (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>EIA: S15</p> <p>ES:S1</p>

No.	Comments	Proponent's Response	EIA Report Ref.
		<p>(a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling;</p> <p>(b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction;</p> <p>(c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and</p> <p>(d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste.</p> <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p>	
PC213	<p>To avoid criticism from residents who live in and around Tuen Mun, Environmental officials have picked the remote outlying island Shek Kwu Chau (SKC) as the preferred site for the first Integrated Waste Management Facility in Hong Kong. While incineration technology is applied for reducing the volume of unrecyclable waste, xxx criticized the HK government for their limited efforts to reduce the volume of waste at the source. This has resulted in an escalating amount of waste being generated and recyclable waste disposed into the landfills. "Another incinerator will probably be required within ten years if the volume of waste cannot be suppressed at the source," xxx worried.</p> <p>"Unless the waste avoidance measures such as Producer Responsibility Scheme' and 'Waste charge by volume' are implemented, introducing the incineration technology at this moment is inappropriate and unable to address the root cause of our waste problem," xxx commented.</p> <p>The lack of an effective recycling system and waste avoidance measures has caused a large volume of recyclable materials to be disposed in landfills every day. Despite the high recycling rate of 49%, of the 9,000 tonnes of municipal solid waste disposed to the landfills every day, 20% is recyclable packaging materials, with the majority being paper and plastic. xxx accused the government of breaking their words of reducing waste. "The government believes incinerator would bring eternal relief to the waste problem. Yet, it burns both recyclable resources and sources of income for the grassroots community by using up the public treasury!"</p> <p>FoE (HK) urges the government to step up its efforts to implement waste avoidance at the source measures, including adopting xxx "Full Recovery – Zero Waste" Proposal, so that by the end of a ten year period we could have reduced our dependency on incineration and landfills. FoE(HK)'s proposal includes:</p> <ul style="list-style-type: none"> • Implementing a weight-based waste charge; • Implementing a landfill ban; 	<p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effectiveness of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <p>(a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling;</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES:S1</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<ul style="list-style-type: none"> • Increasing the capacity from 500 tonnes for daily recycling of food waste to 3,000 tonnes; • Implementing producer responsibility schemes in electrical & electronic waste, packaging waste and beverage containers (the last two items add up to some 20% of municipal solid waste) <p>xxx 強調,「政府把焚化爐搬到『山高皇帝遠』的石鼓洲,以為可以減少反對聲音。」本會重申,焚化爐應該用來處理無法回收的垃圾,政府卻一直在推動源頭減廢措施上放軟手腳,以致垃圾製造量不住攀升,估計不到十年,香港將要再建至少一座大型焚化爐。</p> <p>xxx 指出,「在當局未有盡責落實「生產者責任」和「垃圾收費」等源頭減廢措施前,在任何地方興建焚化爐都是不恰當及未能對應整體廢物問題。」</p> <p>在現時缺乏有效的回收機制及源頭減廢政策下,大量有回收價值的「資源」只被當成垃圾處理。縱然政府辯稱本港的回收率已達 49%,但全港每日掉棄在堆填區的 9,000 噸都市固體廢物中,光是包裝廢物 – 以紙類及塑料為主 -- 便佔了 20%。本會強調,「政府迷信『一爐永逸』,一直未有兌現減廢的承諾,等同以公祭焚燒可回收的資源,燒毀基層市民靠回收增加收入的機會!」</p> <p>xxx 促請當局 盡快落實以源頭減廢為主力的廢物管理策略,並採納本會以十年為期的以下「減廢 6,000 公噸」方案,藉此減輕依賴焚化設施及堆填:</p> <ul style="list-style-type: none"> • 落實垃圾按量徵費計劃; • 落實堆填區禁令 (landfill ban); • 提高廚餘每日的回收量至 3,000 公噸 (政府現計劃僅為 500 公噸); • 全面落實「電子垃圾」、「包裝廢物」及「飲品容器」等生產者責任制等。(後兩者的廢物量,佔都市固體廢物兩成以上) 	<p>(b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction;</p> <p>(c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and</p> <p>(d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste.</p> <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p>	
PC214	<p>xxx would object to the EIA report regarding Development of the IWMF Phase I.</p> <p>1. Shek Kwu Chau Option</p> <p>i. Adherence to EIA Principle</p> <p>With existing coral ground supporting marine ecosystem, together with habitat for White-bellied Sea Eagle and Finless Porpoise, Shek Kwu Chau is highly important in conservation. While admitting such ecological importance, the EIA report, however, still came to the conclusion that all environmental impacts would be acceptable through mitigation. It should be clearly evaluated again if the report strictly adhered to basic hierarchy of EIA, with "avoidance" on top priority. Applying this by claiming avoidance with direct contact with intertidal habitat and coastal subtidal habitat (Paragraph 7b.8.2.1 and 7b.S.2.2) would not true as marine water habitat was still completely left out.</p> <p>Xxx further worries that subsequent environmental problems follows after constructing the IWMF in Shek Kwu Chau, such as odour and air pollution induced by doubling handling of wastes transportation. Besides, the site would be exposed to bad weather especially typhoon, thereby strongly impeding waste transportation.</p>	<p>Other than avoidance, other measures for impact mitigation for marine environment including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limitation on vessel speed limit at areas with high occurrence of Finless Porpoise etc. have also been proposed to minimise the identified impacts. More details on the proposed mitigation measures are presented in Section 7b.8 of the EIA report.</p> <p>During the operation of the IWMF, MSW collected at Island East Transfer Station, Island West Transfer Station and West Kowloon Transfer Station will be stored in water-tight containers and then delivered to the IWMF by dedicated vessels used to transport MSW containers. Odour nuisance due to leakage of waste or wastewater from the containers during the transportation is not anticipated. This is also the current practices for transporting MSW from the refuse transfer stations to the WENT Landfill. Hong Kong has 20 years of experience in transporting MSW by marine transport and there are also contingency plans in place to handle adverse weather situation (e.g. typhoon).</p> <p>ii. Finless Porpoise Noted</p> <p>iii. White-bellied Sea Eagle (WBSE)</p>	<p>EIA: S7b.8</p> <p>ES:2.2.3.2</p>

No.	Comments	Proponent's Response	EIA Report Ref.										
	<p>ii. Finless Porpoise Despite measures such as avoidance of peak season for Finless Porpoise occurrence, regulating vessel speed limit, adopting regular travel route, and so on, the fact is that both baseline survey and survey in this study have recorded high occurrence of Finless Porpoise in south and southwest waters near Shek Kwu Chau. While compensating permanent loss of habitat through proposing a 700-ha marine park in the waters between Soko Islands and Shek Kwu Chau, it should further assess designation of long-delayed marine park in Southwest Lantau and Soko Islands simultaneously to better conserve habitat for Finless Porpoise and other marine lives.</p> <p>iii. White-bellied Sea Eagle (WBSE) The point that "The Tai Ngam Hau nest has demonstrated that WBSE has a certain level of tolerance from human disturbance and could achieve breeding success under human disturbance" (Paragraph 7b.6.2.93) might over-simplify the characteristic of the nest. The breeding success in Tai Ngam Hau nest was due to the presence of fish culturing at Ma Lam Wat, 500m from the nest, which then enhanced the foraging ground, while dead fishes from the fish rafts also act as a food source for WBSE1. Even claiming that WBSE is a "highly mobile species" and "the availability of similar (WBSE) habitat in the vicinity of the Project Site" (Paragraph 7b.6.2.94) would be too vague to justify negligible impacts brought by the project. The threat on WBSE habitat brought by the project seems not to be taken into full account.</p> <p>2. Tsang Tsui Option i. Little Grebe With the impact of both IWMF and West New Territories (WENT) Landfill Extension, the breeding habitat of Little Grebe would be deeply narrowed. Whether the 1.2 ha of the compensatory pond would be a buffer area for the unoccupied Middle Lagoon or a regenerated breeding habitat for Little Grebe is different. xxx after all still remains skeptic of this compensatory pond for Little Grebe because it is too close to the proposed IWMF.</p> <p>The fact to enhance wetland habitat in the southern unoccupied Middle Lagoon with a size of 4.5 ha is that it would process "until the area is occupied by WENT Landfill Extension Project" (Paragraph 7a.8.3.5). The mitigation plan (Figure 8.12 of EIA report of WENT Landfill Extension) also revealed that this part would be designated for compensatory planting. It is therefore doubtful if the Little Grebe habitat can be secured after WENT Landfill Extension.</p> <p>ii. Air Quality It happens as if the EIA report has selectively revealed the ambient air quality condition by extracting the annual average concentrations of pollutants from Year 2005 to Year-2009 only. With reference to the air monitoring data at Yuen Long Station, it has long been recognized that the I-hour O₃, the I-hour and daily NO₂, annual TSP, the daily and annual RSP have often exceeded the Air Quality Objectives (AQO) levels. It was worried that even a slight increase in pollutant emission from IWMF, together with the planned sludge incineration and other existing emission sources, would not be tolerated as stipulated in the required emission standard. EPD Air Quality Monitoring Data at Yuen Long Station (2004-2008)</p> <table border="1"> <thead> <tr> <th>Pollutants</th> <th>Year</th> <th>Highest 1-hour Average (µg/m³)</th> <th>Highest Daily Average (µg/m³)</th> <th>Annual Average (µg/m³)</th> </tr> </thead> <tbody> <tr> <td>O₃</td> <td>2004</td> <td>289</td> <td>102</td> <td>31</td> </tr> </tbody> </table>	Pollutants	Year	Highest 1-hour Average (µg/m ³)	Highest Daily Average (µg/m ³)	Annual Average (µg/m ³)	O ₃	2004	289	102	31	<p>Potential impacts from the Project on WBSE have been identified in the EIA report, covering habitat and foraging ground quality deterioration due to degradation in water quality, noise, increase in marine traffic, glare disturbance, air and dust emission, heat and fume exhaust, and nest abandonment. More details can be found under EIA report S7b.6. Other than the WBSE being a highly mobile species with large territory size, and that similar habitat is available in the vicinity (i.e. the rest of hillside coastal shrubland at Shek Kwu Chau, and other remote islands e.g. Soko Island, Hei Ling Chau), specific measures to minimise disturbance on breeding WBSE were also proposed in the EIA report to minimise the identified impacts, including avoidance of noisy works during the breeding season of WBSE, opt for quieter construction methods and plants, restriction on vessel access near the nest of WBSE, WBSE monitoring programme, education of staff, minimisation of glare disturbance, and adoption of noise control measures.</p> <p>2. Tsang Tsui Option i. Little Grebe In addition to 1.2 ha of the compensatory pond provided under the proposed IWMF, at least 8 ha of compensatory freshwater ponds would be created in the WENT Landfill site under the WENT Landfill Extension project for the loss of Little Grebe's breeding habitat within the ash lagoon area. Therefore, the breeding habitat loss due to both projects would be fully compensated.</p> <p>The location of the 1.2 ha compensatory pond habitat is specifically chosen to minimize the impact of habitat fragmentation by linking up the unoccupied Middle Lagoon, and maintain a reasonable distance from human disturbance (e.g. administrative building). It also serves as a buffer area to screen out the unoccupied Middle Lagoon area to reduce the disturbance due to traffic and human activities. In addition, boundary walls planted with climbers would be set up between the compensatory habitat and the access road to effectively minimize the noise generated from the traffic.</p> <p>No later than the first year of the commencement of construction of the WENT Landfill Extensions project, the aforementioned compensatory freshwater ponds with a size of at least 8 ha. would be created. These freshwater ponds with more favourable condition for Little Grebe (i.e. with less human and noise disturbances) would replace the enhanced wetland habitat.</p> <p>ii. Air Quality The IWMF will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NO_x) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF. Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources (e.g. planned sludge incineration) in Hong Kong. The predicted maximum cumulative concentrations of relevant AQO parameters at all concerned air sensitive receivers complied with the corresponding AQOs.</p> <p>The Government will keep on monitoring and reviewing the waste assignments to the refuse transfer stations. In speeding up the progress of Producer Responsibility Scheme, recycling, waste charging, the Government will strengthen district recycling facilities and networks on various fronts, implement the next stage of the Producer Responsibility Scheme (PRS), including stage two of the plastic shopping bag levy scheme and the PRS for waste electrical and electronic equipment, as well as launch a public consultation on MSW charging.</p>	<p>EIA: S7b.6.2.85-95, 7b.6.2.114, 7b.6.3.42-50, 7b.8.3.34-40</p> <p>ES: S4.2.5</p> <p>ES S4.3.1.3 to S4.3.1.4</p> <p>Not under the jurisdiction of EIAO, ES:S1</p>
Pollutants	Year	Highest 1-hour Average (µg/m ³)	Highest Daily Average (µg/m ³)	Annual Average (µg/m ³)									
O ₃	2004	289	102	31									

No.	Comments					Proponent's Response	EIA Report Ref.
		2005	313	133	35		
	2006	335	116	32			
	2007	327	119	32			
	2008	298	128	35			
NO ₂	2004	317	166	67			
	2005	245	145	58			
	2006	307	198	58			
	2007	279	137	55			
	2008	239	133	56			
TSP	2004	N/A	320	113			
	2005	N/A	252	104			
	2006	N/A	448	101			
	2007	N/A	304	97			
	2008	N/A	217	87			
RSP	2004	366	225	71			
	2005	354	212	62			
	2006	293	246	62			
	2007	341	207	64			
	2008	-	164	60			
Note:	<ul style="list-style-type: none"> • NIA -Not Applicable. • Shaded area -Monitoring results exceeded the criteria of AQO. • Data Extracted from Tuen Mun -Chek Lap Kok Link EIA Report (http://www.epd.gov.hk/eia/register/reoort/eiareport/eia_1742009/html/Section%204%20Air%20Quality/Section%204%20-%20Air%20Quality_final%20310709.htm) and Air Quality Statistics 2008 (http://www.epd.gov.hk/epd/english/environmentinhk/air/data/aq_stat.html) 						
3. Under-utilization of IWMF	<p>A cursory review of the total handling tonnage of the 3 Refuse Transfer Stations (RTSs), namely Island East Transfer Station, Island West Transfer Station and West Kowloon Transfer Station showed that only about 3021 tonnes² per day on average of MSW and special waste are collected and therefore the incineration may run the risk of under-utilization if there is a drop in amount of waste brought by, for instance, increase in waste recycling percentage or change in routings of existing waste trucks. Although it may be argued that the 2009 figures of West Kowloon Transfer Station was lower than normal because of a fire accident occurred during that year, it should be reiterated that since the government has committed to raise the waste recovery rate of the Territory to 55%, it is all possible that total combustible waste received from these 3 RTSs will be lower than the daily throughput of the incinerator. If such a situation occurs, IWMF will be still underutilized. If IWMF is located in Shek Kwu Chau, waste from NLTS will need to be transferred to the Shek Kwu Chau incinerator, making the environmental cost of waste transfer higher than that predicted by the government when they planned the site there.</p>						
xxx	<p>would still highlight that a holistic approach to handle waste problem, including speeding up the progress of Producer Responsibility Scheme, recycling, waste charging, is definitely necessary. Over-reliance of end-of-pipe measures would not be the answer to waste problem in long run.</p>						

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>1 Lee, W.H. & So, W.Y.I. (2010). Breeding Ecology of White-bellied Sea Eagle (<i>Haliaeetus leucogaster</i>, 白腹海鵰) in Hong Kong -A Review and Update. AFCD Hong Kong Biodiversity 18. http://www.afcd.gov.hk/english/publications/publications_con/files/IssueNo18.pdf</p> <p>2 EPD (2010). Solid Waste Delivered to Waste Facilities in 2009. Monitoring of Solid Waste in Hong Kong 2009. https://www.wastereduction.gov.hk/chi/materials/info/msw2009tc.pdf</p>		
PC215 - 289	Note: Comments are similar to PC011.		
PC290	Note: Comment is identical to PC158. 2,160 nos. of signatures are attached with this comment.		
PC291	<p>It is wonderful news that progress is being made towards addressing Hong Kong's waste issue. I believe that a waste incinerator should be part of the whole waste management strategy. However, my concern is that an incinerator or multiple incinerators seem to be the only area that government is taking significant action. This does not result in an integrated approach to Waste Management though rather a one sided approach. I believe strongly that waste reduction at source, extensive waste separation for recycling and food composting should be significant steps taken before incineration.</p> <p>I therefore suggest that significant funding be provided to implement these pre-incinerator processes and the government work on creating suitable legal structures to encourage producer responsibility and waste minimisation by both individuals and organisations through waste charging schemes.</p> <p>In terms of the EIA for the "Development of the Integrated Waste Management Facilities Phase 1" it seems to me that the "Cart is before the horse" or in this case the "Waste barge is before the Tugboat". The "tugboat" should be all the steps that other cities and countries are doing to reduce the volume of waste needs to be incinerated.</p> <p>Looking at the EIA, it appears to steer the result towards the most inappropriate site for Phase 1 and potentially for any phase. That is selecting Shek Kwu Chau ahead of Tsang Tsui. I will just list a couple of the major points of concern.</p> <p>1) The criteria for excluding potential sites does not include proposed conservation areas.</p> <p>2) No budget for the construction costs are included in the site selection process</p> <p>3) Why does the proposed Mechanical Treatment (MT) technology need to be tested for operational viability and cost effectiveness while the Incinerator does not need this testing?</p> <p>4) The proposed Mechanical Treatment (MT) facility will only handle 200tpd, which is only about 5% of the total daily MSW generated in Hong Kong. Surely Phase 1 should include MT facilities that process at least a quarter of the waste.</p> <p>5) The IWMF assessed emissions were all in terms of the current AQOs and these are now over 30 years out of date. Surely the assessment of emissions should be based on World Health Organisation Guidelines.</p>	<p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <p>(a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling;</p> <p>(b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction;</p> <p>(c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and</p> <p>(d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste.</p> <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p>(1) All conservation areas have been excluded from the preliminary search for potential sites, and the two potential sites studied in this EIA are not located in potential conservation areas.</p> <p>(2) This EIA Report was prepared in accordance with the EIA Study Brief No. ESB-184/2008. The purpose of this EIA Study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project at the two potential sites. The information will contribute to decisions by the Director of Environmental Protection on:</p>	<p>ES:S1</p> <p>EIA:S2.2.1.2</p> <p>ESB-184/2008</p>

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	<p>6) The impact assessments to marine biodiversity seem to have different criteria applied for each proposed site and they are very minimal in there scope</p> <p>I hope that EPD takes my comments seriously. The current EIA has serious flaws in the logic used, which when viewed by our local community and our international friends will make Hong Kong look like they do not want to address the core waste issues.</p>	<ul style="list-style-type: none"> - The overall acceptability of any adverse environmental consequences that is to arise as a result of the Project and the associated activities of the Project; - The conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences; and - The acceptability of residual impacts after the proposed mitigation measures are implemented. <p>Cost is not one of the environmental considerations in the EIA study.</p> <p>(3 & 4) The IWMF comprises: (a) an advanced thermal incineration plant with design capacity of 3,000 tonnes per day (tpd) and (b) a mechanical sorting and recycling plant with design capacity of 200 tpd. This has taken into consideration the recommendations of the Advisory Group on Waste Management Facilities comprising members from the professional bodies, green groups and the academic sector was set up to assess the proposals and to recommend suitable waste treatment technologies for Hong Kong in 2005, and the recommendations of the Advisory Council on the Environment (ACE) in 2009 and 2010. It was recommended that incineration could play a key role in the overall IWMF strategy since it had a favorable treatment cost and was the most cost-effective technology to divert MSW from landfills amongst the other strategy options. Land requirement of incineration was also low.</p> <p>It was recommended by the Advisory Group on Waste Management Facilities that mechanical-biological treatment (MBT) was considered to be a potential sorting and recycling technology to be adopted in the IWMF than the other technologies. This was because MBT could potentially recover both materials and energy from the mixed MSW, whereas the others could only recover recyclables. Due to its ineffectiveness in waste volume reduction and requirement of relatively large footprint than thermal treatment technologies, MBT technology was recommended to be adopted at a small scale in the IWMF. At the Meeting of the Waste Management Subcommittee (WMSC) of ACE on 26 January 2010, the WMSC discussed the proposal of whether a sorting and recycling plant should be incorporated in the IWMF project. The WMSC considered the proposal in detail. As the MBT would generally require more land (about 2-3 times of the footprint required by the incinerator for the treatment of the same amount of waste), and the marketability of the products recovered from the MBT process, such as low quality compost and refuse-derived fuel, was a concern, the WMSC considered there was no strong justification in support of adopting the MBT technology in the context of Hong Kong. However, the WMSC supported in general the adoption of Mechanical Treatment (MT) technology to test the operational viability and cost effectiveness of sorting and recovering the recyclables from the MSW prior to the incineration process. Should this arrangement be found viable and cost effective, the project proponent could consider putting in place a MT process of suitable scale prior to incineration in future phases of the IWMF. By doing so, it would reinforce the Government's commitment to minimizing the use of incineration and landfilling in MSW management.</p> <p>5) Based on the Environmental Impact Assessment Ordinance and Technical Memorandum on Environmental Impact Assessment Process, the existing AQO should be followed.</p> <p>6) As required under Clause 3.7.5.2 of the EIAO Study Brief, the study area for marine ecological impact assessment shall be the same as the water quality impact assessment, covering the Southern, Southern Supplementary, Second Southern Supplementary, North Western, North Western Supplementary, and Western Buffer Water Control Zones (WCZs), or the area likely to be affected by the Project. After referring to the Water Quality Impact Assessment (EIA S5b), in addition to the implementation of the proposed water</p>	<p>EIA:S2.3</p> <p>EIA:7b.3.1.2-3</p>

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		quality control measures, with the proposed phasing of works, and low impact construction method, potential adverse impact on water quality is predicted to be minimised and localized in the vicinity of the Project. Marine ecological impact assessment for this study will therefore confine to the area where adverse water quality impact is predicted within and in vicinity of the Project Site.	
PC292	<p>I am writing to express opposition to locating an Integrated Waste Management Facilities (IWMF) (i.e., incinerator) on/near Shek Kwu Chau. The island is totally unsuited to such a facility, and it is highly debatable whether a large incinerator facility is needed at all. The environmental impact assessment for this project cannot be justifiably used to support this facility because the EIA fails (1) to consider adequately options to incineration, in particularly waste reduction through implementation of policies and programmes proved successful elsewhere; (2) to account for the ecological value of Shek Kwu Chau, its environs and particularly the surrounding marine environment and the species living there; and (2) the harmful effects to humans and other species already burdened by air pollution with proven adverse health consequences.</p> <p>In my professional judgment, EPD and the HKSAR Government would be grossly irresponsible to locate an incinerator or similar facility at or near Shek Kwu Chau. Alternatives exist and should be fully explored.</p> <p>Thank you for considering these comments.</p>	<p>The ecological value of Shek Kwu Chau has been presented in the S7b of the EIA report. The EIA study have also assessed the potential impacts of IWMF on different environmental aspects including air quality and health risk. With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.</p>	EIA: S7b.6, ES: S5.1.1.2
PC293	<p>Kindly note the following:</p> <p>Plan for incinerator island by Shek Kwu Chau environmentally unacceptable</p> <p>The Hong Kong Government has given two options for the planned waste incinerator: ash lagoons at Tsang Tsui, Tuen Mun; and an artificial island to be constructed off southwest Shek Kwu Chau. The latter is the governments preferred choice - following a month of consultation.</p> <p>This public consultation was too short: there are many and related issues for further discussions by Hong Kong people. Government's policies have contributed to the filling of landfills and Hong Kong is now one of the world's most throwaway of societies.</p> <p>The choice of Shek Kwu Chau as a covered tip is not justified on any scientific basis, and is environmentally unacceptable. Also, Shek Kwu Chau selection contradicts government plans</p> <p>The government's Southwest New Territories Development Strategy Review recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism. Shek Kwu Chau was designated as a potential conservation area.</p> <p>The environmental impact assessment is biased with factors not covered that reject other sites which appears to result from political imperatives, telling that the EIA consultants are seeking to follow orders from elsewhere.</p> <p>Shek Kwu Chau is unacceptable because of its location: the island is exposed to winds, tropical storms and is bot a site for complex and substantial industrial operation. Reclaiming around 16</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p><u>Shek Kwu Chau Selection</u></p> <p>During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chu as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p><u>Potential air pollution</u></p> <p>Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>EIA:S2.4.1.2</p> <p>ES:S4.3.1.3 to S4.3.1.4</p>

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	<p>hectares of land, plus breakwaters and berthing area will cause significant, unacceptable destruction and damage to the marine environment.</p> <p>Also for reasons of cost: big money is required to build the artificial island.</p> <p>Time constraints: building the island will take time, only when complete can the actual incinerator be constructed.</p> <p>Potential air pollution: toxic chemicals that are proven causes of cancers, such as dioxins, will be generated.</p> <p>Terrestrial biodiversity: the White-bellied Sea-Eagle breeds there, having been chased away from what's now Disneyland.</p> <p>Marine biodiversity: The waters to the southwest of the island are the best fishing ground nearest Cheung Chau. Rare porpoise use the vicinity as a habitat. The nearby Sokos still have seaweeds, and, species of coral are in the neighbourhood.</p> <p>Alternative</p> <p>No incinerator at all or, very specialised small facilities working with absolute leftovers after comprehensive district recycling. The government should also consider transforming existing Refuse Transfer Stations into Waste Processing Centres, including such incinerators.</p> <p>Green Island Cement has an alternative proposal.</p>	<p>be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the target emission limits that is the same as or more stringent than those stipulated in Hong Kong and the European Commission for waste incineration.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p><u>Location and Cost</u></p> <p>Developing the first modern IWMF on the artificial island near SKC will require a relatively longer construction period and a higher capital cost. On balance, it is considered important to achieve a more balanced distribution of waste facilities and more efficient interface with the refuse transfer station network. It would further minimize the impact on air quality, and reduce greenhouse gas emissions. The reclamation works will absorb a couple of million tonnes of construction waste, which would otherwise occupy space at the fill banks.</p> <p><u>Terrestrial biodiversity</u></p> <p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p><u>Marine biodiversity</u></p> <p>The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p><u>Alternative Scale</u></p> <p>As recommended by the Advisory Committee on the Environment (ACE), IWMF would be implemented in phases. When deciding the scale of the Phase 1 IWMF, the Government has considered the factor of economies of scale and made references to the experiences of other densely-populated cities with demographic and geographic similarities as Hong Kong. It is concluded that the first IWMF should have a daily handling capacity of about 3,000 tonnes.</p> <p><u>Green Island Cement's Alternative Proposal</u></p> <p>In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in</p>	<p>EAI:S7b.1.1 .2,S7b.8</p> <p>EIA:S7b.8</p> <p>ES:S3.3</p> <p>ES:S.3.2</p>

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		<p>Hong Kong, the IWMF should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWMF in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p> <p><u>Local Consultation</u> The Government has kept in touch with the respective District Councils (DCs) and local communities so as to enable them to have a better understanding of the modern incineration technology for waste treatment. For example, the Island DC was briefed on the latest progress of developing the IWMF in Hong Kong and the outcome of the site selection in March 2008; the meeting of the Cheung Chau Rural Committee (CCRC) and the public forum organized by CCRC were arranged in April and May 2008 respectively to listen to public views. In 2009, a delegation comprising representatives from the EPD and 26 members of the Tuen Mun and Islands DCs conducted a study visit to Tokyo and Osaka to inspect the use of advanced incineration technologies for waste and sludge treatment in Japan. The Government also briefed the Island DC on 15.11.2010, 21.2.2011 and 21.3.2011 as well as CCRC and residents on 8.3.2011 and 10.3.2011 on the latest progress of developing the IWMF in Hong Kong. From February to April 2011, more than 25 meetings have been arranged, meeting more than 1000 people and about 40 groups/organizations, to further explain the project and the responses to the questions. The Government will continue discuss with the professional institutes, environmental groups, local concern groups, business and academic to gain understanding and to respond to comments.</p>	
PC294	<p>xxx has reviewed many EIAs over the past decade. We conclude that the quality of this EIA report does not follow current best practices in several key areas, and, therefore, cannot be used in its current form to determine the real environmental impacts of the proposed of Integrated Waste Management Facilities, particularly at Shek Kwu Chau. As such, we reiterate that further work be done before the EIA is approved and any decision making for the most appropriate IWMF location. Our detailed comments are as follows:</p> <p><u>Failing to provide objective comparison for the short-listed sites</u> Although the project proponent proposed five main criteria, including environmental, engineering/technical, economics, social and consumer & user at Section 2.2.2, it has failed to provide any systematic evaluation for the short-listed sites based on the proposed criteria. Much more comprehensive and appropriate site selection approaches have been adopted for a number of approved EIAs, such as the <i>Development of a 100MW Offshore Wind Farm in Hong Kong</i> (EIA-177/2009), <i>Hong Kong Offshore Wind Farm in Southeastern Waters</i> (EIA-167/2009) and <i>A Commercial Scale Wind Turbine Pilot Demonstration at Hei Ling Chau</i> (EIA-124/2006). Given the captioned facilities were the first time being introduced to Hong Kong, WWF considers the project proponent should provide a comprehensive analysis to identify its preferred site, so as to avoid and</p>	<p>The project proponent has have gone through a systematic and deliberate process in shortlisting and evaluating the potential sites for the development of the IWMF. A site search exercise was conducted in 2008 under the study <i>Site Search for Integrated Waste Management Facilities in Hong Kong for Municipal Solid Waste</i> to identify the potential sites for the development of the IWMF. The Legislative Council, the Tuen Mun and Islands District Councils and the Advisory Council on the Environment were briefed on the findings of the site search in 2008. In the preliminary search exercise, 23 types of areas, including Country Parks, Marine Parks and Marine Reserves, Sites of Special Scientific Interest, Green Belt, Conservation Areas, Coastal Protection Areas, etc., were excluded, and an initial list of 21 sites was formed. The initial list of potential sites was then subject to further consideration with respect to their site characteristics, latest development status, prevailing wind directions and the dominant environmental conditions to form a site proposal. Six potential sites were shortlisted for evaluation based on the criteria, including environmental consideration, engineer/technical feasibility, cost, social and community impacts. The evaluation outcome suggested that an artificial island near Shek Kwu Chau and Tsang Tsui Ash Lagoons were worth taking forward for detailed studies and further consideration as potential sites for the IWMF.</p> <p>To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek</p>	<p>EIA S2.2</p> <p>ES:S2.1.1.3</p>

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	<p>prevent adverse environmental consequences of the proposed project (Principle Two: Avoidance, Pre-emption and Prevention of Adverse Environmental Consequences)¹.</p> <p>With reference to the proposed broad land-use pattern under the Recommended Development Strategy for South West New Territories by the Planning Department in 2001 (Figure 1), Shek Kwu Chau has been proposed as Conservation Area (Landscape Protection Area/Coastal Protection Area). As the island is home to a number of rare species of conservation concern, WWF considers Shek Kwu Chau should be protected by conservation zonings or as a Site of Special Scientific Interest. While the site has been proposed for natural environment conservation² and it is consistent with the settings of the nearby Lantau South Country Park, we consider that the IWMF development would be incompatible with the proposed land use and the surrounding environment. We also note that the project proponent failed to mention the aforementioned Development Strategy in the evaluation of Shek Kwu Chau as a potential site for the IWMF.</p> <p><u>Section 5b Water Quality Impact (SKC)</u> <u>Disturbance and re-suspension of seabed sediments</u></p> <p>The construction work of the artificial island will involve filling activities. Section 5b.6.1.8 mentions that the opening provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site, and filling would only be carried out behind the silt curtain when it is completely closed. However, no information is provided on the period of time that shall be allowed for the suspended fill material (public fill, sand and/or rock) to settle after the filling, before the silt curtain is allowed to open for the barge access again.</p> <p>In Section 5b.6.1.9, it was stated that "the disturbed sediment would be highly localized and would be settle (sic) shortly after". WWF opines that project proponent shall provide justification on the length of time for the disturbed sediment to settle.</p> <p>The release or loss of elevated amount of suspended sediment from the work site would cause adverse impacts to the sensitive receivers such as corals (e.g. the closest one is just 6m away from the boundary of the breakwater) and fish larvae inhabit in the vicinity of the Project Site. The project proponent should be explicit in how to achieve the highest efficiency on every single mitigation measure adoption during reclamation and dredging, and in particular, the silt curtain installation and operation.</p> <p><u>Water modeling prediction</u></p> <p>xxx has concerns on the accuracy of the water modeling result of the current EIA study, which is heavily dependent on the model results predicted by the regional Update Model (developed under Agreement No. CE 42/97, Update on Cumulative Water Quality and Hydrological Effect of Coastal Developments and Upgrading of Assessment Tool) ..</p> <p>xxx believes that because of the close proximity to sensitive receivers, there is strong justification to collect current velocity data from the Project Area for modeling to predict the accurate sediment loss rate and the extent of sediment plume dispersion caused by the reclamation and dredging works, which are essential for a robust water quality and ecological impact assessment.</p> <p><u>Discharge of brine water from desalination plant</u></p> <p>According to 5b.6.2.17, the brine water drained from the desalination plant will be high in salinity (about 1.7-1.8 time more concentrated than the raw seawater), with a volume estimated to be about</p>	<p>Kwu Chau and the reclamation area will be separated by a water channel.</p> <p>To provide better service to the community, the IWMF will include facilities for environmental education and leisure tourism. The objectives of environmental education centre are to promote environmental awareness to the society and attract tourists. This would be in line with the strategy of promoting environmental awareness and leisure tourism of the nearby area as mentioned out in the South West New Territories (SWNT) Development Strategy Review.</p> <p><u>Section 5b Water Quality Impact (SKC)</u> <u>Disturbance and re-suspension of seabed sediments</u></p> <p>The assumptions made for the assessment of sediment plume dispersion for the reclamation filling works are strictly conservative, for example, by assuming the nearest water sensitive receiver locates directly at the centerline downstream of the dispersion plume of suspended solid but in actuality the water quality impact upon the nearest receiver would be shielded by solid seawall. Before commencement of the filling work, seawalls will be constructed first (above high water mark) with filling carried out behind the completed seawalls. The proposed silt curtain system required at the small gap for marine access will not be directly facing any water sensitive receivers (including corals). The assessment also assumed that the dredging / filling works would be carried out continuously at the location nearest to the water sensitive receiver throughout the entire dredging / filling work period, but in reality, most of the dredging areas would be much farther away than that assumed in the modelling exercise. These assumptions would obviously provide conservative assessment to address any uncertainty in prediction. As the opening period of silt curtain required for marine access would be short while remain closed for the most of the filling period, any potential release of suspended solids due to the opening of the silt curtain system is considered to be minor and transient. As stated in section 5b.7.3.18, field trial will be carried out during the initial reclamation period to ensure that the operation of the silt curtain systems at the marine access opening is effective in protection of the water sensitive receivers. Besides, environmental monitoring and audit would be carried out to ensure the proper implementation of water quality mitigation measures while monitoring the environmental condition during the construction and operation of the IWMF.</p> <p>Section 5b.6.1.9 discusses mainly on the water quality issue concerning marine piling and filling of circular cells. The disturbance of marine sediment due to marine piling is a result of driving of metallic pile into the seabed which would not induce significant seabed disturbance and SS elevation based on the experience of past marine piling projects. Marine sheet piling are adopted in recently approved EIAs such as the Hong Kong-Zhuhai-Macao Bridge EIA and the South Island Line (East) EIA. No significant water quality impact is expected in these two EIAs except localized disturbance of bottom sediment. Given that silt curtain would be deployed for controlling any potential dispersion of suspended sediment, no significant water quality impact of suspended solid would be expected from the marine piling work. Indeed, the adoption of breakwater construction using circular cells would be much environmentally friendly when compared with conventional breakwater construction method which generally requires extensive dredging and filling for the foundation.</p> <p>For the filling of circular, the potential water quality impact would be insignificant as well. The filling material used (sand, rock or public fill) would generally consist of coarse particle (when compared with marine sediment at the seabed). This means any potential loss of fine from the filling material would settle within a shorter period of time than disturbed marine sediment, thus travel a shorter distance. Besides, the filling would be carried out in completed circular cells consisted of metallic piles, which would be further enclosed by silt curtain. Water quality impact of suspended solid at the nearby water sensitive receivers would be insignificant, if not unlikely.</p>	<p>S.5b.7.3.8-2 1</p> <p>S.5b.6.1.9 and 5b.7.2.1</p>

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	<p>1,520 m³ per day. A number of studies reveal that increases in salinity will cause detrimental effects to the eggs and larvae of marine species; affecting yolk utilization and larval growth and survival by influencing the amount of energy needed for osmoregulation³⁴, as well as prolonging the duration of their developments⁵. In view of this, the eggs and larvae spawned and released by the nearby corals, fish and other marine species will be adversely affected by the continues discharge of brine water from the desalination plant during the operation phase.</p> <p>The project proponent should consider studying the impact of the discharged brine water to the eggs and larvae of the nearby marine sensitive receivers, in order to minimise adverse impacts.</p> <p><u>Section 7b Ecological Impact (Aquatic) (Artificial Island near SKC)</u></p> <p><u>Corals</u></p> <p><u>Light attenuation</u></p> <p>The artificial island and the Shek Kwu Chau shoreline will be separated by a channel of 10-40m wide and 400m long. According to Section 2.4.3.6., the finished ground level of the artificial island and the cellular breakwater will be of +5mPD and +9mPD high. Corals, particularly the zooxanthellate varieties, require sunlight for photosynthesis for growth and survival; they are vulnerable to the stress caused by the decrease of light attenuation. The narrow channel and the shade of the infrastructures will reduce the amount of available light attenuates through the water column, posing adverse effects to the feeding and the growth rates of corals, and bleaching, partial and totally mortality may result.</p> <p><u>Change in current velocity</u></p> <p>Octocorals are heterotrophic suspension feeders, they usually feed on small organic food particles in the water column. However, since their nematocysts are small and weak, they cannot actively capture their prey but would depend on water current to bring in their food. Food particles transported to the coral colonies will then be trapped and captured by the tentacles and pinnules of the individual polyps. The intensity and speed of water current may thus affect their feeding rate. The water movement is one of the main factors directly affecting the growth and distribution of octocorals.</p> <p>According to Section 5b.7.9.1, it was stated that the overall current speed within the channel would be increased when compared with the original state, however, the extent and intensity of the change was not provided or assessed. If the current speed is too high, it will bend the polyps and afflict drag, lead to low rates of food intake and affect the growth of the octocorals. The project proponent should investigate the impact from changes in current speed to the octocorals situated in and near the Vicinity of the Project area.</p> <p><u>Sediment elevation</u></p> <p>As mentioned in Section 5b.7.3.32, "the maximum suspended solids (SS) elevation predicted at the nearest coral community would be 2.5 mg/L, which is 29.7% increase of the baseline SS level at Shek Kwu Chau monitoring station SM13 (8.6 mg/L). Although the elevation still complies with the WQO, it is at the margin of the SS criterion (elevation from 30% of the ambient SS). WWF opines that project proponent should closely monitor the coral condition in the Project area to see if any coral colonies show an abnormal appearance (e.g. layer of mucus, bleached, partial mortality) during the coral monitoring programme.</p> <p><u>Coral translocation</u></p> <p>No projects have translocated octocorals in Hong Kong waters to date. If the environmental condition of the recipient site is not suitable (e.g. concentration of suspended particles and the current speed), it</p>	<p><u>Water modeling prediction</u></p> <p>The regional Update Model adopted in this EIA has been extensively tested and calibrated in the "Update on Cumulative Water Quality and Hydrological Effect of Coastal Developments and Upgrading of Assessment Tool" Study, and is adopted by a number of approved EIAs. The information provided by the Update Model would be sufficient and reliable for prediction of water quality impact at both proposed IWMF sites. Given that the worse case for water quality impact has already been assessed using highly conservative assumptions in the water quality impact assessment while the water quality impact is predicted to be acceptable with the adoption of mitigation measures, a further detailed water quality impact assessment is considered not necessary.</p> <p><u>Discharge of brine water from desalination plant</u></p> <p>As predicted in the water quality impact assessment, the zone of initial mixing for the saline water discharge would be confined within 100 m from the saline outfall. At the boundary of the zone of initial mixing for the saline water discharge, the level of dilution is predicted to be at least 90 times of the discharged concentration, which implies a less than 2% elevation above ambient level. As identified in the water quality impact assessment, the nearest water sensitive receivers would be the coral communities at the south western shore at Shek Kwu Chau, which is located over 400 m from proposed discharge location. In view of the low level of elevation as well as the localized effect on salinity due the brine water discharge, no adverse water quality impact to the nearby water sensitive receivers is anticipated.</p> <p><u>Section 7b Ecological Impact (Aquatic) (Artificial Island near SKC)</u></p> <p><u>Corals</u></p> <p><u>Light attenuation</u></p> <p>It should be noted that shading of the coral colonies from the Shek Kwu Chau island already exist. Moreover, certain level of turbidity also exist around the Project site, because the western part of the Southern WCZ (where the artificial island near SKC will be located) is directly open to the South China Sea, and is affected by the discharge from Pearl River; high level of SS is often recorded at the western water quality monitoring stations. The recorded visibility at coral sites during dive surveys was 0.5-1m. Therefore, corals along SKC shore are considered to have adapted to shady and turbid environmental condition. On the other hand, the proposed channel between IWMF and Shek Kwu Chau would be ~10-40 m wide and in open form. Significant decrease in light attenuation is not expected.</p> <p><u>Change in current velocity</u></p> <p>Corals along the SKC shore are currently exposed to strong current and tidal action. As quoted in the EIA report, previous studies have documented that enhanced water flow stimulates photosynthesis within a coral colony. A coral monitoring programme will be implemented to monitor the health and condition of corals during pre-construction phase (or baseline phase), construction phase, and operation phase (one year after the completion of construction works).</p> <p><u>Sediment Elevation</u></p> <p>A coral monitoring programme will be implemented to verify the predicted impacts, and examine whether the mitigation measures recommended in the EIA report have been effectively implemented to protect the corals along the shore of Shek Kwu Chau from negative impacts from construction activities. The programme will cover pre-construction phase (or baseline phase), construction phase, and operation phase (one year after the completion of construction works).</p>	<p>S.5b.7.3.5 and 5b.7.6.10-14</p> <p>S.5b.7.6.14</p> <p>EIA:S7b</p> <p>EIA: S7b.6.3.10-16</p> <p>EIA: S7b.10.3</p>

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	<p>will threaten the growth and survival of translocated octocoral, particular the soft coral species <i>Dendronephthya</i>, which needs to pump in water and provide its body with rigidity as the hydroskeleton.</p> <p>We recommend the coral translation exercise should be lead by coral specialist(s) who preferably have coral translocation experience. WWF is of the view that the selection of recipient site for the translocated corals is a key element in the coral translocation exercise planning process. The following criteria for selecting a suitable coral recipient site should be met in order to increase the survival rate of the translocated corals:</p> <ol style="list-style-type: none"> 1 2 1. The recipient site should support a similar coral community and the same coral species (naturally occurred) as that of donor site; 3 2. The recipient site should have similar environmental conditions such as hydrographic condition and bathymetry as that of donor site; 4 3. Translocated boulders/rocks should be permanently stabilised to prevent them overturning by occasional strong currents/storms; and 5 4. The recipient site should have reasonable protection from storm/typhoon damage. <p>Finless Porpoise <u>Inadequate Information to assess impact</u> The Finless porpoise (<i>Neophocaena phocaenoides</i>), is listed as "Vulnerable" in the IUCN Red List of Threatened Species⁶, and CITES Appendix I (i.e. highest protection)⁷, and one of two resident cetaceans inhabiting Hong Kong waters. More than 150 finless porpoises could be found in Hong Kong waters⁸ during the peak season (December to May). Preceding monitoring⁹ and current study both explicit that waters between Shek Kwu Chau and Soko Islands, including the proposed reclamation area, is amongst the most important habitats for the Finless porpoise in Hong Kong where high density of finless porpoise can be found.</p> <p>The data provided by the AFCD marine mammal monitoring report (2009-2010) and the present EIA study both reveal that notable concentrations of porpoise were observed at the southwest of Shek Kwu Chau, and the offshore waters at the southwest portion of the survey area. Sightings were noted within the proposed reclamation and breakwater area, as well as in close proximity to the proposed submarine cable alignment. In addition, a total of 49 porpoise individuals were sighted in the water areas in proximity to Project area during the six-month survey period, and potentially comprising up to ~1/3 of the estimated total porpoise population in Hong Kong during the peak season. In view of this, the Project area is considered to be in the range of porpoise preferable habitat.</p> <p>xxx is of the opinion that this porpoise impact assessment has confirmed the Project area is of high ecologically value. We question why such important habitat has not been avoided in the first place according to the Avoidance Principle (EIAO Guidance Note No.1/2010).</p> <p><u>Impact from permanent loss of habitat</u> Reclamation work of IWMF is very likely to result in porpoise's behaviour alternation, increase in stress and displacement from important habitat. The modification of habitat may cause changes in their food sources (through change in prey aggregation), hence may affect the distribution of this marine mammal.</p>	<p><u>Coral translocation</u> A detailed coral translocation plan would be submitted upon approval of this Project, prior to commencement of construction works. Post-translocation monitoring on the translocated corals would also be considered.</p> <p>Finless Porpoise <u>Inadequate Information to assess impact</u> The survey methodology followed the requirements under EIAO TM and made reference to EIAO Guidance Note. The ecological baseline survey aimed at collecting representative ecological data through sampling. The data collected for the IWMF EIA study is considered adequate for the purpose of ecological impact assessment.</p> <p><u>Impact from Permanent Loss of Habitat</u> It is understood that reclamation works for IWMF would result in loss of important Finless Porpoise habitat. As a compensation measure for the habitat loss, the Project Proponent has made a firm commitment to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance.</p> <p><u>Lack of a comprehensive plan to conserve the Finless porpoise</u> The firm commitment to seek to designate the marine park, where incompatible activities would be regulated and proper management regime imposed in accordance with the Marine Park Ordinance, would significantly help conserve Finless Porpoise, and hence serve as an effective compensation measure for the permanent loss of Finless Porpoise habitat arising from the project. The Project Proponent shall seek to complete the designation by 2018 to tie in with the operation of the IWMF at the artificial island near SKC.</p> <p>Section 7b Ecological Impact (Terrestrial) (Artificial island near SKC) Section 7b.5 Ecological Value Habitat evaluation of shrubland has taken in consideration of the current ecological value of the habitat. Potential impacts on shrubland has been identified and evaluated in the report, where appropriate mitigation measures have been proposed accordingly to minimise adverse impacts to acceptable level.</p> <p>White-bellied sea eagle (WBSE) and other avifauna <u>Nest of White-bellied sea eagle (<i>Haliaeetus/eucogastet</i>)</u> Potential impacts from the Project on WBSE have been identified in the EIA report, covering habitat and foraging ground quality deterioration due to degradation in water quality, noise, increase in marine traffic, glare disturbance, air and dust emission, heat and fume exhaust, and nest abandonment. More details can be found under EIA report S7b.6. Other than the WBSE being a highly mobile species with large territory size, and that similar habitat is available in the vicinity (i.e. the rest of hillside coastal shrubland at Shek Kwu Chau, and other remote islands e.g. Soko Island, Hei Ling Chau), specific measures to minimise disturbance on breeding WBSE were also proposed in the EIA report to minimise the identified impacts, including avoidance of noisy works during the breeding season of WBSE, opt for quieter construction methods and plants, restriction on vessel access near the nest of WBSE, WBSE monitoring programme, education of staff, minimisation of glare disturbance, and adoption of noise control measures.</p> <p><u>Noise Disturbance during Construction, Noise Disturbance during Operation</u> Measures proposed to minimise impacts on WBSE include: <ul style="list-style-type: none"> • Avoidance of noisy works during the breeding season of White-bellied Sea Eagle (Dec to May) – minimizing disturbance on WBSE during the sensitive breeding period </p>	<p>EIA: S7b.8.3.31-32</p> <p>EIAO TM</p> <p>EIA: S7b.8.4.1-8</p> <p>ES:4.3.5</p> <p>EIA: S7b.8</p> <p>EIA: S7b.6</p> <p>EIA: S7b.8.3.34-40, 7b.10.4</p>

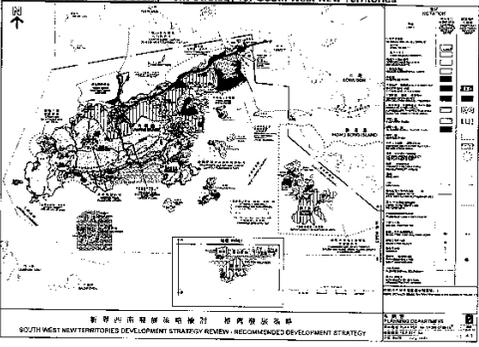
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	<p><u>Lack of a comprehensive plan to conserve the Finless porpoise</u> xxx considers that the Hong Kong Government has the obligation to protect species of high conservation interests in Hong Kong, including the protected and "Vulnerable" Finless porpoise. However, apart from a regular monitoring programme, to date there have been no active conservation measures proposed for this species despite increasing threats in recent years, including the cumulative impacts from developments (e.g. proposed windfarm at Southwest Lamma) as well as more high-speed vessel traffic. While WWF supports the designation of Marine Parks to protect important habitats for the Finless porpoises, their role as a proactive threat mitigation tool to conserve the species should be clearly defined. As such, there is a clear need for the Government to formulate and implement a Finless Porpoise Management Plan under an overarching policy for the conservation of this protected species. The key aspects of such a best-practise Plan should be as follows:</p> <ul style="list-style-type: none"> • A SMART management objective for species in Hong Kong waters • The objects/threats (e.g. threats from marine vessel traffic, new development etc) to be addressed under the Plan, and objectives to be achieved; • Management strategies and measures; • Evaluation of the conservation status of the porpoise based on the existing information; • Types of activities and actions (e.g. research) to help achieve the objectives; and, • Government roles and responsibilities. <p>Section 7b Ecological Impact (Terrestrial) (Artificial island near SKC) Section 7b.5 Ecological value According to Table 7b.23, the ecological value of shrubland habitat, in which the Bogadek's burrowing lizard has been recorded and an active nest of White-bellied Sea Eagle was identified, was considered to be moderate. However, with reference to the approved EIA report of the theme park in Penny's Bay (AEIAR-032/2000), the woodland at Pa Tau Kwu at which a breeding pair of White-bellied Sea Eagle and their nest was identified was considered to be of high ecological value¹⁰. We view that the project proponent should make reference to the previously approved EIAs and ensure the accuracy of the evaluation of the ecological value of the habitat within the study area as it can significantly affect the identification and evaluation of the ecological impacts on the flora and fauna, and the mitigation measures being proposed to minimize the identified impacts.</p> <p>White-bellied sea eagle (WBSE) and other avifauna <u>Nest of White-bellied sea eagle (<i>Haliaeetus /eucogastet</i>)</u> With reference to the breeding surveys of WBSE since by Agriculture, Fisheries and Conservation Department (AFCD) since 2002, it states the heavy sea traffic at the area around Yeung Chau, which is located about 700 m from the Sai Kung Pier and town, may render the area become less suitable for the WBSE to forage, incurring adverse impacts to their breeding success. Although the nest at Shek Kwu Chau is not within the Project area, the estimated distance from the nest to the nearest works from breakwater, berth and cofferdam are approximately 350 m, 500 m, and 550 m respectively¹¹. Therefore, we are of grave concern that the disturbance due to the construction and operation of the IWMF will decrease the breeding success of the WBSE.</p> <p>While the previous study at Tai Ngam Hau suggests that WBSE has a certain level of tolerance from human disturbance and could achieve breeding success under the influence of human activities¹², we consider it appropriate to compare the two locations as that the level of disturbance from human</p>	<ul style="list-style-type: none"> • Opt for quieter construction methods and plants – adopted the less disturbing cofferdam construction design, avoided the noisy percussive piling method. • Restriction on vessel access near the nest of White-bellied Sea Eagle – minimisation of human disturbance • Education of staff • Minimisation of glare disturbance • Non-reflective and non-transparent building envelope of IWMF – minimise bird collision • The visitor/staff shuttle ferry frequency (between Cheung Chau and SKC) has reduced from 16 round trips/day to 12 round trips/day (MSW barge frequency: 4 round trips/day) – minimise human disturbance <p>Noting that the possibility of WBSE nest abandonment still remains after implementation of mitigation measures, a White-bellied Sea Eagle monitoring programme would be implemented to assess any adverse and unacceptable indirect impacts on the nest of White-bellied Sea Eagle, comprising 3 phases: pre-construction phase, construction phase, and operation phase. Should White-bellied Sea Eagles be absent for a whole day during the monitoring. Event and Action Plans for construction and operation phases is recommended.</p> <p><u>Glare Disturbance</u> Considering the potential glare disturbance on WBSE, minimal amount of outdoor lighting would be adopted during the detailed design stage. Moreover, non-reflective and non-transparent material has been proposed for the building envelope of IWMF, hence minimising glare disturbance and bird collision.</p> <p><u>Barrier effect of IWMF structure</u> It should be noted that the shore of SKC would be 10-40 m away from the IWMF structure; no direct occupation of the shoreline will be resulted by the project. Shore birds would still be able to utilise the rocky shore habitat as roosting and foraging grounds. Within the IWMF site, buildings of various heights would allow birds to fly through the site. Section 7b.6.3.48-50 of the EIA report has assessed barrier effect for avifauna that utilise the shore.</p> <p><u>Residual impact</u> Measures proposed to minimise impacts on WBSE include:</p> <ul style="list-style-type: none"> • Avoidance of noisy works during the breeding season of White-bellied Sea Eagle (Dec to May) – minimizing disturbance on WBSE during the sensitive breeding period • Opt for quieter construction methods and plants – adopted the less disturbing cofferdam construction design, avoided the noisy percussive piling method. • Restriction on vessel access near the nest of White-bellied Sea Eagle – minimisation of human disturbance • Education of staff • Minimisation of glare disturbance • Non-reflective and non-transparent building envelope of IWMF – minimise bird collision • The visitor/staff shuttle ferry frequency (between Cheung Chau and SKC) has reduced from 16 round trips/day to 12 round trips/day (MSW barge frequency: 4 round trips/day) – minimise human disturbance <p>Noting that the possibility of WBSE nest abandonment still remains after implementation of mitigation</p>	<p>EIA: S7b.6.3.48-50</p> <p>EIA: S7b.8.3.34-40, 7b.10.4</p>

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	<p>activities, waterway traffic and construction of the IWMF must be much higher than that in Tai Ngam Hau.</p> <p><u>Noise Disturbance during construction</u> The project proponent suggests that the noisy construction works would be avoided during the breeding season of WBSE¹⁵, and good site practices and use of quiet plants and working methods are proposed to minimize the noise disturbance on avifauna during construction¹⁴. Given White-bellied Sea Eagle is sensitive to human disturbance during the breeding season, and may even abandon a nest if disturbed¹⁵, we consider that the proposed mitigation measures cannot explicitly address the potential noise impacts on the WBSE. For instance, we opine that other appropriate measures (e.g. movable noise barrier) should also be provided to minimize the disturbance impacts on the avifauna, especially during the breeding season.</p> <p><u>Noise Disturbance during operation</u> While the predicted noise level during daytime, evening time and night time would meet the noise criterion, we consider that noise impacts during operation are still anticipated due to some sources of noise associated with the daily operation of the IWMF (e.g. container vehicle and marine vessel). WWF considers it important to adopt a precautionary principle to minimize the disturbance impacts on the species of conservation concern, such as the White-bellied Sea Eagle, as far as practical.</p> <p><u>Glare disturbance</u> While the project proponent suggests that <i>"any un-necessary outdoor lighting should be avoided, and inward and downward pointing of lights should be adopted"</i>¹⁶, we are highly dubious about the effectiveness of the proposed measures to minimize the glare disturbance on White-bellied Sea Eagle as the development scale of the IWMF is large (the size of the physical structure above water surface is 15.9 ha). Since the glare disturbance may cause disorientation of birds by interfering with their magnetic compass and disruption in behavioural patterns and foraging pattern¹⁷, a precautionary principle should be adopted to minimize the glare impacts to the fauna groups, in particular the White-bellied Sea Eagle.</p> <p><u>Barrier effects of the IWMF structure</u> It is stated in Section 7b.6.3.49 that the height of the buildings associated with the IWMF would range from 5-50 m above ground and the stack height would be 150 m. Given the flight heights of the WBSE (14 to 136 m above sea level) and Pacific Reef Egret (below 14 m) overlap with the range of the building height, the buildings will act physical barriers which obstruct the birds from using the coastal area. Therefore, we are concerned that adverse ecological impacts will result as the IWMF prevents the avifauna from making use of the shore of Shek Kwu Chau as roosting and foraging grounds.</p> <p>With reference to Figure 7b.1, three individuals of Pacific Reef Egret were recorded along the rocky shore near the proposed reclamation area while one individual of WBSE was recorded among the shrubland habitat near the shore. In addition, while it is stated in Section 7b.6.2.85 that the intertidal rocky shore is considered to be an important habitat for these two species, the project proponent fails to explicitly evaluate the potential ecological impacts of the IWMF including the reclamation works on the avifauna, in particular the above-mentioned species recorded near the Project area.</p> <p>While the ranges of territory of two breeding pairs of WBSE at Yeung Chau and Tai Ngam Hau were</p>	<p>measures, a White-bellied Sea Eagle monitoring programme would be implemented to assess any adverse and unacceptable indirect impacts on the nest of White-bellied Sea Eagle, comprising 3 phases: pre-construction phase, construction phase, and operation phase. Should White-bellied Sea Eagles be absent for a whole day during the monitoring. Event and Action Plans for construction and operation phases is recommended.</p> <p>Herpetofauna <u>Cover board survey</u> Cover board survey was conducted between May and October 2009, covering 6 months of their active season. A total of 25 wooden cover boards of 80 cm x 80 cm were deployed at different habitats including shrubland, plantation, developed area, and near pond and watercourse. Boards were placed on natural areas with flat soil surface. Warning signs were hung near the deployed boards to minimise potential human disturbance. During each of the cover board surveys, each of the boards was lifted to check for the potential presence of any hiding amphibians and reptiles. Although by the end of the survey period, a total of 6 boards went missing, nevertheless, cover board survey was an additional act for herpetofauna survey due to previous records of Bogadek's Burrowing Lizard. It should be noted that standard herpetofauna surveys were conducted from March to June, where walk transects, searches at habitats/breeding areas of herpetofauna near pond, stream, vegetated areas with leaf litter, and underneath rotten logs were conducted. The herpetofauna survey recorded a total of 6 reptile species and 5 amphibian species.</p> <p><u>Potential impacts of Pest</u> The concern on pest has been considered, where measures for pest control have been proposed in the EIA report S7b.8.3.48:</p> <ul style="list-style-type: none"> • Transportation of wastes in enclosed containers • Waste storage area should be well maintained and cleaned • Waste should only be disposed of at designated areas • Timely removal of the newly arrived waste • Removal of items that are capable of retaining water • Rapid clean up of any waste spillages • Maintenance of a tidy and clean site environment • Regular application of pest control • Education of staff the importance of site cleanliness <p>Section 8b Fisheries Impact (SKC) <u>Additional studies are required to update the fisheries resources</u> The comprehensive Port Survey was conducted in 2006 by the Agriculture, Fisheries and Conservation Department to collect updated data on the fisheries production and fishing operations in Hong Kong waters for the year of 2005. The Port Survey consisted of an interview programme. During the interviews, particulars (e.g. vessel length, type and its homeport) of the fishing vessels were recorded and information about their fishing operations and fisheries production in Hong Kong waters were collected.</p> <p>Since the objective of the Fisheries Impact Assessment is to identify any negative impacts on capture and culture fisheries, and to propose measures to mitigate those impacts in the study area, baseline data obtained from the Port Survey during 2006 is considered adequate and relevant to reflect the situation on capture and culture fisheries in the study area.</p> <p>Other relevant fisheries studies, including the fisheries baseline surveys (ichthyoplankton and post-larvae)</p>	<p>EIA: S7b.3.3.8-1 3, 7b.4.5.6, Appendix 7b.7</p> <p>EIA: S7b.8.3.48</p> <p>EIA: S7b.4.2.29, 8b.6.1.8</p>

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	<p>estimated to be 3 -4 km in radius during the breeding period ¹⁸, we consider is inappropriate to compare the area of physical structure above water surface (15.9 ha) with the rest of open sea. By making reference to the range of territory of the WBSE, the IWMF will be considered to be a significant barrier to the WBSE, and thus WWF remains concerned that the ecological linkage along the shore of Shek Kwu Chau will be adversely affected.</p> <p><u>Residual Impact</u> It is stated in Section 7b.9.1.6 that the possibility of WBSE nest abandonment still remains even though the proposed mitigation measures during construction and operation phases are implemented. In the absence of effective mitigation measures to address the potential ecological impacts (e.g. nest abandonment), we consider that the project proponent fail to provide the justification for his statement "<i>Residual impact on the nest of White-bellied Sea Eagle is considered to be acceptable</i>". Given WBSE is a species of conservation importance and the breeding pair at Shek Kwu Chau is one of only eight active breeding pairs recorded in Hong Kong in 2008/2009¹⁹, we strongly recommend that the residual impact due to the proposed IWMF should be compensated off-site by a long term conservation plan for WBSE.</p> <p>Herpetofauna <u>Cover board survey</u> With reference to Appendix 7b. 7, the results of the cover board surveys conducted in Shek Kwu Chau indicate that some of the cover boards were lost and only three individuals of <i>Bufo melanostictus</i> were recorded during the survey. Since a certain proportion of cover boards was lost and only one amphibian species was recorded during the survey, we are dubious about the effectiveness of the cover board surveys conducted by the project proponent in terms of recording various species of amphibians and reptiles.</p> <p><u>Potential impacts of Pest on the Bogadek's Burrowing Lizard and other herpetofauna</u> We consider that the increased vessel traffic and waste transported to the IWMF may facilitate the introduction of pests to Shek Kwu Chau, rendering adverse ecological impacts to the native fauna and flora, especially the species of conservation interest (e.g. Bogadek's Burrowing Lizard). While some good waste management practices have been proposed to reduce the risk of introduction of pest to the island, we consider that more stringent measures should be provided to prevent the wildlife with high conservation interests from adversely affected from the introduction of potential pests. A comprehensive pest control plan should be formulated prior to the operation of the IWMF.</p> <p>Section 8b Fisheries Impact (SKC) <u>Additional studies are required to update the fisheries resources</u> xxx rejects the findings of the fisheries impact study. The methodology used is weak, the data out-of-date, would not be acceptable for other important fauna/resources, and is inadequate for an assessment in an EIA. Furthermore, there are strong ecological reasons to suspect that the methodology will produce findings that have little relation to current conditions in the Project Area. We have previously expressed our grave concerns on the over reliance on Port Survey data. and earlier 1998 study results (the latest one released in 2006) and the out-dated data in two other coastal development projects and the project proponents have agreed to conduct supplementary fishery surveys.</p> <p>Port Surveys are grossly inadequate for identifying and quantifying fisheries resources and important</p>	<p>under EIA-125/2006 Liquefied Natural Gas (LNG) Receiving Terminal and Associated Facilities: Part 2 South Soko, were also referred to in the Fisheries Impact Assessment as supplementary information, in order to provide a more thorough understanding of the fisheries condition of the study area.</p> <p><u>Water cooling system -entrainment and impingement of eggs and larvae</u> It should be noted that IWMF will adopt an air cool system. Impact assessment for entrainment and impingement of eggs and larvae has been included in Section 8b.6.2.6.</p> <p>Other Impacts <u>Antifouling paint</u> No antifouling paint will be used.</p> <p>Section 7a. Ecological Impact on Tsang Tsui <u>Ecological survey</u> Although the study period of the current ecological survey only covered from January 2009 to August 2009, the impact evaluation is based on the findings from the current study and literature review. Site relevant field surveys previously conducted under other EIA studies such as Sludge Treatment Facilities EIA and WENT Landfill Ex EIA lasted for over a year, i.e. March 2007 to August 2008. Therefore, the impact evaluation has included different faunal groups occurred in different seasons and is considered as sufficient.</p> <p><u>Impacts on Little Grebe (<i>Tachybaptus ruficollis</i>)</u> As revealed from the field survey and literature review, habitat with more stable condition (i.e. permanent water pool with little fluctuation in water level) is favourable for breeding of Little Grebe. Condition of Middle Lagoon is volatile, and only 18% of the project footprint (1.98 ha) would encroach on the area usually flooded. Moreover, there are alternative habitats nearby. Therefore, the impact on the Little Grebe due to the breeding habitat loss is considered to be low to moderate. To compensate for the breeding ground loss, 1.2 ha permanent pond habitat, and the southern unoccupied Middle Lagoon portion with a size of 4.5 ha would be enhanced under the current project. The residual loss would be about 9 ha dry ash lagoon area, and the proposed IWMF would not cause adverse impact to Little Grebe due to the loss of habitat which functions as its breeding ground. Potential impacts on Little Grebe include habitat loss, habitat fragmentation and human and noise disturbance. Evaluation could be found in Table 7a.26.</p>	<p>EIA: S8b.6.2.6</p> <p>EIA: S7a.4</p> <p>EIA: Table 7a.26</p>

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	<p>fisheries areas in Hong Kong. The nature of the Surveys (through fishers' interviews) and the length of time (i.e. every few years) between Surveys particularly cast serious doubts on the quality and accuracy of the fisheries information. Since the Surveys relied almost entirely on reported catches from fishers, the high sampling errors and systematic bias may largely affect the accuracy of the estimates. In addition, the interview data is not ground-truthed by actual fishing surveys. As the size of fish stocks often vary massively from year to year due to naturally large variations in recruitment, the every-several-year Port Surveys should not be expected to reflect the state of current fisheries resources with any accuracy several years after they have been completed, notwithstanding the inherent weaknesses of an interview based methodology ..</p> <p>Using data of such dubious quality could likely lead to the under-estimation of the potential impacts from the work to the fisheries (both resources and fishermen livelihood) in the Project area. The impact on the fisheries, in particular, the fish eggs and larvae, if not being assessed carefully, will cause detrimental impact to the fish stocks, as well as the prey availability to the dolphins, alternating their distribution, abundance and feeding behaviour.</p> <p>xxx urges the project proponent in the strongest possible manner to conduct supplementary fishing surveys to fill the knowledge gap of the fisheries resources and provide up-to-date fisheries stocks information in the Project area before assessing the severity of the impacts. The current conclusions on the impacts of the project on fisheries resources are meaningless, given the inadequacies of the methods used to derive them.</p> <p><u>Water cooling system -entrainment and impingement of eggs and larvae</u> An on-site desalination plant will supply water to the IWMF, which continuous seawater intake will be required. WWF is concerned that this cooling system will continuously causing entrainment and impingement of eggs and larvae of marine organisms (such as corals and fish), affecting the recruitment and abundance of the marine species inhabit in the Project area. The potential impacts which will be caused by this process are not mentioned or assessed anywhere in the EIA report but should be. The potential impacts have been evaluated in previously approved EIA, i.e. Liquefied Natural Gas (LNG) Receiving Terminal and Associated Facilities (EIA-125/2006).</p> <p><u>Other Impacts</u> <u>Antifouling paint</u> Certain chemical compounds in the antifouling paint were found to inhibit the coral photosynthesis and disruption of growth of fish eggs and larvae. The project proponent shall investigate the toxicity effect(s) of the chosen antifouling paint on the surface of any submerged facilities to the nearby marine sensitive receivers.</p> <p><u>Section 7a. Ecological Impact on Tsang Tsui</u> <u>Ecological survey</u> While it is stated in Section 7a.3.3.2 that a six-month ecological survey conducted from January to June 2009 covering both dry and wet season, xxx considers that the 6-month wildlife surveys are not comprehensive to identify the sensitive fauna inhabiting the study site (e.g. avifauna) and the potential impacts incurred by the project. Although the surveys included both wet and dry seasons, only early wet season and late dry season were covered. Since the study period of the ecological survey is limited, potential impacts due to the proposed IWMF on different fauna groups especially those species which are not identified in the EIA may be underestimated.</p>		

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	<p><u>Impacts on Little Grebe (<i>Tachybaptus ruficollis</i>)</u></p> <p>While a large portion (about 82%) of the proposed site area will be located at the proportion of the Middle lagoon where floral and fauna diversity is limited, an area of 1.98 ha which is usually flooded will be directly encroached by the proposed development (See Section 7a.6.2.3). Since the Middle Lagoon is a potential breeding site of the Little Grebe (<i>Tachybaptus ruficollis</i>) and the number of know breeding sites of the species in Hong Kong is limited, we are concerned that the Little Grebe will be adversely affected due to the loss of habitat which functions as a breeding ground. Nevertheless, the project proponent fails to explicitly evaluate the potential ecological impacts on the Little Grebe.</p> <p>We would be grateful if the above comments can be considered by the Director.</p> <p>¹ Environmental Impact Assessment Ordinance, Cap.499 Guidance Note <i>No 1/2010</i></p> <p>² See Appendix 5 of the Final Report of the South West New Territories Development Strategy Review (SWNT DSR) -A Summary of the Broad Land Uses Recommended by SWNT DSR</p> <p>³ Howell B.R., Day O.J., Ellis T. and Baynes S.M. 1998. Early life stages of farmed fish. In: <i>Biology of Farmed Fish</i>. Black. KD. and Pickering AD.(Eds.). Sheffield Academic Press, pp. 27-66</p> <p>⁴ Nasrolahi A, Farahani F. and Saifabadi S.J. 2006. Effect of salinity on larval development and survival of the Caspian Sea Barnacle. <i>Balanus improvisus</i> Darwin (1854). <i>Journal of Biological Sciences</i> 6(6): 1103-1107.</p> <p>⁵ Luppi TA, Spivak E.D. and Bas C.C. 2003. The effects of temperature and salinity on larval development of <i>Annases rubripes</i> Rahtbun, 1897 (Brachyura, Grapsioidea, Sesarmidae) and the southern limit of its geographical distribution. <i>Estuarine, Coastal and Shelf Science</i>. 58:575-585.</p> <p>⁶ IUCN Red List http://www.iucnredlist.org/apps/redlist/search Accessed on 16 March 2011.</p> <p>⁷ CITES-listed species database.http://www.cites.org/eng/resources/species.html Accessed on 16 March 2011.</p> <p>⁸AFCDdata. http://www.afcd.gov.hk/en/conservation/con_mar/con_mar_fin/con_mar_fin_fin/con_mar_fin_fin_djs_where.html. Accessed on 16 March 2011.</p> <p>⁹ AFCD. 2010. Monitoring of Marine Mammals in Hong Kong Waters -Data Collection (2009-10).</p> <p>¹⁰ See Table 7.3a of the Terrestrial Ecology Assessment of the Construction of an International Theme Park in Penny's Bay of North Lantau together with its Essential Associated Infrastructures</p> <p>¹¹ See Section 7b.6.2.92 of the EIA report for the IWMF</p> <p>¹² AFCD Newsletter Issue No.18: Breeding Ecology of White-bellied Sea Eagle in Hong Kong -A Review and Update</p> <p>¹³ See Section 7b.8.3.34 of the EIA report for the IWMF</p> <p>¹⁴ See Section 4b.8 of the EIA report for the IWMF</p> <p>¹⁵ Clunie, P., 1994. <i>Plants and Animals: Flora and Fauna Guarantee: Action Statement</i> No. 60: <i>'White-bellied Seaeagle Haliaeetus leucogaster</i>. Department of Natural Resources and Environment, Australia.</p> <p>¹⁶ See Section 7b.B.3.4D of the EIA report for the IWMF</p> <p>¹⁷ <i>ibid</i></p> <p>¹⁸ AFCD Newsletter Issue No.5: The Population and Breeding Ecology of White-bellied Sea-eagles in Hong Kong</p> <p>¹⁹ AFCD Newsletter Issue No.18: Breeding Ecology of White-bellied Sea Eagle in Hong Kong -A</p>		

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	<p>Review and Update</p> <p>Figure 1: The broad land-use proposals and their distribution within the sub-region under the Recommend Development Strategy for South West New Territories</p> 		
PC295	<p>香港目前三個堆填區日趨飽和，若不從速正面的處理廢物問題後果堪虞。作為社會的持分者，xxx 誠意就如何減少廢物、發展環保工業、技術開發及持份者的參與等問題上，同心協力為改善環境出一分力，向政府提出關於綜合廢物管理設施的建議(詳細資料請見附件)。</p> <p>為了取得業界、學者、區議員及關心廢物管理的廣大市民意見，xxx 特別於 2011 年 3 月 15 日假浸會大學舉辦一個名為〈一『爐』永逸〉？香港廢物管理的座談會，為各界提供意見交流的平台。當日出席者超過 100 位，包括來自政府、區議會、業界、環保團體、學校的代表(出席者詳情請參見附表一)。綜合各持份者對香港的廢物管理策略、綜合廢物管理設施的可行性、減廢策略和環保回收工業出路等的意見，xxx 現提出此建議書作環境局考慮，希望能有助香港能妥善和有效解決當前嚴峻的廢物問題。</p> <p>附件</p> <p>導言</p> <p>香港目前三個堆填區日趨飽和，若不從速正面的處理相關問題後果堪虞。作為社會的持分者，xxx 誠意就如何減少廢物、發展環保工業、技術開發及持份者的參與等問題上，同心協力為改善環境出一分力，向政府提出關於綜合廢物管理設施的建議。</p> <p>為了取得業界、學者、區議員及關心廢物管理的廣大市民意見，xxx 特別於三月十五號下午六時半假浸會大學逸夫行政樓 501 室舉辦一個名為〈一『爐』永逸〉？香港廢物管理的座談會，為各界提供意見交流的平台。當日出席座談會的講者，包括環境保護署助理署長區偉光先生、中華基督教青年會環保顧問張麗萍小姐及香港浸會大學生物系黃煥忠教授，還有香港民政事務局政治助理徐英偉先生列席。出席者共 107 位，包括來自政府、區議會、業界、環保團體、學校的代表(出席者詳情請參見附錄的表一及相片)，討論過程理性、客觀，而且具建設性。</p> <p>建議</p>	<p>為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》(以下簡稱《政策大綱》)所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <ol style="list-style-type: none"> 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳； 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經濟誘因；及 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施(包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物／有機廢物的有機資源回收設施)和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。 <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>我們一直就擬建的綜合廢物管理設施與相關的區議會及地區人士保持聯絡，希望能令地區人士更了解現代廢物焚化處理方法，如在 2008 年 3 月，我們曾向離島區議會介紹在本港發展綜合廢物管理設施的最新進展和選址研究的結果，並分別在 2008 年 4 月及 5 月出席長洲鄉事委員會及其舉辦的居民大會，聽取市民的意見。在 2009 年，我們聯同屯門和離島區共 26 位議員到東京和大阪，實地考察日本當地如何利用先進的焚化技術來處理當地的廢物及污泥。我們亦於 2010 年 11 月 15 日、2011 年 2 月 21</p>	<p>ES:S1</p> <p>Not under the jurisdiction of EIOA</p>

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>參加者對香港的廢物管理策略、綜合廢物管理設施的可行性、減廢策略和環保回收工業出路等方向提出客觀和建設性的討論。綜合各持份者的意見，xxx 提出以下建議作環境局考慮，建議如下：</p> <ol style="list-style-type: none"> 1. 政府過去廢物管理政策未能成功地解決廢物產生和處理，錯誤地倚賴填埋技術作為處理廢物的唯一方案，堆填區到 2018 年完全飽和。要解決當今垃圾的危機，擴建堆填區現實上是無可避免，建設一座 3000 噸的轉化為能的焚化爐亦是無可避免。 2. 雖然各界沒有強烈反對政府興建焚化爐，各出席者均同意政府要同時顯示減廢的決心，加快落實生產者責任制的推行，就廢物收費和源頭分類的立法訂出確實時間表，方能獲得市民支持綜合廢物處理施。 3. 要求政府就減廢工作推出一系列減廢措施，包括①擴大可回收物料的種類、②加強教育市民減廢的意識；及③加強廢物分類處理和教育工作 5. 對環保回收工業應提供足夠經濟誘因，增加香港回收成效，讓回收工業能健康發展，利用這個機會建立香港的環保工業。 <p>各出席者認為，在這樣的條件下，綜合廢物管理系統才會得到市民的認同和支持。而興建焚化爐、擴建堆填區、推行減廢措施的先後，各界也認為有需要落實前作出具體的安排。</p> <p>業界及學者們的意見如下：</p> <p>環保團體：</p> <ul style="list-style-type: none"> • 可參考台北的強制性分類回收推行方式，他們的推行過程可分三個階段：(1) 教育及推廣，(2) 實踐，(3) 傳媒配合下予以推行。 • 如果政府在分類回收方面的架構及安排未做好，會引致多種問題的發生（如市民棄置膠樽時不知道要先清潔；同時，回收物料的種類也不多）。 • 建議政府首先從問題的源頭做起，處理好最困難的工作，包括推行生產者責任計劃，改善三色回收桶的不當使用問題。建議在 2013 年以前做好減廢和垃圾徵費，再考慮興建焚化爐、擴建堆填區等安排。 • 建議政府立法要求製造商在塑料產品上加上清楚標籤，方便市民識別及分類，從而增加廢物的回收。目標是令所有東西都是可回收的資源。 • 政府的減廢決心是成功的關鍵。如果單一的興建焚化爐，只會把迫在眉睫的問題再一次被忽視。業界不反對未來興建焚化爐，但同時要加強教育，集中做好減廢，包括增加可回收物料的種類，幫助業界提高，並加速更多物料種類的資源回收，提供誘因鼓勵市民參與解決廢物問題。 • 政府應教育市民明白護環境的社會責任，如市民棄置膠樽前，應清洗及去掉包裝紙。同時，政府應提供更多資源，幫助民間機構的力量，協助市民如何減廢節能，讓市民最終培養成習慣。 	<p>日向離島區議會和 2011 年 3 月 8 日、3 月 10 日、3 月 17 日、3 月 29 日、4 月 11 日、4 月 12 日、4 月 14 日向長洲鄉事委員會、長洲地區組織及居民介紹在本港發展綜合廢物管理設施的最新進展。</p>	

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>回收再造工業：</p> <ul style="list-style-type: none"> • 認同有需要興建焚化爐及擴建堆填區，但應該在減廢推行以後。政府應思考如何增加回收率。政府應提供回收塑料及廚餘的時間表，包括什麼可以回收，如何提高回收量，何時立法等。 • 根據行內情況，相對於政府的數據 49%，認為回收率只有 1-2%。現時業界有約 200 名員工，由此估計，如政府能擴大回收率，將可製造達 2 萬就業機會。建議政府提供誘因，吸引業界回收更多種類的物料，如膠樽以外的塑膠、玻璃樽等。要做到 80% 的回收率不難。根據業界在天水圍做的民意調查，只要與居民做好溝通就可以。 • 目前許多資源都沒有回收商回收，包括膠樽以外的塑料、發泡膠、廚餘、木板、玻璃樽等，政府應推行生產者責任制。 • 政府也應考慮立例，確保不同的資源可以通過適當的途徑回收。 • 電腦等產品回收的前期處理過程成本很高，業界呼籲政府可以提供資助。 <p>區議員（特別是離島區議會）的意見：</p> <ul style="list-style-type: none"> • 認同有需要興建焚化爐，但政府應先落實有關環保政策。 • 離島區議會一致反對在石鼓洲興建焚化爐，因為擔心會導致損失 31 公頃的捕魚區域，進一步影響捕魚業；同時，可能會損害有生態價值的海域，包括影響江豚的生態等。業界也擔心焚化爐附近空氣累積二噁英，影響市民健康。相應地，政府要提出保障市民健康的方案方可行。 • 技術上，諮詢期不能太短。 • 同時，政府也要考慮其他方案，如有機處理廚餘等，讓全港市民承擔廢物處理的責任。廢物處理問題主要靠市民的自覺，而環保政策只是輔助而已。因此環保的社區教育也要加強。 <p>學校</p> <ul style="list-style-type: none"> • 建議政府在學校推行減廢教育，讓市民從小開始認識回收。 • 鼓勵政府可以提供誘因，並幫助業界解決回收過程的前期物料處理問題。 	<p>是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>是次環評研究根據兩個可能選址，評估了三個情景： 只於曾咀選址發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施； 只於石鼓洲附近的人工島上發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施；及 在兩個可能選址各自發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施（並存情況）。</p> <p>環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p>
PC296	<p>香港目前三個堆填區將於未來幾年相繼溢滿，處理廢物問題迫在眉睫。xxx 能為政府就廢物管理政策的制定上提倡意見，並提交關於發展綜合廢物管理設施的意見書(詳細資料請見附件)作環境局考慮。</p> <p>面對當前香港嚴峻的廢物問題，社會近來亦有廣泛討論應對的策略。本意見書的重點是探討如何能妥善和有效地去解決香港廢物問題，以及在石鼓洲人工島上興建綜合廢物管理設施的適切性，我們期盼本意見書能有助香港找出更有效和可持續的廢物管理對策。</p> <p>引言</p>	<p>為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》（以下簡稱《政策大綱》）所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <p>(a) 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳；</p> <p>(b) 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。</p> <p>(c) 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經</p>	<p>ES:S1</p>

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	<p>本港三個堆填區將於未來幾年相繼溢滿，處理廢物問題迫在眉睫。面對當前廢物問題的困局，環境局局長邱騰華於本年初提出一籃子廢物管理方案，包括多項源頭減廢的措施，將減廢比率從現時的 49% 增加至 55%，再配合現代化的廢物處理設施和擴建堆填區，以多管齊下的方式去解決迫切的廢物問題。最近，政府亦剛剛完成了綜合廢物管理設施選址的環評，傾向在毗鄰石鼓洲的人工島興建現代化焚化設施。究竟，這些措施能否妥善和有效解決香港廢物問題？香港能單靠焚化就一「爐」永逸嗎？而石鼓洲的人工島是合適的選址點嗎？我們廢物管理的對策是否有其他更可取和可持續的選擇呢？</p> <p>回顧</p> <p>首先，讓我們先檢視香港廢物問題的現況。根據環保署的資料，2009 年的香港都市固體廢物(即家居和工商廢物)生產量達 645 萬噸，儘管本港固體廢物的總回收率於 2009 年已升至 49%，每日仍有約 9,000 公噸的都市固體廢物需要棄置，當中 41%(3,715 公噸)是「易腐爛的廢物」(即廚餘)。另外，我們每日還需棄置約 3,100 公噸的建築廢物及 1,200 公噸的特殊廢物，即總共每日於堆填區棄置的固體廢物量多達 13,300 公噸，這沉重的廢物棄置量引致現有三個策略性堆填區會於七年內逐一填滿。</p> <p>在 2005 年，政府發表了一份《都市固體廢物管理政策大綱(2005-2014)》(政策大綱)，政策大綱主要建議利用廢物收費和生產者責任計劃，以及制訂堆填區棄置禁令，倡導市民加強循環再造，減少棄置廢物。同時，政策大綱也建議適度擴展堆填區來延長堆填區的使用年期，以及發展先進科技減少最終棄置前的廢物體積。然而，現時除了膠袋徵費已落實執行外，以上大部份的政策工具和措施仍在計劃或諮詢階段。事實上，根據政策大綱訂下的 3 大指標，當中亦只有「指標 2」能大致上達標，如下：</p> <ul style="list-style-type: none"> ● 指標1:每年減少本港產生的都市固體廢物量1%，直至2014年。[現況：除2007年外，2005到2009年分別比對前一年的固體廢物產造量均有上升。] ● 指標2:在2009年和2014年或之前，把都市固體廢物回收率分別提高至45%和50%。[現況：2009年已達49%回收率。] ● 指標3:以及在2014年或之前，把棄置於堆填區的都市固體廢物總量減少至25%以下。[現況：2009年棄置於堆填區的廢物總量為51%。] <p>繼立法會以高票通過廢除擴建將軍澳堆填區法令的動議後，政府最近公布了三大廢物處理策略，除了加強源頭減廢和鼓勵廢物回收，並計劃興建一個綜合廢物管理設施(預計每日可處理 3,000 公噸固體廢物)和兩期的有機資源回收中心(預計每日可處理 500 公噸廚餘)，以及擴建三個堆填區(擬擴建合共 10,850 萬立方米，約佔現時三個堆填區容量的 8 成)，政府期望新的減廢回收政策能把現時 49% 的回收率提升至 2015 年的 55%。</p> <p>面對當前香港嚴峻的廢物問題，社會近來亦有廣泛討論應對的策略。本意見書的重點是探討如何能妥善和有效地去解決香港廢物問題，以及在石鼓洲人工島上興建綜合廢物管理設施的適切性，我們期盼本意見書能有助香港找出更有效和可持續的廢物管理對策。</p> <p>1. 如何能妥善和有效地去解決香港廢物問題？</p> <p>1.1 香港並不能一「爐」永逸</p> <p>依我們估計，即使香港回收率達至 55% 水平，並已落成一個綜合廢物管理設施和兩期的有機資</p>	<p>濟誘因；及</p> <p>(d) 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施（包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物／有機廢物的有機資源回收設施）和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。</p> <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p>	

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	<p>源回收中心，使用這些設施後而剩下需棄置在堆填區的都市固體廢物量仍有約 4,700 公噸/日，而建築廢物則為 3120 公噸/日，需要填埋的廢物大約為原來的 60%，與政府所訂的少過 25% 仍有相當大的落差。但香港的三個堆填區容量將分別在 2012 至 2018 間，完全用盡，如此看來，除非能一下子將香港廢物產生量減少 3 成，否則興建一個 3,000 公噸的綜合廢物管理設施是無可避免，但從目前形勢要在短短一至兩年時間大量減少 3 成垃圾產量是不可能，若籌建綜合廢物管理設施不能儘快上馬，以現時堆填區剩餘容量，垃圾將會在 2018 年前無處容身，垃圾上街的可能性極高，所以在現時的狀況下是無爐不行，並且要適量擴建堆填區，以應付沒有焚燒的 4,700 公噸/日都市固體廢物和 3,120 公噸/日的建築廢物。</p> <p>但「爐」並不能永逸，每日仍有 8,000 公噸的廢物要運往堆填區，要進一步減少廢物體積及進一步延長堆填區的壽命，否則仍需要相當大面積的堆填區，或要興建多一個焚化設施來減低堆填負荷。</p> <p>1.2 香港需要制訂一個全面和綜合的廢物管理計劃 故此，我們呼籲香港政府及早制訂全面和綜合的廢物管理計劃，務求能完滿地解決本地廢物問題。此計畫並不是單靠一個或兩個焚化設施和填埋作為廢物處理選項，而是確認所有廢物管理選項在廢物處理問題上都有其重要角色，包括：廢物分類及收集、資源再生利用、生物處理（如堆肥和厭氧消化）、熱處理（如轉廢為能的焚化技術）及運往堆填區（如堆填配以堆填氣體重用）。這需要適當地組合不同的廢物處理選項，優化整個廢物管理系統，使其成為環境有利、經濟上可行和資源高效的方法，以應付本港廢物問題。</p> <p>1.3 減廢及垃圾源頭分類回收是廢物管理策略成敗的關鍵 然而，整個廢物管理策略成敗的先決條件有賴政府和市民協力減廢及做好垃圾源頭分類。因此，我們亦呼籲政府應加快立法的進程，及早制訂垃圾按量收費計劃、強制性垃圾分類回收及實施其他尚待執行的生產者責任計劃。同時，為配合增加資源回收的效率，我們應為政府應支援本地回收業發展成真正的循環再造及環保工業，例如：在每區增撥用地作初步回收及分類用途、設立發展基金以鼓勵業界提升回收及循環再造技術、制定優先採購環保產品政策以增加市場需求等，這些措施亦能減輕現時本地回收物料過分依賴出口的問題。我們相信以上政策如能儘早推行，應與綜合廢物管理設施同步進行，務求以源頭減廢為首要工作，並進一步增加本地廢物回收率由目前的 49% 到 60% 或以上，這可以大幅減少需要廢物處理的壓力，不需在港再建第二座焚化爐。</p> <p>1.4 邁向「零堆填」的政策願景 如香港想進一步減少依賴堆填為主要處理廢物的方法，並如亞洲其他城市如台北及新加坡邁向「零堆填」的政策規劃願景，除實施強制廢物分類回收，以及利用生物和現代化焚化技術去增加資源回收和能源效益，還要積極減少需棄置的建築廢物。現時，建築廢物大部份是泥土、泥漿和土壤等填料，適用於填海和填土工程；其次是石頭和碎混凝土，可循環再造為碎石料，以製造混凝土；還有金屬和木材，亦可循環再造成有用的資源。如我們能減少和回收現時一半的建築廢物量，估計每日只有約 2,000 公噸的固體廢物需要棄置，而堆填區的壽命亦會延長約 6.6 倍，換句話來說，即是把堆填區的壽命由原先 10 年延長至 66 年，大幅減少需要擴建堆填區的壓力。</p>		

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	<p>2. 石鼓洲的人工島是綜合廢物管理設施的合適選址點</p> <p>如前所述，發展先進的焚化技術的確可舒緩本地的廢物問題，亦為香港的可持續的廢物管理計畫重要的一環。所以，我們支持政府選擇石鼓洲作為發展香港綜合廢物管理設施的選址地點，這是基於環境和社會因素，詳細如下：</p> <p>2.1 環境因素：</p> <p>香港綜合廢物管理設施的工程勘察和環境研究-行性研究(研究)基本上確認屯門曾咀煤灰湖(曾咀選址)和毗鄰石鼓洲的一個人工島(石鼓洲的人工島選址)均滿足環境影響評估的最低要求，兩個選址亦不視作發展禁地。事實上，曾咀並不是合適選址，這是因為屯門區內現存有一些污染排放源(例如:發電廠的排放物)，因此累積的環境影響是較石鼓洲高。還有，如政府提到，在整個垃圾的運送過程中，如果選址在石鼓洲旁邊的地方所涉及航運的距離是遠遠比運往屯門曾咀為短。這不單減少廢物貨櫃船因運送廢物至屯門而排放的空氣污染物，同時縮短了的航運距離也減少對於棲息在大嶼山北部及東北部附近水域的中華白海豚的間接影響。無疑選點在石鼓洲將會帶來某程度的生態破壞，但我們相信，在實施各項建議緩解措施和對江豚、珊瑚群落和白腹海鵬進行監察後，綜合廢物管理設施工程項目在施工和運作時可能造成的不良生態影響會減少至可接受水平。我們尤其是支持在石鼓洲和索罟群島之間的海域內，劃出約 700 公頃的合適範圍作為海岸公園，以及在擬建的海岸公園內放置人工魚礁和釋放魚苗，作為補償江豚重要生境和漁業資源的損失。</p> <p>2.2 社會因素：</p> <p>我們同意政府建議在石鼓洲旁邊以人工島的方式興建綜合廢物管理設施，因這會令整個城市在廢物處理設施的分配上有更均衡的布局。特別是屯門區內已有不少厭惡性設施，例如：新界西堆填區、燃煤發電廠、水泥廠、飛機煤油貯存庫、將來的污泥焚化設施等。屯門居民必定會質疑政府為何要將這些本地不受歡迎的設施全都設置在屯門區，所以在屯門興建綜合廢物管理設施的社會影響會相對較石鼓洲為大。實際上，無論選擇哪個地方興建堆填區或焚化設施，都很難受到居民歡迎。每個社區不應存有「不在我家後院」(Not-in-my-backyard or NIMBY) 的態度，而要共同分擔社會責任，接納社會所需的設施在其社區內。關鍵是我們要理性地審議不同方案的利弊，選擇最小影響和最能執行的方案。否則，如我們至今仍未為綜合廢物管理設施作出適當的選址決定，香港廢物問題定必加劇，日後我們可能要付出更高昂的成本來處理香港所產生的垃圾。</p> <p>我們建議政府成立市民聯絡小組，以便促進當局和附近居民就有關設置綜合廢物管理設施的各項事宜上溝通，包括設施的設計、施工和運作方面，及使用相關社區設施的事宜。透過此聯絡小組，可以加強官民間的溝通，亦可以更有效地解決社區上的關注和需要。我們期望將來在石鼓洲人工島興建的綜合廢物管理設施可以成為附近居民的「好鄰居」，更成為社會良好的示範，使公眾明白將來他們不需要過份擔心設置類似的設施。</p> <p>總結</p> <p>總的來說，填埋作為香港唯一廢物處理的出路是不可持續的，但我們亦不能一「爐」永逸，而是需要焚化及生物技術處理來解決香港嚴峻的廢物問題。故此，政府應提供一個可持續和全面的綜合廢物處理計劃，供市民考慮這計劃所帶來的社會益處。然而，整個廢物管理策略成敗的</p>		

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	<p>先決條件有賴政府和市民協力減廢及做好垃圾源頭分類，並需支援本地回收業發展成循環再造及環保工業，以增加資源回收的效率，所以政府應下定決心，儘快立法規管源頭分類和垃圾徵費。長遠更需大幅減少建築廢物棄置，促進香港實現「零堆填」的願景。此外，如要說服公眾有關石鼓洲人工島是更可取的選址方案，政府則須要說服公眾擬建的綜合廢物管理設施既安全又衛生，更不會影響周邊的環境質素。因此，我們建議政府應成立市民聯絡小組，加強官民間就設施設計、施工和管理方面事宜的溝通，以便制定獲公眾支持的社區優化計畫，為附近居民帶來裨益。</p>		
PC297	<p>Note: Comment is identical to PC293.</p>		
PC298	<p>We have many concerns about the captioned EIA report, in particular the impact assessment of the two study sites, some of the mitigation measures and the irreversible ecological impacts that will be caused by the proposed artificial island near Shek Kwu Chau. Rather than going into the details of the EIA report here, we think the more fundamental issue of how to solve our growing solid waste problem should be addressed first.</p> <p>We are disappointed to see the development of the Integrated Waste Management Facilities being considered as a means to solve Hong Kong's growing waste problem. We understand our landfills will be full in the coming few years according to the current trend and how to really solve the solid waste issue is of utmost importance to the whole society. However, building new waste management facilities, like building or extending landfills, is not a solution at all and will require Hong Kong continually sacrificing valuable environment and investing large amounts of money to deal with the ever-growing-solid waste. Instead, we would like to urge your department to have more vision and come up with an ambitious strategy, quicken the pace in setting conducive policies, and, in engaging and leading the public to substantially reduce the waste produced through reduction, reuse and recycling. This would not only save our valuable resources, but would also steer Hong Kong closer to a truly sustainable society and contribute towards fighting climate change through greenhouse gas reduction. Creative approaches at community level, like recycling by social enterprises, community composting of food waste and small bio-char kiln to handle fallen/cut trees, should be investigated and seriously considered. These would also enable more small businesses to develop which will be an added gain for the society. There are many successful examples overseas that Hong Kong can learn from in order to adopt reduction measures quickly. We look forward to seeing these actions and working with you in promoting waste reduction.</p> <p>We are confident that Hong Kong society is ready to take action but there is a lack of leadership from the Hong Kong Government to take the required steps forward. We know the waste reduction will be a gradual process and there will still be some solid waste generated even if the best practices are in place. There may indeed be a need for the Integrated Waste Management Facilities but the scale and urgency will be very different from the business as usual scenario. Hence we believe we should concentrate on waste reduction now. Once the actions are in place, we will be able to measure the results and then decide on what kind of waste management facilities Hong Kong will need and when. We are being seen as a society that just throws big money at problems with little long term vision and with a display of ignorance to what are already best practices in other societies. We like many others feel it is time for change.</p>	<p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ul style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p>	ES:S1
PC299	<p>I am writing to object to the proposed plan to construct an artificial island and waste incinerator off southwest Shek Kwu Chau. The choice of Shek Kwu Chau does not appear justified on any</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an</p>	EIA S2.4.1.2

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	<p>scientific basis, and is environmentally unacceptable.</p> <p><i>Shek Kwu Chau Selection Contradicts Government Plans</i> The selection of Shek Kwu Chau (i.e., the waters to the southwest, where an artificial island will be constructed) is in direct contradiction to the intent of the government's Southwest New Territories Development Strategy Review. This review recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism. Shek Kwu Chau was designated as a potential conservation area.</p> <p><i>Badly Biased Environmental Impact Assessment</i> The environmental impact assessment as drafted is clearly biased towards making Shek Kwu Chau appear environmentally acceptable as a site for the incinerator. Note, for instance, different approaches taken to "assessing" Sai Kung islands and Lamma sites versus Shek Kwu Chau: with the former, factors are covered that reject these sites. However, similar factors that also apply to Shek Kwu Chau are barely mentioned. An artificial island with no infrastructure does not seem a sensible choice for locating a complicated, substantial industrial complex. Plus, Shek Kwu Chau is exposed to the elements, including tropical storms and typhoons.</p> <p>In addition, massive funding will be required for constructing the artificial island together with necessary infrastructure. Building the island will take time, additional to the time needed for constructing the actual incinerator. The incinerator cannot become operational until 2018 at the earliest. Hence, it may not be available until after existing landfills are full. And, there may be pressure to rush the project, reducing efficiency and increasing pollution once it does begin operating.</p> <p>Potential air pollution Especially given the location, it is unlikely the incinerator will operate at anything approaching the efficiency possible with waste incinerators, which are complex, with potential for releasing a range of toxic chemicals that have been proven to cause cancer and other illnesses. For instance, dioxins are readily created by incineration, particularly if there is inadequate waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements. Pollutants will not only affect the immediate vicinity, including Cheung Chau and south Lantau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon and Tuen Mun.</p> <p>Terrestrial biodiversity Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – have been found nowhere else on earth. Shek Kwu Chau is one of only three islands in the world, all near Lantau, that are home to Bogadek's legless lizard. Around two-thirds of Hong Kong's species have been recorded: an astonishing diversity for such a tiny island. Plus, Shek Kwu Chau is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>Marine biodiversity Marine biodiversity is high around Shek Kwu Chau. The waters to the southwest of the island are the best fishing ground near Cheung Chau. Some 15 species of hard coral have been found.</p> <p>This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is</p>	<p>artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p><u>Shek Kwu Chau Selection</u> During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chau as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p><u>Potential air pollution</u> Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the target emission limits that is the same as or more stringent than those stipulated in Hong Kong and the European Commission for waste incineration.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p><u>Location and Cost</u> Developing the first modern IWMF on the artificial island near SKC will require a relatively longer construction period and a higher capital cost. On balance, it is considered important to achieve a more balanced distribution of waste facilities and more efficient interface with the refuse transfer station network. It would further minimize the impact on air quality, and reduce greenhouse gas emissions. The reclamation works will absorb a couple of million tonnes of construction waste, which would otherwise occupy space at the fill banks.</p> <p><u>Terrestrial biodiversity</u> The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p>	<p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES S4.3.1.3 to S4.3.1.4</p> <p>EIA: S7b.1.1.2,S 7b.8</p>

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	<p>globally Vulnerable to extinction. <i>This fact alone should make Shek Kwu Chau an unacceptable location for the incinerator.</i></p> <p>Reclaiming around 16 hectares of land, plus breakwaters and berthing area will cause significant, irreparable and unacceptable destruction and damage to the marine environment.</p> <p>Scenic value As the Southwest New Territories Development Strategy acknowledges, Shek Kwu Chau is located in an area of islands and coastline with great scenic value, including south Lantau, the Soko Islands, and Cheung Chau.</p> <p>The EIA cited scenic value as an important reason for rejecting potential sites in Sai Kung islands and on Lamma. Shek Kwu Chau should also be rejected because of the landscape value.</p> <p>Tourism value Tourism – particularly involving people from urban areas in Hong Kong, as well as overseas visitors – is very important for nearby Cheung Chau and south Lantau. Indeed, for Hong Kong city people visits to these areas give them a chance to escape the “concrete jungle”, and enjoy greenery, scenery, and fresher air.</p> <p>Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines. This situation is similar to the Sai Kung islands – and yet the EIA used leisure activities as a reason for rejecting the Sai Kung islands as a potential site, but not Shek Kwu Chau.</p> <p>Woefully Inadequate Public Consultation To date, public consultation has been woefully inadequate, and the information on the EPD website has not been adequately updated. The meeting regarding Cheung Chau attended by EPD officials and AECOM consultants provided no answers to concerned citizens' questions.</p> <p>Further discussions and genuine public consultations are needed. An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p>	<p><u>Marine biodiversity</u> The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p><u>Scenic value</u> The artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. For example, Cheung Chau is located to the northeast of Shek Kwu Chau, the buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. Viewing from these areas, IWMF will be partially blocked by the Shek Kwu Chau. Besides, with the introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, this can fuse IWMF into the surrounding natural environment.</p> <p>Sai Kung was not shortlisted for further site evaluation in the site search study. In addition to the facts that Sai Kung and the nearby waters are popular locations for various recreational activities and some areas have been proposed as Landscape Protection Areas, Sai Kung is located at the upstream location of the prevailing wind direction. Hence, Sai Kung is not a favorable place for the development of the IWMF.</p> <p>Ex-Lamma Quarry was not selected for the development of the IWMF because the development of the IWMF would not be compatible with the future planned development for tourism and recreation purposes, and the adjoining “Comprehensive Development Area” (CDA) site which is planned for comprehensive low-rise residential development.</p> <p><u>Tourism value</u> The IWMF under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWMF may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p> <p><u>Alternative Scale</u> As recommended by the Advisory Committee on the Environment (ACE), IWMF would be implemented in phases. When deciding the scale of the Phase 1 IWMF, the Government has considered the factor of economies of scale and made references to the experiences of other densely-populated cities with demographic and geographic similarities as Hong Kong. It is concluded that the first IWMF should have a daily handling capacity of about 3,000 tonnes.</p> <p><u>Incineration Technology</u> The temperature of 1350°C is actually the temperature at which syngas produced from gasification</p>	<p>EIA: S7b.8</p> <p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p> <p>ES:3.1.3.4</p> <p>Not under the jurisdiction of EIAO</p>

No.	Comments	Proponent's Response	EIA Report Ref.
		<p>technology is burned to melt fly ash, not the temperature at which waste is burned. A technology review in 2009 showed that the operation cost of the ash melting is very high and therefore not widely used internationally. The gasification technology, as of 2008, has only been used in about 90 worldwide gasification facilities to handle municipal solid waste, much less than the number of moving grate incineration facilities in the world (with more than 900 moving grate incineration facilities). In addition, the gasification technology is not suitable for dealing with different size and quality of mixed municipal solid waste, and it is often necessary to pre-shred the waste into small pieces. At present, this technology is only used in relatively small-scale municipal solid waste (i.e. less than 530 tonnes per day). The technology review also found that some of the major supplier of gasification technology has recently withdrawn from the international market. In view of its limited track record in dealing with large scale municipal solid waste treatment, its lack of capacity in handling a mix of different sizes and types of waste, and the fact that the number of suppliers is limited (less than five major international suppliers), the technology review considered that it is not suitable for gasification technology to be used in the proposed integrated waste management facilities development plan.</p> <p><u>Eco-Co-Combustion System</u></p> <p>In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in Hong Kong, the IWMF should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWMF in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p> <p><u>Local Consultation</u></p> <p>The Government has kept in touch with the respective District Councils (DCs) and local communities so as to enable them to have a better understanding of the modern incineration technology for waste treatment. For example, the Island DC was briefed on the latest progress of developing the IWMF in Hong Kong and the outcome of the site selection in March 2008; the meeting of the Cheung Chau Rural Committee (CCRC) and the public forum organized by CCRC were arranged in April and May 2008 respectively to listen to public views. In 2009, a delegation comprising representatives from the EPD and 26 members of the Tuen Mun and Islands DCs conducted a study visit to Tokyo and Osaka to inspect the use of advanced incineration technologies for waste and sludge treatment in Japan. The Government also briefed the Island DC on 15.11.2010, 21.2.2011 and 21.3.2011 as well as CCRC and residents on 8.3.2011 and 10.3.2011 on the latest progress of developing the IWMF in Hong Kong. From February to April 2011, more than 25 meetings have</p>	

No.	Comments	Proponent's Response	EIA Report Ref.																		
		been arranged, meeting more than 1000 people and about 40 groups/organizations, to further explain the project and the responses to the questions. The Government will continue discuss with the professional institutes, environmental groups, local concern groups, business and academic to gain understanding and to respond to comments.																			
PC300	Note: Comment is identical to PC178.																				
PC301	<p>As a general public of Hong Kong who is interested in environmental protection, I am writing to provide my comments / queries on your project of Development of the Integrated Waste Management Facilities Phase 1.</p> <p>Firstly, I would like to express support to the subject project aiming to resolve / improve the imminent waste disposal problem in Hong Kong. Noting from the project title of "Phase 1", it is definite that the Government has already had plan on Phase 2 or so on. Could you please let me know more about the plan of later phase(s), including the context and implementation programme?</p> <p>I note that the project's Environmental Impact Assessment (EIA) Report is currently under public exhibition until 18 March 2011. After reading through this detailed report, I would like to provide my comments as enclosed for your follow-up action and responses to my queries / comments. By copy to the EIAO Register Office, please take my comments into your consideration under the EIAO.</p> <p>I am looking forward to receiving your reply soon. Thank you very much for your attention.</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Ref.</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td colspan="3">EIA Report</td> </tr> <tr> <td>1.</td> <td>Figure 1.2</td> <td>The breakwater shown in Figure 1.2 is a part of the proposed IWMF in SKC, <u>NOT</u> an existing facility. Hence, the breakwater should not be indicated in half-tone. 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It appears that the alternative layout arrangement has not yet been considered / presented.	4.	Section	I note from Figures 1.1 and 1.2 that electricity substations are included in	<p>1. The colour of the breakwater shown in Figure 1.2 does not imply the breakwater is not a part of the proposed IWMF or is an existing facility.</p> <p>2. The length of the breakwater is not more than 500m. Therefore, it is not a DP item.</p> <p>3. To make use of the 185mPD summit of SKC as a natural barrier of stack so that the stack would not be visible from Cheung Chau, the stack will need to be located to the west of the SKC. However, the visual impact to the residents in the South Lantau, which are further away as compared with those in Cheung Chau, would be higher. The current location and layout arrangement is a balanced solution.</p> <p>4. A 275kV electricity substation which is not a DP item will be included in the IWMF.</p>	<p>EIA: Figure 1.2</p> <p>EIA:S1.1.1.3</p> <p>EIA:S2.5.4</p> <p>EIA:S1.1.1.</p>
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	1.1.1.3	both schemes. Please clarify whether they are for high voltage of 400kV. If so, Item H.1, Part I, Schedule 2 of the EIAO should <u>NOT</u> be excluded and <u>NOT</u> covered by Item D.1 .	<p>5. The demand of treated effluent will be greater than the effluent generation.</p> <p>6. SARDA is the “The Society for the Aid and Rehabilitation of Drug Abusers”</p> <p>7. The columbarium project is still in conceptual stage and its environmental impact will be studied and addressed under a separate EIA study</p> <p>8. The quantity of oil to be stored in-situ will not exceed 500 tonnes. However, the exact quantity to be stored will be decided by the future DBO contractor according to his operational need.</p> <p>9. There is currently no EPD-operated air quality monitoring station located in the TTAL site study area. Historical air quality monitoring data from the nearest station, namely the rooftop Yuen Long station operated by EPD is taken to examine the historical trend of the air quality condition in the vicinity of the TTAL study area.</p> <p>10. Noted and the appendices also form part of the EIA Report.</p> <p>11. Agree. The double counting provided conservative predictions of the potential cumulative air quality impacts.</p>	3
5.	Section 1.2.3.4	Is the demand for treated effluent great than or equal to the effluent generation? If not, effluent would be discharged to the nearby water receiving bodies and cause potential water quality implication.		EIA:S1.2.3.4
6.	Section 1.2.8.2	Please clarify the abbreviation of SARDA in early paragraph(s).		
7.	Figure 2.3 and Appendix 3.4	A columbarium is proposed next to the IWMF. It is considered that there would be incense burning in the columbarium. Gaseous pollutants, particulates and odour would be generated / released from the burning. However, in the emission inventory, this emission source(s) is <u>NOT</u> included. Please re-consider.		
8.	Section 1.1.1.3 and Figure 2.3	Oil pump room is indicated on the plan. It is understood that oil is commonly used as supportive fuel for start-up / waste burning in case of low heat content of waste. What is the quantity of oil to be stored in-situ? It is not mentioned in the report. In case of exceeding 500 tonnes, it appears that Item K.13, Part I, Schedule 2 of the EIAO should be included.		EIA:S1.1.1.3
9.	Section 3a.3.1.2	Understood that there is no EPD-operated air quality monitoring station located in Tuen Mun area, background air quality at the nearest station (i.e. Yuen Long) is used to represent the background air quality at the project area. I consider this would be valid if the surrounding environment of the nearest station is comparable to that of the project site. The Yuen Long Station is located in Yuen Long Town, which is surrounded mainly by residential developments, whilst receivers for TTAL are strongly affected by industries in the region, including power station, cement plant, steel factory, etc. Hence, this appears <u>NOT</u> adequate to present the air quality data from the Yuen Long Station, which would cause misleading. In addition, in view of numerous emission sources in the region and huge local concern, EPD should seriously consider to set up a monitoring station in this area.		EIA: S3a.3.1.2
10.	Section 3a.7.2.8	The air quality modeling results are only presented in Appendix 3.12. This approach does <u>NOT</u> provide clear picture / information for the general public when reading the EIA Report. I suggest the applicant should summarize the results and present in this section, rather than just solely referring to the appendix.		
11.	Section 3a.6.2.7	Understood that the air quality impact assessment incorporates the background concentration from PATH model to the results from CALINE and ISCST to assess the cumulative air quality impact in total. However, I note that PATH model is catering various territory-wide air pollution sources, including vehicular and industrial emissions, whilst CALINE and		EIA:S3a.6.2.7

No.	Comments		Proponent's Response	EIA Report Ref.
		ISCST focus on local emission sources (also including open roads and emission from industries) within 500m from the sensitive receivers. As such, I consider that implications by the same pollution sources (e.g. vehicular emissions) have been double counted. Please explain.		
12.	Figure 3b.2	The marine emission (idling) for WKTS is missing. Please amend.	12. On-shore power will be provided for the WKTS vessel. Therefore, no marine emission during idling for WKTS.	Appendix 3.3
13.	Section 3b.5.1	For the option of SKC Site, noting from Section 6b.4.1.25, biogas would be released from marine sediment rich in organic matter when they are covered by reclamation fill. It is typical that under anaerobic degradation, in the absence of oxygen source, sulfur/ would be dominant as one of the oxygen donors and hence odorous hydrogen sulfide would be generated. Furthermore, dredging is proposed for the construction of seawall. Strong smelling might be directly released from the atmosphere by such works. However, I cannot find any discussion about the implication of this odorous gas in this chapter. Please re-consider.	13. Since there is no known historic discharge or deposition of contaminated sediment in the vicinity of SKC, adverse odorous emissions from sediment dredged from the seabed in the vicinity of SKC are not anticipated.	EIA:S3b.5.1
14.	Section 5a.6.1.9	A minor typo of "B ^a y", please amend.	14. Noted.	
15.	Section 5a.6.1.8	Cementitious liner was placed at the bottom of the ash lagoons. The piling construction would penetrate through the base and hence the liner should be damaged. With only marine deposits of low permeability, how the conclusion of <i>"leakage of PFA leachate through the base of the Middle Lagoon to Deep Bay after the pile construction, if any, would not be much different from the existing condition"</i> can be drawn? Does it imply that the cementitious liner is redundant in the presence of marine sediment? Also, what does the <i>"existing condition"</i> refer?	15. The ash lagoon area is underlain by marine deposits which consist of fine grained material. Alluvium is present underneath the marine deposits. Depths of alluvium may vary from approximately 4.0 to 19.0m. The low permeability values of the marine deposits and alluvium underneath the PFA layer would limit the seepage of PFA leachate. Therefore, significant increase of PFA leachate during and after the piling works would not be expected.	EIA:S5a.6.1.8
16.	Sections 5a.7.1.1 and 7a	It is understood that the power company uses water as a medium for transporting PFA to ash lagoons for storage. It is anticipated that site runoff and drainage during construction is easily contaminated by PFA / PFA leachate. Hence, it is considered that, typical /standard sediment removal facilities, mainly settling suspended solids, as described in Section 5a.8.1.1 might not be sufficient. Please re-consider. In addition, as discussed in Section 7a, the water level of the lagoons is varied with the amount of rainfall. It sounds that there should not be drainage system in the lagoon (seems reasonable to avoid polluting the sea if the stormwater drainage is contaminated by PFA). Site runoff would be contaminated by PFA and typical desilting facilities appear <u>NOT</u> effective in removing leaching contaminants. Please re-consider the mitigation measures.	16. At commencement of site formation works, exposed PFA will be covered with construction fill material and direct runoff of PFA from the project site would be expected.	EIA:S5a.7.1.1 and 7a
17.	Section 5a.7.1.4	It is likely that site office(s) will be provided for resident staff. In this section, measure(s) to resolve the sewage effluent from site office(s) is absent. It appears provision of portable chemical toilets is not a common practice for resident staff. Please address.	17. During construction phase, sewage generated from workforce should be adequately treated by interim sewage treatment facilities such as portable chemical toilets. During operation phase, sewage will be treated by on-site secondary wastewater treatment and hence no adverse water quality impact would be expected.	EIA:S5a.7.1.4

No.	Comments		Proponent's Response	EIA Report Ref.
18.	Section 5a.7.2.2	It is know that backwash is normally required for desalination process. How would the backwash water from desalination plant be treated? Back to the on-site wastewater treatment plant? Has this issue been considered with the water balance?	18. Backwash water would be either re-used or treated by secondary wastewater treatment plant provided on-site.	EIA:S5a.7.2.2
19.	Section 5a.8.2.2	In view of the Water Pollution Control Ordinance (WPCO), industrial effluent discharging into water body is subject to control. Hence, a WPCO Licence should be required for brine solution discharge. However, it is not mentioned in the report. Please clarify	19. According to Cap. 358 Section 8 Item (3f) and Section 9 Item (3c), a discharge of unpolluted water, which does not contain any poisonous, noxious or polluting matter, is not a offence to WPCO (thus not require a WPCO discharge licence). The potential discharge from the desalination plant of the proposed IWMF facility at the TTAL site or SKC artificial island would be only concentrated brine and would not contain any pollutants such as biocides or anti-fouling agents. As such, the potential discharge from the desalination plant of the proposed IWMF facility would likely be categorized as "a discharge of unpolluted water" under the WPCO and may not required a WPCO discharge licence. Yet the project proponent will confirm with the Regional Office of EPD on the need for applying a discharge licence for the discharge of concentrated brine before the commencement of the IWMF Project.	EIA:S5a.8.2.2
20.	Section 6	The proposed sewage treatment plant definitely generates certain amount of sewage sludge during operation. However, disposal / treatment of sewage sludge is <u>NOT</u> discussed and assessed in the chapter. In addition, general refuse by operator staff and spent chemicals for maintenance during operation stage are <u>NOT</u> included in the study. Please re-consider.	20. The IWMF will handle the waste generated from the plant itself.	EIA:S6
21.	Section 6a.4.2	It is mentioned that part of the incineration by-products would require cement solidification / chemical stabilization prior to disposal to landfill. In terms of quantity, it is more representative to express by volume (e.g. in cubic meter) after cement solidification / chemical stabilization, <u>NOT</u> mass (in tonnes) before the said pre-treatment, to assess / visualize the waste management implication to the landfill. It would be misleading in case of high cement to ash ratio. Please re-consider.	21. Expressing the waste quantity in term of tonnes is to facilitate public to understand that the waste reduction after the plant from 3000 tpd to 900 tpd.	EIA:S6a.4.2
22.	Section 6b.4.1.13	Approximate 27,300m ³ of sediment will be dredged and disposed. Is there any sufficient space for disposal? Should the relevant party (i.e. Marine Fill Committee) confirm sufficient space in this early stage? If sufficient space is not available, it should be a significant concern on waste management implication and alternative disposal site should be proposed in this stage. I note from newspaper that the space for marine sediment disposal is limited and new disposal site(s) is being identified. There is huge implication if sufficient space is not allocated.	22. Subject to agreement with Marine Fill Committee (MFC), Type 1 sediment is typically disposed to South Cheung Chau and/or East of Ninepin as open sea disposal.	EIA:S6b.4.1.13
23.	Section 7a.9.1.1	It is noted that a total loss of 11ha of Middle Lagoon area (including 9.02ha of dry area and 1.98ha of wet area) would be resulted due to the Project. In order to mitigate the impact to habitats at the wet area, 1.2ha of compensatory pond habitat is proposed within the TTAL Site while 4.5ha of unoccupied land outside the site boundary is committed to maintain as an enhanced wetland habitat until the area is occupied by WENT Landfill Extension Project. A net surplus (3.72ha) of compensation of wet area is proposed. The section does <u>NOT</u> address the need of the said surplus resulting compensatory ratio of about 1 :3. Although both projects of IWMF and WENT Landfill Extension are under the ambit of EPD, there is no reason to expedite extra government resource on this unnecessary additional compensatory wetland (3.72ha). Please address.	23. The unoccupied southern Middle Lagoon, which would be enhanced as a compensatory measure under the proposed Project, is currently utilized by Little Grebe as a breeding ground. Thereby, it cannot be considered as a 1:1 compensatory ratio. It targets to enhance the functional value of the unoccupied southern Middle Lagoon so as to compensate for the remaining breeding ground loss of about 0.8 ha, which cannot be mitigated by 1.2 ha compensatory pond habitat.	EIA:S7a.9.1.1
			24. It is stated in S7b.8.4.3 under 'Mitigation of Adverse Environmental Impacts – Compensation' of the EIA	EIA:S7b.8.4

No.	Comments		Proponent's Response	EIA Report Ref.
24.	Section 7b.8.4.3	<p>The proponent has made a firm commitment to seek to designate a marine park to compensate habitat loss as a result of the artificial island near SKC. I query the term of "firm commitment".</p> <p>Firstly, if the EIA Report is approved and EP is granted, the EP holder should implement all measures as per the approved EIA Report. I wonder whether this "firm commitment" belongs to one of the measures.</p> <p>Secondly, "firm commitment" does <u>NOT</u> mean "must / should" in common understanding. Why is the phrase of "firm commitment used, not "must / should"? This might have confusion on the responsibility of the proponent.</p> <p>In addition, it is understood that the proposed marine park should be formed in accordance with Marine Park Ordinance. Who should be responsible to manage the proposed park? The proponent or AFCD? Also, in case that the proposed park is not supported due to any reason (e.g. strong public objection from fisheries), is there any other measure to compensate the habitat loss? In Section 7b.8.4.6, it is mentioned that a management plan for the proposed marine park should be proposed. I just wonder why this plan has not yet been formed at the stage of EIA Report submission, rather waiting to the later stage. The conclusion of no unacceptable residual impact on marine habitat is built on the assumption of successful formation of the proposed marine park. It sounds failure as a result if the proposed park cannot be formed.</p>	<p>report that "The Project Proponent has made a firm commitment to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau...".</p> <p>The project proponent is aware of the responsibility while making such commitment. Other than making the 'firm commitment' as quoted, it is also further stated that 'A further study should be carried out to review relevant previous studies and collate available information on the ecological characters of the proposed area for marine park designation; and review available survey data for Finless Porpoise, water quality, fisheries... etc.'. Moreover, 'a management plan for the proposed marine park should be proposed', and 'should be submitted to Director of Environmental Protection (DEP) for approval before the commencement of construction works. (EIA: S7b.8.4)</p> <p>It has been stated in S7b.8.4.6 of the EIA report that a management plan for the proposed marine park would be proposed, covering information on the responsible departments for operation and management (O&M) of the marine park, as well as the O&M duties of each of the departments involved. Consultation with relevant government departments and stakeholders would be conducted under the study. The study should be submitted to Director of Environmental Protection (DEP) for approval before the commencement of construction works.</p>	.3
25.	Section 9a.2.2.9	The maximum emission rates stated in the quantitative risk assessment of stack emissions from municipal waste combustors is for the combustion of 1,500tpd. Since the design capacity of the IWMF is 3,000tpd, therefore 2 times the maximum emission rates in the said paper have been adopted for the assessment. Has this direct proportional relationship been confirmed?	25. Since the design capacity of the IWMF is 3000 tpd, therefore two times the maximum emission rates stated in the "Quantitative risk assessment of stack emissions from municipal waste combustors" have been adopted for the assessment. In accordance with the above paper, the anticipated normal emission rates for Be, Zn, PCBs & PAHs would only be 2% to 11% of their corresponding maximum emission rates, taking into consideration the waste composition and the incinerator design of the IWMF, the assumed emission rates (i.e. 2 times of the max. emission rates) for Be, Zn, PCBs & PAHs adopted in this assessment are indeed conservative.	EIA:S9a.2.2.9
26.	Section 15.4.1.1	A minor typo of "Place", please amend.	26. Noted.	
27.	Table 15.1	A minor typo of "elied", please amend.	27. Noted.	
28.	N/A	According to Section 1.2 of ESB-184/2008, the project is to construct and operate the IWMF at <u>either</u> the TTAL or SKC site.' In view of this, in order to fulfill the ESB requirement, the EIA Report should conclude which site is selected for the construction and operation of IWMF. However, reading through the whole report, I cannot obtain such conclusion. Please indicate.	28. The objective of this EIA study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project at both sites. The information include the overall acceptability of any adverse environmental consequences that is to arise as a result of the Project and the associated activities of the Project, the conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences, and the acceptability of residual impacts after the proposed mitigation measures are implemented. With the recommended mitigation measures applied and the adoption of advanced technology, the IWMF at both sites would be environmentally acceptable and no unacceptable residual impacts are anticipated.	ES:S1.2.1.2, S5.1.1.2
EM&A Manual				
29.	Section 1.2.3.4	It is mentioned that at the TTAL Site, underground cables will be laid to the nearby Black Point Power Station. However, in the EIA Report, there is no assessment / discussion showing the proposed alignment and the associated potential environmental implications (whether it will be placed underneath the WENT Landfill Extension and whether it needs additional	29. The underground cable is not part of the project. Therefore, its environmental impact is not required to address in this EIA report.	EM&A:S1.2.3.4

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		<p>decommissioning of the ash lagoon further to the project boundary, etc). Similar to the case in SKC Site, I see no reason why the underground cable is omitted from the project.</p> <p>Hence, this underground cable should be considered as part of the project at TTAL and hence relevant figures, in particular showing the project boundary, should be revised accordingly. As the TTAL Site is surrounded by the WENT Landfill Extension, should there be any implication I interfacing of this cable to the Extension?</p>		
30.	Section 2a.3.1	Should action and limit levels be specified for stack monitoring in order to minimise exceedance and enhanced control? Also, if the limit level exceeds persistently, should the incineration process be stopped or burn less waste?	30. To ensure proper operation of the whole incineration process and the air pollution control equipment system so that the emissions will be within the standards, the operation and maintenance of the IWMF will straightly follow the requirements listed out in EIA Report, including proper operation and maintenance of equipment, its supervision when in use and the training and supervision of properly qualified staff. In case of malfunctioning and breakdown of the process or air pollution control equipment which would cause exceedance of the standards or breaches of other air pollution control requirements, the incident shall be reported to the EPD Authority without delay. Moreover, the incinerator shall be closed down as soon as practicable until normal operation can be restored.	EM&A:S2a .3.1
31.	Section 2a.3.1.5	In order to increase the transparency, I urge the result of continuous stack emission monitoring should be released to the public instantaneously, in addition to EPD by telemetry system. This could be done by real-time posting emission data via L. dedicated website to be either maintained by EPD or the DBO contractor. This is technologically feasible and could avoid any time-lag by publication of EM&A Reports (in frequency of monthly).	31. Noted.	
32.	Section 2a.3.2	Odour patrol / sniffing is a subjective monitoring approach and would be variant by personnel and experience to the environment. Would EPD consider the use of e-noise or measurement of indicative chemicals .(e.g. H ₂ S, VOC) as an objective and scientific measurement approach?	32. Noted	
33.	Section 2a.3.2.1	The odour patrol is proposed along the IWMF site boundary. However, the proposed IWMF is surrounded by STF, WENT Landfill and Extension. Would there be any confusion between odour source(s)? Hence, would the results be representative and reliable?	33. The odour patrol should be carried out by independent trained personnel / competent persons who should use their noses (olfactory sensors) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance shall be identified.	EM&A:S2a .3.2.1
34.	Section 2a.3.2.2	Is there any requirement on the trained personnel to review his / her capability regularly (say 1-year)? Since olfaction would be changed subject to age, as well as experience to the environment.	34. The odour patrol should be carried out by the independent trained personnel / competent persons.	EM&A:S2a .3.2.2
35.	Section 2a.3.2.7	The odour patrol might be terminated after the end of the 2-year monitoring period and subject to the agreement with EPD. It appears that there is no mechanism to resume odour patrol once the monitoring is terminated with EPD's agreement. This might happen in case of poor maintenance or significant increase in waste input comparing to that before termination. Please consider provision. for ET / IEC / EPD to resume the patrol subject to regular review and upon receive of a substantiated public complaint.	35. The need to continue the odour patrol after the end of the 2-year monitoring period would depend on the monitoring results and should be agreed with EPD. The plant should be well maintenance which is stated in the contract documents.	EM&A:S2a .3.2.7
36.	Section 2a.3	During operation phase, only stack monitoring and odour patrol are proposed. I seriously consider these are NOT sufficient. In particular, I	36. With the implementation of practicable air pollution control, the cumulative air quality impact assessment results shows that all the air sensitive receivers would comply with the Air Quality Objectives	EM&A:S2a .3

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			strongly urge air pollutants should be regularly sampled and tested at representative air sensitive receivers to show compliance with the Air Quality Objectives, to response the strong local public concerns. I agree stack monitoring is an essential monitoring measure, however it is more direct and convincible to measure pollutant levels we breathe in. Moreover, a set of action and limit levels and plan should be set. Please throughoutly consider .	(AQOs). The existing air quality monitoring stations will continue to monitor the ambient air quality over the territory of Hong Kong.	
37	Section 4a		As per the above Item 16, site runoff and drainage during construction might be contaminated by PFA / PFA leachate. Hence, monitoring of construction water quality due to PFA / PFA leachate should be required.	37. Please refer to our response above.	EM&A:S4a
38.	Section 8a		Monitoring of radon concentration is required for the first year of operation, in view of radon accumulation inside building structures. At the later construction stage, after the building structures have been formed, workers would be present inside the structures for SS works and installation of equipment and hence similar concern should be in place. Should the monitoring, of radon level be commenced since the building structures have been completed in order to protect workers as well?	38. The health risks for radon emissions from PFA during construction and operation phases of IWmf are considered insignificant. The recommended monitoring at commencement of operation phase only serve as a precautionary measures in view of the longer duration and hence potentially more exposure during operation phase of the facilities.	EM&A:S8a
39.	N/A		The above comments are mainly focused on TTAL Site, while applicable to SKC Site as appropriate.	39. Noted	
PC302	<p>xxx is writing to comment on the Environmental Impact Assessment (EIA) report for Development of the Integrated Waste Management Facilities Phase 1 (EIA-193/2011). We OBJECT to the approval of Shek Kwu Chau option for the development of the captioned because: 1. The Ecological value and impact at Shek Kwu Chau is significantly higher than the Tsang Tsui Option; 2. The ecological impact assessment, compensation and mitigation do not fulfil the requirements stated in the Technical Memorandum of the Environmental Impact Assessment Ordinance (EIAO-TM).</p> <p>1. Environmental Impact of the Shek Kwu Chau option is significantly higher The Tsang Tsui site is only of low to moderate ecological value, while the Marine waters at Shek Kwu Chau is of high ecological value according to the EIA report. The Tsang Tsui site is an artificial habitat while the coastline and waters of Shek Kwu Chau is largely natural. The environmental impact on Shek Kwu Chau resulted from reclamation of our marine waters is irreversible. It would also have adverse impact on species such as Finless Porpoise and White-bellied Sea Eagle, which are both of high conservation importance. Based on the results of the Environmental Impact Assessment, There is no reason why the Shek Kwu Chau is considered as a feasible site for the captioned development. According to the EIAO-TM 3.1, "Any project that is likely to result in adverse ecological impacts in areas of ecological importance shall not normally be permitted unless the project is necessary; it has been proven that no other practical and reasonable alternatives are available, and, adequate on-site and/or off-site mitigation measures are to be employed;" The Shek Kwu Chau site, according to the EIAO-TM, should not be permitted as 1) There is adverse ecological impact, particularly to species of conservation interest including Finless Porpoise and White-bellied Sea Eagle; 2) There is at least one other practical alternative (e.g. Tsang Tsui Option) available; 3) No adequate on-site or offsite mitigation were suggested in the report (refer to the below comments).</p>			<p>1. Environmental Impact of the Shek Kwu Chau option is significantly higher The EIA study on IWmf has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWmf with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWmf with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWmf with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWmf with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>2. Ecological impact assessment, compensation and mitigation is not acceptable under EIAO-TM 2.1 Quality of Avifauna Survey</p>	ES 4, ES 5 and under various parts of EIA Reports

No.	Comments	Proponent's Response	EIA Report Ref.
	<p>2. Ecological impact assessment, compensation and mitigation is not acceptable under EIAO-TM</p> <p>2.1 Quality of Avifauna Survey</p> <p>2.1.1) The wildlife survey in the EIA report was carried out during January 2009 to June 2009¹. This is considered inadequate as it do not cover autumn migration period in Hong Kong (August-November)².</p> <p>2.1.2) There are limited information provided in the EIA report on details of Avifauna survey, such as survey frequency, time in the survey day and number of surveyors. We are concerned that the survey effort is limited and may be insufficient.</p> <p>2.1.3) No seabird survey and impact assessment, particularly for breeding terns, were included in the EIA report although a pair of Black-naped Tern were recorded by the consultant at Shek Kwu Chau². Thus, based on the above reasons, we are concerned that the EIA report is largely under-estimating species diversity and abundance occurring at or near the site.</p> <p>2.2 Impacts on breeding White-bellied Sea Eagle and mitigation</p> <p>The White-bellied Sea Eagle (WBSE) is a coastal raptor species with high conservation interest. The population of the species in Hong Kong is considered important regionally³, as there are only scarce records in the southeast China coast. Given the significant impact on the breeding pair of WBSE, more attention and effort should be put on the conservation of the species in Hong Kong. xxx would like to raise the following opinions regarding the issue:</p> <p>2.2.1) The development would cause significant impact to the White-bellied Sea Eagle. Little mitigation and no solid compensation measures have been suggested by the EIA report, even residual impact of nest abandonment was identified by the consultant. According to the EIAO-TM Section 5.4.1, "The loss of important species (e.g. trees) and habitats (e.g. woodland) may be provided elsewhere (on-site or off-site) as a compensation. Enhancement and other conservation measures shall always be considered, whenever possible". Most compensation measures such as setting-up of marine parks were targeting on finless porpoise but not WBSE. Thus, the current EIA does NOT fulfil the requirements of the EIAO-TM.</p> <p>2.2.2) The development may lead to abandonment of nest by the breeding WBSE pair and the pair may not utilized Shek Kwu Chau as a nesting site anymore. Furthermore, impact of loss of feeding ground of WBSE has not been addressed. Quality of feeding ground is crucial to the breeding success of the species but no compensation was made. The residual impact after mitigation would be a significant reduction of breeding success of the species in Hong Kong⁴ but no compensation has been suggested by the EIA report. According to the EIAO-TM Section 5.4.5, "if the residual ecological impacts require mitigation and all practicable on-site ecological mitigation measures have been exhausted, off-site ecological mitigation measures shall be provided". No off-site ecological mitigation were suggested by the EIA report and this does NOT fulfil the requirements of the EIAO-TM.</p> <p>2.2.3) The location of the nest of WBSE were not incorporated in a systematic and a qualitative impact assessment. For example, the nesting location of WBSE was not included as a sensitive</p>	<p>The survey methodology followed the requirements under EIAO TM and made reference to EIAO Guidance Note. The ecological baseline survey aimed at collecting representative ecological data through sampling. The data collected for the IWMF EIA study is considered adequate for the purpose of ecological impact assessment.</p> <p>2.2 Impacts on breeding White-bellied Sea Eagle and mitigation</p> <p>2.2.1) The measures to minimise impacts on WBSE have been presented in the S7b of the EIA report and summarized in below for easy reference.</p> <ul style="list-style-type: none"> • Avoidance of noisy works during the breeding season of White-bellied Sea Eagle (Dec to May) – minimizing disturbance on WBSE during the sensitive breeding period • Opt for quieter construction methods and plants – adopted the less disturbing cofferdam construction design, avoided the noisy percussive piling method. • Restriction on vessel access near the nest of White-bellied Sea Eagle – minimisation of human disturbance • Education of staff • Minimisation of glare disturbance • Non-reflective and non-transparent building envelope of IWMF – minimise bird collision • The visitor/staff shuttle ferry frequency (between Cheung Chau and SKC) has reduced from 16 round trips/day to 12 round trips/day (MSW barge frequency: 4 round trips/day) – minimise human disturbance <p>White-bellied Sea Eagle monitoring programme – due to the identified residual impact on the WBSE nest, the programme will monitor the effectiveness of the proposed mitigation measures. Noting that the possibility of WBSE nest abandonment still remains after implementation of mitigation measures, a White-bellied Sea Eagle monitoring programme would be carried out to assess any adverse and unacceptable indirect impacts for the nest of White-bellied Sea Eagle, comprising 3 phases: pre-construction phase, construction phase, and operation phase. Should White-bellied Sea Eagles be absent for a whole day during the monitoring, Event and Action Plans for construction and operation phases is recommended.</p> <p>A more detailed White-bellied Sea Eagle monitoring programme, including confirmation of location and status of breeding nest, commencement dates for monitoring, and detailed survey methodology in relation to the latest location of breeding nest etc., would be submitted upon approval of this Project, prior to commencement of construction works.</p> <p>2.2.2) Impact on feeding ground of WBSE</p> <p>WBSE is a highly mobile species, with a range and territory size from 3.8 km to as far as 18.7 km, as reported by AFCD. The high mobility of WBSE will allow their feeding activity to take place in the marine waters surrounding SKC. Implementation of water quality control measures would minimise the impact of degradation in marine water quality, in other words feeding ground of WBSE, to acceptable level.</p> <p>The proposed designation of Marine Park, deployment of artificial reef, and release of fish fry shall increase the biodiversity and abundance of fishes in the area, hence increasing the prey abundance for WBSE.</p> <p>2.2.3) Noise impact on WBSE</p> <p>The noise mitigation measures proposed in the Noise Impact Assessment in the EIA report will minimise noise disturbance to WBSE.</p> <p>2.2.4) WBSE Monitoring Programme</p>	<p>EIA:S7b</p> <p>EIA: S7b.</p>

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	<p>receiver for qualitative noise impact assessment, though noise impacts on WBSE were identified in the ecological assessment and mitigation measures.</p> <p>2.2.4) A WBSE monitoring programme was suggested by the EIA report⁵ but no solid action plan was suggested to mitigate the impact. An effective and feasible action plan needs to be comprehensively studied and formulated BEFORE the project commences, not after impacts being observed⁶. There is no justification provided to prove that such a monitoring programme is effective to the conservation of the species.</p> <p>2.2.5) We strongly emphasize the need of a long-term conservation programme on the White-bellied Sea Eagle Population in Hong Kong as a compensation measure for the reduction of breeding success of the species in the territory. The conservation programme should include the following: i.) an in-depth monitoring and survey to identify important local habitat for WBSE; ii.) Protection of habitat identified with higher important through legislation, habitat enhancement project, monitoring of coastal development and restriction on fishery activities; and iii.) Engagement with local conservation groups for formulating conservation plan. Such conservation plan as an off-site compensation measure is a requirement of the EIAO-TM, but it is not suggested by the EIA report.</p> <p>Based on the reasons on above, The Shek Kwu Chau option is not an acceptable choice for the captioned development due to its environmental concerns. As an alternative site is available and the mitigation measures suggested are not sufficient, the Shek Kwu Chau option should not be accepted as it does not fulfil the requirements of the EIAO. Therefore, xxx respectfully requests the Environmental Protection Department and Advisory Council on the Environment to Reject the approval of Environmental Permit for the Shek Kwu Chau Artificial Island option in the EIA report.</p> <p>1 Refer to Section 7b.3.3.2 of the EIA report 2 Refer to Section 7b.4.3.10 and Figure 7b.1 of the EIA report 3 Fellowes et al, 2002. Wild animals to watch: Terrestrial and freshwater fauna of conservation concern in Hong Kong. Memoirs of Hong Kong Natural History Society, 25: 123-159. 4 There are only 9 nests in Hong Kong each year on average, according to Hong Kong Biodiversity Issue J8,AFCD Newsletter February 2010 5 Refer to Section 6b.5 of the EM&A manual 6 As described in Table 6b.1 of the EM&A manual</p>	<p>A more detailed White-bellied Sea Eagle monitoring programme, including pre-construction baseline survey, confirmation of location and status of breeding nest, commencement dates for monitoring, and detailed survey methodology in relation to the latest location of breeding nest, etc., would be prepared prior to commencement of construction works. Advice from relevant government departments (e.g. AFCD) would be sought after, in order to identify an effective practice for monitoring of nesting White-bellied Sea Eagle.</p>	
PC303	Note: Comment is identical to PC178.		
PC304	<p>It doesn't take much research to realize that an advanced form of recycling is an absolute requirement for an incinerator not to produce hazardous emissions. In my mind the EDP's claims that the incinerator on Shek Kwu Chau will not produce hazardous emissions is so misleading it almost constitutes a lie. Even the temperature used in the suggested process is far too low. And what will happen to the most toxic forms of waste? In my native country Finland there is a separate plant that handles the most dangerous waste. This plant was so expensive to build that there is only one of its kind in a country much larger than Guangdong province. Will there be such a plant on Shek Kwu Chau? As far as I can understand the answer is no which undoubtedly means carsogenic particles will be emitted.</p>	<p>The objective of the IWMF is to treat mixed municipal solid waste. The IWMF will adopt advance incineration technologies and follow the most stringent EU dioxin emission standard to safeguard the environment and human health. Thus, emissions from the IWMF incinerator will not pose adverse health impacts.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various</p>	<p>EIA:S3</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p>

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		<p>mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p><u>Management of Chemical and Clinical Waste in Hong Kong</u></p> <p>Chemical waste and clinical waste as mentioned in Mr Adahl's email are managed separately from MSW in Hong Kong. Since 1993, chemical wastes from industrial, commercial, construction activities have been subject to the control framework in the Waste Disposal Ordinance and specifically in the Waste Disposal (Chemical Waste) (General) Regulation. The statutory provisions impose responsibility upon waste producers, waste collectors and treatment or disposal site operators to ensure that the hazardous waste is properly managed by all parties from the source of production through to the place of final disposal. Waste producers have to fulfill their responsibilities on packaging, labelling, storage and consigning the waste to licensed collectors for disposal; operators of the waste collection, treatment and disposal of chemical waste have to obtain a licence from the department and comply fully with stringent licence conditions in their day to day operation. Any failure to comply with regulatory requirements will be an offence liable to prosecution.</p> <p>For the time being, clinical waste is subject to an administrative permit system through which the day-to-day operation of specialised waste collectors and waste disposal at designated trenches of our landfills are managed by the department. Though healthcare professionals and the collection and disposal teams are all fully equipped with the technical know-how in safe handling of clinical waste, the existing system will be upgraded further to a regulatory one later this year in order to raise public health standard to a level on par with the highest international requirement. Upon commencement of control, a similar cradle-to-grave regulatory system will be in place to deal with waste production at clinical premises, collection by licensed collectors and waste disposal at licensed facilities.</p> <p>At present, the majority of chemical wastes in Hong Kong are disposed of at the Chemical Waste Treatment Centre (CWTC) at Tsing Yi. The CWTC has been in operation since 1993 and is licensed under the Waste Disposal Ordinance. The main treatment processes in the CWTC include high temperature incineration, oil/water separation and physical/chemical treatment together with ancillary systems such as wastewater treatment, chemical stabilization, laboratory services, waste container handling and storage tank farm. The incineration system is equipped with comprehensive emission control measures to ensure no adverse impact on the environment and public health. The first and second combustion chambers both operate at above 1,000oC to disintegrate harmful substances in the waste and the gas cleaning system has two independent activated carbon injection systems to remove the remaining gaseous pollutants. The air emissions, the stabilised residues and the wastewater discharges are closely monitored to ensure that they meet the environmental statutory requirements. The CWTC has recently completed the upgrading work for</p>	<p>Not under the jurisdiction of EIAO</p>

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		<p>reception and disposal of clinical waste and upon commencement of regulatory control later this year, all clinical waste arising of the territory will be diverted to the CWTC for high temperature incineration.</p> <p>Further details of the chemical waste and the clinical waste control schemes as well as the operation of the CWTC are available at the following webpages of the department: http://www.epd.gov.hk/epd/english/environmentinhk/waste/guide_ref/guide_cwc_list.html http://www.epd.gov.hk/epd/clinicalwaste http://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/chemical_cwctintro.html</p>	
PC305	<p>Subsequent to the Forum on Integrated Waste Management Facilities: A Technical Perspective held on 16 March 2011 morning at the Hong Kong Polytechnic University to which the xxx has been invited to participate, I would like formally put forward in writing the following views with regard to the EIA Report (EIA193-2011)--"Engineering Investigation and Environmental Studies for Integrated Wastes Management Facilities Phase 1 – Feasibility". Similar points and views have been publicly and verbally raised at this Forum after identifying xxx.</p> <p>Views and Position</p> <p>1. We welcome government's effort to engage stakeholders, including the xxx (hereunder refer to as "we"), to consider its proposal(s) to implement policy commitment to manage municipal solid waste in a holistic sustainable manner, as spelled out in "A Policy Framework for the Management of Municipal Solid Waste (2005-2014)". We support the strategy framework in principle and will continue to contribute positively and professionally to related initiatives in the public's interest.</p> <p>2. Aside from on-going or planned efforts to reduce waste at source, we understand that since 2008, it has been one of government's intentions to adopt modern incineration technology, by building a plant with design capacity not exceeding 3,000 tonnes per day, at either one of two potential sites, subject to the outcome of an EIA study. The two sites proposed for study are: (1) Tsang Tsui Ash Lagoons next to China Light and Power's (CLP's) Black Point site; and (2) an artificial island to be formed by reclamation near Shek Kwu Chau. This has been clearly spelled out in the Project Profile (PP-348/2008) submitted on 31 March 2008 to which the EIAO Authority subsequently responded with the issuance of the EIA Study Brief (ESB-184/2008) in May 2008.</p> <p>3. The relevant EIA Report (EIA 193/2011), completed in accordance with ESB-184/2008, has been under public inspection since 17 February 2011. Inspection will officially end by 18 March 2011. The findings and conclusions in the EIA 193/2011 are however silent and non-committal in respect of:</p> <p>(a) making any quantitative but thorough comparison, at least on the significant key issues, of the environmental performance of the two potential sites; or</p> <p>(b) recommending a preferred site for building the first Incinerator and its associated facilities.</p> <p>Rather, the EIA 193/2011 includes a "co-exist scenario" not specified under the ESB-184/2008.</p> <p>In this context, it is necessary to ask what considerations have been given to ensure compliance of the findings in the EIA 193/2011 with respect to meeting the specific provisions in the relevant EIA</p>	<p>3. Section 2.2 (Site Selection), Section 2.3 (Technology Selection) and Section 2.5 (Consideration of Alternatives) of the EIA Report have presented all the consideration in coming up with the two preferred sites and the selected technology and construction methods as required under Section 2.1 (iii) and Section 3.3.5 of the EIA Study Brief. The evaluation of the shortlisted sites (including the two preferred sites) on environmental merits and demerits as required under Section 2.1 (xiv) of the EIA Study Brief is also presented in Section 2.2.3 of the EIA Report.</p> <p>The key environmental outcomes / benefits and environmental performance comparison of two potential sites have been presented in Table 15.1 of the EIA report.</p> <p>Regarding to the co-existing scenario not specified under the ESB-184/2208, with reference to the Section 6.2 of the EIA Study Brief, if there is any key change in scope of the Project, the Applicant must seek confirmation from the Director in writing on whether or not the scope of issues covered by the EIA study</p>	<p>EIA: S2.2, 2.3, 2.5</p> <p>EIA: Table 15.1 & Study Brief:S6.2</p>

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	<p>Study Brief (ESB-184/2008), in particular requirements covered under Section 1.2, Sections 2.1 (iii) and (xiv) and Section 3.3.5.</p> <p>It is not apparent from the content of the EIA 193/2011 nor its executive summaries pertinent coverage to enable the reader or the public to understand what "Phase 1 of the Project"—[that is "the first new Incinerator and associated facilities"] will actually involve: such as what facilities, where and when. This also implies that EIA 193/2011, if eventually approved by the EIAO Authority, would remain unclear and ambiguous as to what permission has actually been granted to the proponent to build and where with a specific project time frame. This would cast considerable uncertainties over the validity of the assumed scenario(s) for assessing cumulative air quality impacts from projects close to the site(s) yet to be decided. This in turn could limit the ability of the Environmental Permits to be issued to control the impacts of the Project.</p> <p>4. This flexible approach of completing an EIA without a clearly defined scope of "the Project", nor any requirement to identify a specific location/time frame for the first facility (or facilities) as a preferred option is observed to be a major departure from the approach adopted for past EIAs completed on major infrastructure projects. We would like the proponent and the EIAO Authority to explain the reason(s) behind such a departure, and if considered justifiable, the legal basis to support, as appropriate.</p> <p>5. We accept that cumulative air quality impact (including odor from wastes movements) arising from the operation of any one, or both incinerators, either at one or both locations, when operating in combination with existing emission sources and planned future projects (such as the HK-Macao-Zhuhai Bridge, the third Chek Lap Kok airport runway) should be a major concern. The need on how and to what extent population(s) located downwind of the incinerator(s) emissions may be affected under different meteorological conditions should contribute towards decision on selecting the first (or priority) site from the environmental perspective. What quantitative comparisons have been made and included in the EIA Report to help decide on priority of one site over the other? Under the "co-exist scenario", the coverage on cumulative air quality is rather difficult to comprehend and needs clarification and explanation on (a) residual impact of reported predicted exceedances in the air pollutant NO2 and (b) the implications on future development potential of affected area(s) if any.</p> <p>*****End*****</p>	<p>brief. A letter to SAG/EPD has been sent on 25 October 2010 by IPG/EPD on this issue. Reply from the SAG/EPD mentioned that "the two-IWMF scenario would likely give rise to potential environmental issues, including air, health, water, ecology, landscape and visual, cultural heritage as well as waste and noise, and these issues have already been covered in the current EIA study brief. Therefore, in accordance with Section 6.2 of the brief, and on the understanding that your proposal would not involve any change in project location or any new project features as compared with the information in your project profile (No. PP-348/2008) submitted on 31 March 2008, there is no need for you to apply for a new EIA study brief".</p> <p>4. Details on the scope of the project, including what facilities, where and when are clearly stated in Section 2.4 (Scope of the Project) of the EIA Report.</p> <p>5. Sections 3a/b.6 of the EIA Report described the air quality assessment methodology and Sections 3a/b.6.2.18 to 42 detailed the emission sources that have been covered in the cumulative air quality impact assessment which include major air pollution sources in PRD, marine and road traffic emissions over the entire HK territory, all power plant emissions in HK, as well as other major emission sources in HK. The odour impact assessment of the IWMF is also presented under the Air Quality Sections of the EIA Report.</p> <p>With regards to the air quality assessment for the co-exist scenario, Section 3c.2.1.1 clearly stated that the assessment methodology is the same as those adopted for individual site as detailed in Sections 3a/b, i.e. cumulative air quality impacts are equally examined under the co-exist scenario. The area with predicted exceedance of the hourly average AQO for NO2 are shown in Figure 3c.3 of the EIA Report. As stated in Section 3c.2.1.1 of the EIA Report, no existing or planned ASR is identified within those predicted exceedance areas.</p> <p>A summary of the comparison of the environmental performance of the two potential sites are presented in Section 15.4 of the EIA Report.</p>	<p>EIA: S2.4</p> <p>EIA: S3a/b.6 S3a/b.6.2.1 8 to 42, S3c.2.1.1 S15.4</p>
PC306	Note: Comment is identical to PC178.		
PC307	Note: Comment is identical to PC178.		
PC308	Note: Comment is identical to PC181.		
PC309	<p>Please consider other alternatives for the Shek Kwu Chau coast incinerator. There is a special area for wildlife and marine life and should be protected for tourist and the future of our children. There are better alternatives.</p> <p>As the EIA makes clear, the site at Tsang Tsui ash lagoons is far better than Shek Kwu Chau on</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the</p>	<p>ES 4, ES 5 and under various parts of EIA</p>

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	<p>environmental grounds. If an incinerator were to be built here, there would be far less constraints on land area than at Shek Kwu Chau, and it would be possible to also use money "saved" (by not constructing an island) to maximise incinerator efficiency – such as using burning at temperatures of 1350C and above, rather than 850C as currently planned.</p> <p>Also, Green Island Cement has an alternative proposal, which would appear to have several benefits: far lower cost – partly as industrial land with infrastructure is already available; tried and proven in Hong Kong; higher capacity; trial operations yielded waste emissions substantially lower than government standards – for instance, dioxin levels 99 percent lower than the BMP standard.</p>	<p>Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p>In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in Hong Kong, the IWMF should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWMF in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p>	<p>Reports</p> <p>ES:S3.2</p>
PC310	Note: Comment is identical to PC179.		
PC311	<p>I am writing in response to the report's summary as a resident of Cheung Chau and as the former Chairman of The Chartered Institution of Water & Environmental Management, Hong Kong Branch, I have over 40 years experience working in the field of environmental profession both in Hong Kong and Overseas. My comments are as follows:</p> <p>3.1 Site selection</p> <p>3.1.1.6 The islands in Sai Kung were rejected on the grounds that the islands are popular locations for recreational activities including swimming, diving, golfing, hiking, etc; Cheung Chau as the sensitive receivers from Shek Kwu Chau (SKC) is also popular for these activities for both people in Hong Kong and from overseas, but these criteria are being ignored in the report for Cheung Chau.</p> <p>3.1.3.9 The report has concluded that the sensitive receivers in Cheung Chau will receive minimal air quality impact as it is not situated at the prevailing wind. In summer, the southern monsoon is often prevailing, so Cheung Chau is directly impacted. Please provide detailed meteorological information to substantiate the report's findings. The air quality impact should also be assessed using</p>	<p><u>3.1 Site Selection</u></p> <p>Sai Kung is not shortlisted for further site evaluation in the site search study. In addition to the facts that the islands in Sai Kung and their nearby waters are popular locations for various recreational activities including swimming, diving, golfing, hiking, etc., the southern parts of Kau Sai Chau and Jin Island have been proposed as Landscape Protection Areas and are to be used for seabirds/ other wildlife conservation, and the islands are also viewed by the nearby Sai Kung East Country Park, Sai Kung West Country Park, Kiu Tsui Country Park and Clear Water Bay Country Park, Sai Kung is less favorable for the development of the IWMF because it is located at the upstream location of the prevailing wind direction (i.e. from the northeast direction). Considering the above mentioned factors, Sai Kung is not considered for the development of the IWMF.</p> <p>The EIA study on IWMF has assessed the potential cumulative environmental impacts arising from the Project and other developments, covering noise, air, water, waste, ecology, landscape and cultural heritage and was conducted in accordance with the Environmental Impact Assessment Ordinance and the Technical Memorandum on EIA Process. The EIA has proposed appropriate mitigation measures to ensure that the</p>	<p>ES:3.1.1.6</p> <p>ES 4, ES 5 and under various</p>

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	<p>the more stringent future air quality objectives which are expected to be implemented in a few years time.</p> <p>3.1.3.11 The report has found many merits in Tsang Tsui Ash Lagoon(TTAL S5) for citing the IWMF, such as:</p> <p>-- Located right next to WENT landfill, it has operational advantages of sharing existing infrastructure with synergy effect, hence the IWMF could occupy a small site area, thus translate into both land and cost savings.</p> <p>-- It is close to existing power plant, so the surplus energy generated from the IWMF can be easily be connected to the power grid.</p> <p>-- Unlike the island option, both marine and land transport of waste and ash are possible, and no reclamation is required.</p> <p>-- As there are no major population clusters in the vicinity, the IWMF should have no significant visual impact on the immediate local community.</p> <p>With all these merits and little dis-merits, please offer explanations to why S5 is not put forward as the first choice for the IWMF site?</p> <p>3.1.3.15 While the Old Lamma Quarry (S2) is rejected because of the nearby seafood restaurants and marine culture zone, Cheung Chau is also well known for its seafood restaurants located at the seafront served with locally caught seafood and there is also a marine culture zone nearby, and yet these factors are being ignored.</p> <p>3.1.3.16 I strongly disagree that SKC is comparatively favourable from the air quality aspects because it has not taken the southern monsoon into account.</p> <p>3.2.4.3 In view of the strong commitment on waste reduction by the government in the past 20 years, why only a demonstration-scale mechanical treatment process and not a full scale plant is incorporate at the design stage of this IWMF ?</p> <p>3.4 Stack Height</p> <p>Visualisation of the stack plume behaviour under various wind directions and speeds was conducted by the wind tunnel tests on S4 & S5. The report has found no adverse effect by using 125m and 150 m in height. It is requested that virtual stimulation images of the stack plume under various weather conditions be produced, so that the residents of Cheung Chau can see what their exposure is in the future. Could the consultant confirm that the stack is not visible from various locations in Cheung Chau?</p> <p>4.3.5 Ecology</p> <p>4.3.5.2 The report has found that due to the loss of habitat for finless porpoise, corals and reduced fish spawning and nursery grounds, deployment of artificial reef and release of fish fry are</p>	<p>impact on the environment can be alleviated to an acceptable level, and has also recommended environmental monitoring and audit programmes to ensure the effective implementation of various mitigation measures. The EIA study was conducted based on the development of an IWMF with a treatment capacity of 3,000 tonnes per day at the two potential sites, i.e. TTAL site in Tuen Mun and the artificial island near SKC.</p> <p>Three scenarios are examined based on the two potential sites in the EIA study:</p> <ul style="list-style-type: none"> • developing an IWMF with a capacity of 3,000 tonnes per day at the TTAL site; • developing an IWMF with a capacity of 3,000 tonnes per day at the artificial island at SKC; and • developing an IWMF with a capacity of 3,000 tonnes per day at each of the two potential sites (co-existing scenario). <p>The EIA report indicates that the construction of modern incineration facilities at the above two sites and under all three scenarios is environmentally acceptable, provided that advanced technologies are adopted and appropriate mitigation measures are implemented.</p> <p>Ex-Lamma Quarry was one of the eight shortlisted sites for the further evaluation in the preliminary site search exercise. This site was eventually not selected for further EIA and engineering investigation because the development of the IWMF would not be compatible with the existing land uses as well as the future planned development. The planning intention of the remaining portion of the ex-Lamma Quarry site is proposed for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p> <p>It was recommended by the Advisory Group on Waste Management Facilities that mechanical-biological treatment (MBT) was considered to be a potential sorting and recycling technology to be adopted in the IWMF than the other technologies. This was because MBT could potentially recover both materials and energy from the mixed MSW, whereas the others could only recover recyclables. Due to its ineffectiveness in waste volume reduction and requirement of relatively large footprint than thermal treatment technologies, MBT technology was recommended to be adopted at a small scale in the IWMF. At the Meeting of the Waste Management Subcommittee (WMSC) of ACE on 26 January 2010, the WMSC discussed the proposal of whether a sorting and recycling plant should be incorporated in the IWMF project. The WMSC considered the proposal in detail. As the MBT would generally require more land (about 2-3 times of the footprint required by the incinerator for the treatment of the same amount of waste), and the marketability of the products recovered from the MBT process, such as low quality compost and refuse-derived fuel, was a concern, the WMSC considered there was no strong justification in support of adopting the MBT technology in the context of Hong Kong. However, the WMSC supported in general the adoption of Mechanical Treatment (MT) technology to test the operational viability and cost effectiveness of sorting and recovering the recyclables from the MSW prior to the incineration process. Should this arrangement be found viable and cost effective, the project proponent could consider putting in place a MT process of suitable scale prior to incineration in future phases of the IWMF. By doing so, it would reinforce the Government's commitment to minimizing the use of incineration and landfilling in MSW management.</p> <p><u>3.4 Stack Height</u></p> <p>The photomontages showing the views of the IWMF from Cheung Chau Cheung Po Tsai Cave and Cheung Chau Ferry Pier are presented in Figures 10b.34 and 10b.38. As shown in the photomontages, Shek Kwu</p>	<p>parts of EIA Reports</p> <p>ES:3.1.3.4</p> <p>ES:3.2</p> <p>EIA Figures 10b.34 &</p>

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	<p>recommended, please outline how these measures are to be implemented.</p> <p>4.3.5.4 Rare species in SKC are reported by J. Jazell, in 2002. Apart from Bogadek's legless lizard (<i>Dibamus bogadeki</i>), other only known snakes such as the gorgeous vine snake (<i>Ahaetulla prasina medioxima</i>) and the elegant, slender racer (<i>Dendrelaphis hollinrakie</i>) also are found, these species should be protected.</p> <p>4.3.7.1 The cancer risk arising from exposure to compounds of potential concern (COPCs) is desk studied, in view of the importance to the sensitive receivers, could the findings be reviewed by an independent consultant with more in-depth study?</p> <p>4.3.8 Landscape and visual impact</p> <p>Operational Phase</p> <p>The report has not studied the issue of the visual impact from the stack and the stack plume to the sensitive receivers in Cheung Chau, Pi O, Cheung Sha and Sea Ranch, which is far more important than the structure itself. It would be highly unacceptable if stack plume is billowing out 24 hours a day, please address this item.</p> <p>Overall Views and Comments</p> <p>On technical grounds, it is my view that the report has made a biased judgement on the selection of the potential site for building the IWMF. Despite all the merits on TTAL and dis-merits on SKC, the report has not excluded SKC as one of the potential sites. The overriding factors are: Firstly, the costs and the time frame; It is important that realistic costs should be made known and incorporated into the final decision process. Since TTAL takes much shorter time to build, that means more landfill capacity, which is near to its exhaustion, can be reserved for future use. Secondly, Cheung Chau has a population of around 30,000 plus a few thousand visitors on the weekends, they will be constantly disturbed by the sight of the stack plume, which will cause a great negative impact to the tourist industry, to which many people's livelihood on the Island depend on. On the other hand, TTAL has nearly no sensitive receivers, but a large cluster of population in Tsuen Mun situated some 4 or 5 times the distance of SKC to Cheung Chau, and they do not have any visual impact of the plume. Thirdly, the impact to the local ecology of SKC which is so much more severe than that of TTAL, resulting in some of the fishery spawning and nursery grounds being lost forever. Fourthly, SKC is situated in a conservation area where the government has designated such area as for the development of tourist and recreational activities, the building of the incinerator will destroy the original objective of the government. How could the government change its long term policy and commitment to suit its political needs?</p> <p>The discussion paper (23/2011), the government presented to the Island district board, indicates the positive synergy effects of job and business opportunities to the Cheung Chau economy during the construction of IWMF; this is completely false, as it is the normal practice that the contractors will provide all the skilled and unskilled labour ferried from Hong Kong daily rather than recruited from Cheung Chau. Cheung Chau's economy would not be benefited at all. It is unprofessional that the EIA report, ignoring the effect of the southern monsoon during the summer, concludes the air quality impact to Cheung Chau would be minimal, also the assessment should be made using the more</p>	<p>Chau provides a screening effect to most of the structures in the IWMF, and only the top part of the chimney will be visible.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project at the artificial island near SKC. The cumulative air quality impact assessment has taken into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p>The wind direction data and distribution can be obtained from HK Observatory wind rose diagram at the web page: http://www.weather.gov.hk/cis/region_climat/CCH/CCH_windrose_year_e.htm</p> <p><u>4.3.5 Ecology</u></p> <p>Deployment of artificial reef</p> <p>Deployment of artificial reef (AR) is considered as an enhancement measure for the marine habitats. ARs are proposed to be deployed within the proposed marine park under this Project, in which, the Project Proponent would seek to complete the designation by 2018 to tie in with the operation of the IWMF at the artificial island near SKC. The exact location, dimension and type of AR to be deployed are to be further investigated along with the further study of the proposed marine park under this Project. The proposed ARs would be deployed at the same time as completing the designation of marine park.</p> <p>Release of Fish Fry at Artificial Reef</p> <p>Release of fish fry is proposed to be carried out at the proposed AR, as well as the proposed marine park under this study. Fish fry release is considered as an enhancement measure for the fish resources in the nearby waters, and subsequently food sources for Finless Porpoise. The proposed ARs with various micro-habitats would have the potential to provide shelter and nursery ground for the released fish fry. Upon the further study and investigation on marine park designation and artificial reef deployment, agreement with AFCD would be sought on the frequency and quantity of fish fry to be released.</p> <p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has therefore considered that reclamation is a more suitable option for the siting of the IWMF. No unacceptable impacts are predicted for terrestrial biodiversity.</p> <p>All the assessments presented in the EIA Report, including the health risk assessment, are reviewed and consulted under the mechanism stipulated in the EIA Ordinance, which include consultation with the Advisory Council on the Environment (ACE). Members of the ACE consist of experts on different environmental areas.</p> <p><u>4.3.8 Landscape and visual impact</u></p> <p>As mentioned above, the plume is usually not visible with the temperature of the emission being well controlled.</p> <p><u>Overall Views and Comments</u></p>	<p>10b.38</p> <p>ES:S4.3.1.4</p> <p>ES: S4.3.5</p> <p>ES: S4.3.5</p> <p>ES:4.3.5.4</p> <p>ES:4.3.7.1</p> <p>ES 4, ES 5 and under various parts of EIA</p>

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	<p>stringent new air quality objectives, which is expected to be promulgated within the next few years.</p> <p>For the long term solution to the Hong kong waste, the target of waste recovery rate from 49% to 55% is just not good enough, with the right policy of "user pays principle"by imposing charging schemes, the recovery figures should improve much more than that . On other hand, the government should build the IWMF first at TTAL without fear of political opposition, because it can be built with less time, less costs and less environmental impact. This is why TTAL was the original designated site. The government should also seriously consider the options of building a multi-storey IWMF , including incinerator, at the present refuse transfer station sites and the feasibility of upgrading the transfer stations into high level of menhanical sorting plants and to burn the burnables at the exhausted and existing landfill sites. These are the real long term alternative options as adopted by most big cities around the world.</p>	<p>To address the imminent waste problem in a holistic manner, the Government has reviewed the action agenda outlined in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (the Policy Framework) published in 2005 against the latest development in January 2011. To ensure solid waste can continue to be handled properly without causing environmental problems, the Government will:</p> <ol style="list-style-type: none"> (a) revise upward the MSW recovery target to 55% by 2015 by stepping up publicity and promotional efforts on waste reduction and recycling; (b) expedite legislative proposals to introduce new Producer Responsibility Scheme (PRS) and extend current PRS to encourage waste reduction; (c) engage the public in continued discussions on possible options to introduce MSW charging as a direct economic disincentive to reduce waste at source; and (d) seek funding approval from the Finance Committee of the Legislative Council (LegCo) in early 2012 so that advanced waste treatment facilities (including an IWMF with a treatment capacity of 3,000 tonnes of MSW daily, one organic waste treatment facility with a capacity of 200 tonnes of food/ organic waste daily), and extension to the existing landfills will be commissioned in time to ensure continual and more sustainable management of solid waste. <p>Hong Kong needs to confirm on the development of the first IWMF to significantly reduce the bulk of MSW size as soon as possible, otherwise with the decreasing availability of landfill capacity there will be little suitable disposal facilities to handle the MSW we generate by 2018. There is a need to act in time, taking into account the lead time required for project planning and preparation, as well as the relevant statutory and administrative requirements. Hong Kong will not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world class city if there is no timely and adequate provision of appropriate waste treatment and disposal facilities.</p> <p>A review of the existing incineration plants in the world was conducted. Based on the existing installations in the world, most of the incineration plants have a treatment capacity ranging from less than 1,000 tpd to 4,000 tpd. Selection of plant capacity is normally dependent on local requirements and constraints. Localized small scale incineration plants likely have less traffic impact when compared to centralized large scale incinerations. The advantages of large scale incineration plants are that they are more efficient in cost and land utilization when compared with small scale incineration plants. With due regard to the scarcity of suitable land in densely populated cities and considerations of economy of scale, there is a tendency to maximize the potential of a site and to plan for an incineration plant with higher treatment capacity. Some overseas examples with installed treatment capacity larger than 3,000 tpd are listed below:</p> <ul style="list-style-type: none"> • Tuas South Incineration Plant and Senoko Incineration Plant in Singapore with an installed capacity of about 4,300 tpd and 3,300 tpd, respectively; and • Afval Energie Bedrijf (AEB) Incineration Plant in Amsterdam, the Netherlands with an installed capacity of about 4,000 tpd. <p>In Hong Kong, there is already a very well organized and efficient refuse transfer station network whereby MSW collected in the urban area are being compressed into large dedicated containers and then transferred away in bulk by marine transport. The usual constraint of potential adverse traffic impact on transport network in the vicinity of large scale incineration plants therefore does not exist. To achieve good economy of scale and making reference to the capacity of similar facilities in other densely populated cities e.g. Singapore with similar demographic and geographic situations, it is decided that the first IWMF will have a treatment capacity of 3,000 tpd, which has taken into consideration the waste reduction and recycling</p>	<p>Reports</p> <p>ES:S3.3</p>

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		programme, the proven reliability of the proposed scale of incineration plants and the site and environmental constraints.	
PC312	<p>I'm writing to object to the proposed rubbish incinerator on Shek Kwu Chau.</p> <p>I believe the idea is ill-considered and that the consultation process has not been long enough to be fair to all parties concerned.</p> <p>My objections are summarised as follows:</p> <ol style="list-style-type: none"> 1. It will be too close to Cheung Chau, which is a major population centre (estimates of the population vary between 30,000 to 40,000). Air pollution in Hong Kong is already severe, especially in the winter months, and this will add to it. 2. Shek Kwu Chau is home to Bogadek's legless lizard (<i>Dibamus bogadeki</i>), and two snakes known only from the island: the vine snake (<i>Ahaetulla prasina medioxima</i>) and a species of racer (<i>Dendrelaphis hollinrakei</i>). In addition, a pair of white-bellied sea eagles (<i>Haliaeetus leucogaster</i>) nests on the island, one of only eight pairs in Hong Kong. 3. The Environment Bureau claims that the incinerator will create tourism opportunities. I totally reject this claim: it is very likely to reduce tourism on Cheung Chau, which is vitally important to the island and has been heavily promoted by the Hong Kong Tourist Board as a cultural destination. An integrated eco-tourism approach is the way forward for the Islands District. 4. Transportation of rubbish to the island could adversely affect the local population of Finless Porpoises, (<i>Neophocaena phocaenoides</i>). Not long ago, the sea around Shek Kwu Chau was proposed as a Marine Park. 5. If Hong Kong really needs an incinerator, the ash lagoon near Tuen Mun is a more suitable site: it is already degraded and has suitable road access for the large amounts of refuse that would need processing. Green Island Cement has proposed an alternative at a lower cost and with a higher capacity. Trials have yielded waste emissions substantially lower than Hong Kong government standards – for instance, dioxin levels 99 percent lower than the BMP standard. 6. A better approach would be to encourage proper waste management, with an emphasis on re-use and recycling. The amount of rubbish generated could be drastically cut in this way. <p>I sincerely hope that the incinerator will not be built on Shek Kwu Chau, as I believe it will be truly detrimental to the ecology, culture and landscape of the Islands District.</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p><u>Potential air pollution</u> Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the target emission limits that is the same as or more stringent than those stipulated in Hong Kong and the European Commission for waste incineration.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p><u>Prevailing Wind Direction</u> According to Hong Kong Observatory's information, the prevailing wind direction at the Cheung Chau and SKC area around the year is from northeast blowing southwestwards. Hence emission from the proposed IWMF at the artificial island near SKC would be blown southwestwards to the sea most of the time. The EIA study has made use of scientific mathematical models to assess the impact of the IWMF emission throughout the year in detail, covering the time when southwesterly wind might blow the IWMF emission towards Cheung Chau and SKC. The assessment result indicates the IWMF emission would have insignificant impact on Cheung Chau and SKC and the predicted air quality will be in full compliance with both the shorter term hourly and the longer term annual environmental standards. For example, the annual average cumulative NO₂ concentration at Cheung Chau (including all other sources) is predicted to be 26 µg/m³ (well below the AQO value of 80 µg/m³) while that contributed by the IWMF emission is less than 0.08 µg/m³.</p> <p><u>Terrestrial biodiversity</u> The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p>	

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		<p><u>Marine biodiversity</u> The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p><u>Tourism value</u> The IWMF under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWMF may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p> <p><u>Green Island Cement's Alternative Proposal</u> In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in Hong Kong, the IWMF should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWMF in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p>	
PC313	Note: Comment is identical to PC179.		
PC314	<p>邱局長於今年2月17日公開作出焚化爐選址石鼓洲的定調，此舉令我們長洲居民十分震驚。一個影響七百萬港人的龐大計劃，既欠溝通，又欠解釋，為何如此草率？石鼓洲焚化爐的諮詢時間只得一個月(19-2-2011 至 18-3-2011)，可能是香港回歸以來最火速的一次。《環境評估報告》匆匆的公佈，內容不盡不實；雖然在這一個月內增多了兩份附件解釋，仍難解釋當中眾多的矛盾。今次推出這大型「垃圾」政策，一味推銷焚化等末端處理方法，廢物源頭分類及垃圾徵費</p>	<p>1. <u>地區諮詢</u> 我們一直就擬建的綜合廢物管理設施與相關的區議會及地區人士保持聯絡，希望能令地區人士更了解現代廢物焚化處理方法，如在 2008 年 3 月，我們曾向離島區議會介紹在本港發展綜合廢物管理設施的最新進展和選址研究的結果，並分別在 2008 年 4 月及 5 月出席長洲鄉事委員會及其舉辦的居民大會，聽取市民的意見。在 2009 年，我們聯同屯門和離島區共 26 位議員到東京和大阪，實地考察日本當地</p>	Not under the jurisdiction of EIAO

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	<p>等源頭減廢措施卻遲遲未上馬，可謂本末倒置之極。雖然《環境評估報告》總結出石鼓洲為一個非常合適興建焚化爐的地點，但各種因素顯示並非如此。</p> <p>1. 黑箱作業無誠信。 邱局長於今年2月17日公開作出焚化爐選址石鼓洲的定調，此舉違反了貴局在2008年的承諾；先參考《環境評估報告》及作進一步諮詢，才定選址。且自2008年至最近的宣佈期間，貴局一直不與長洲居民進一步溝通或諮詢；這單方面的宣佈既粗暴專橫又無誠信，是激起居民強烈反應的主因。此外，貴局的石鼓洲選址，也違背了自1990年代政府的新界西南發展策略：建議保護大嶼山南部及附近島嶼為自然保育區及發展休閒旅遊；石鼓洲被指定為保護區之一。香港社會向來重視誠信及理據，作為問責制下的局長，顯然不應違背事實承諾，任意莽為；長洲居民向來安居樂業，對貴局如此漠視民意，深表遺憾。</p> <p>2. 欺瞞公眾假諮詢？ 貴局蓄意安排 議員及官員到日本考察焚化爐，並大肆宣傳日式焚化設施之先進，未來香港採用技術之符合世界先進水平及歐盟標準；但卻未詳細交代興建那種焚化爐及採用那種技術，現在的設施與舊式焚化爐有多大差別？據資料顯示，日本的「焚化技術」可達1350℃，相比局方所建議的850℃焚化技術高；且850℃並不能將致癌物質二惡英完全分解，況且焚化爐還會釋出其有害氣體；而且日本的源頭分類做得很徹底，但香港只能做到簡單的廢物分類；其他垃圾便一爐而燒，顯然是想誤導公眾？再者，現時大部份日本焚化爐每日處理量約為300公噸，而貴局所建議的每日處理量為3000公噸。既無先做好源頭分類(如日式)，本身的技術及設施又是不超越歐美日等先進國家；何以能建造一個超級焚化爐，處理垃圾量超越先進國家十倍？據我們了解，香港現時未做好源頭分類，自然無法採用日式或先進國家之焚化設施及技術；貴局公佈之符合歐盟標準，是否欲「欺上瞞下」？</p> <p>3. 空言先進無保證。 貴局每次推出文件時均強調處理廢物的迫切性，但提出的廢物管理措施大部分「講完就算」，最後「無影無蹤」。局方今次強調所謂「三條腿減廢」的原則，包括源頭減廢、引入現代化處理垃圾設施及擴建堆填區。但我們可以看到的，目前廢物分類仍然停留在「黃鋁罐、藍廢紙、啡膠樽」的口號式宣傳，有姿勢無實際；以致本港廢物回收率遠遠低於歐美日等先進地區，將來何來保證達及格水平？據世界經驗及研究顯示，解決垃圾問題沒有靈丹妙藥，亦不能以純技術解決。當年顧問報告已表明焚化技術的處理成本最高，每噸耗費七百七十元，是減少廢物的五倍；若考慮近十多年土地成本及運費飆升的因素，兩者其實差距更大。貴局必須帶頭支援回收業，展示源頭減廢以協助基層市民就業，才算是上策。</p> <p>4. 空氣污染難監管。 鑑於石鼓洲焚化爐將建立在一個人工島上，它不可能成爲一個先進一流且能完全將廢物分類和除濕的焚化爐；因爲它有先天的物理條件限制。焚燒爐的污染不單只會影響附近，包括長洲，而且還將會擴散到東部和北大嶼山，甚至香港其他地區包括九龍。國際上越來越多的研究顯</p>	<p>如何利用先進的焚化技術來處理當地的廢物及污泥。我們亦於 2010 年 11 月 15 日、2011 年 2 月 21 日向離島區議會和 2011 年 3 月 8 日、3 月 10 日、3 月 17 日、3 月 29 日、4 月 11 日、4 月 12 日、4 月 14 日向長洲鄉事委員會、長洲地區組織及居民介紹在本港發展綜合廢物管理設施的最新進展。按我們的紀錄，單在今年 2 月起至 4 月，我們已與超過 1000 位人士及約 33 個團體舉行超過 40 次中會議，以進一步解釋我們現時建議的方案及回應有關疑問。我們會繼續與專業學會、環保團體、地區關注組織、商界及學術界會面，以爭取理解，並回應意見。</p> <p>在選擇在毗鄰石鼓洲的人工島發展綜合廢物管理設施時，我們亦有考慮到選址用途。在新界西南發展策略中建議把石鼓洲列爲自然保育區。爲免直接影響石鼓洲的陸地生態，以及保持石鼓洲的天然海岸線，填海區不會與石鼓洲相連。石鼓洲海岸和填海區之間將會有一條水道分隔。</p> <p>2. 我們就綜合廢物管理設施進行的工程研究中，顧問公司檢討了各種處理都市固體廢物的熱能技術的可行性，其中包括活動爐排、流化床、及旋轉窯等焚化技術，以及環保共燃系統、氣化、等離子氣化和熱解等技術。根據評估研究的結果顯示，是次項目所採用的 3T 活動爐排焚化技術並不是屬於個別國家的技術，現時已在 20 多個先進國家超過 900 座都市固體廢物處理設施使用，並已有 100 多年的營運經驗，適合處理無需預先篩選的混雜都市固體廢物。故此，無論在環境、技術成熟性、可靠性、操作、處理廢物適應能力和成本等因素上，都是國際間廢物管理設施採用的主流技術，最適合作爲本港第一座現代化的綜合廢物管理設施採用。在 2009 年 12 月，我們就建議的 3T 活動爐排焚化技術諮詢了環境諮詢委員會。隨後環諮會支持我們採用以活動爐排焚化技術爲核心處理技術。</p> <p>在日本，3T 活動爐排焚化亦是處理都市固體廢棄物的主導技術，現時有不少採用 3T 活動爐排焚化技術的日本焚化廠每日處理量高於 1,000 公噸。以下是一些例子：</p> <ul style="list-style-type: none"> ● 東京新江東焚化廠： 每日處理量：1800 公噸 ● 名古屋新南陽焚化廠： 每日處理量：1500 公噸 ● 神奈川縣都築焚化廠： 每日處理量：1200 公噸 <p>一般來說，3T活動爐排焚化爐的操作溫度是850℃和900℃之間，最低的停留時間爲2秒。從充分的操作記錄顯示，在操作溫度爲850℃以上及徹底燃燒的情況下，二噁英會完全分解爲二氧化碳、水和氯化氫，因此國際上亦以此訂爲操作標準¹。加上現代先進的氣體潔淨設備，如纖維過濾器、洗滌器和活性碳粉噴注系統，可以有效控制污染物的排放，達至爲保護環境及人體健康的嚴格排放標準。</p> <p>至於環境關注組來信中提及日本的「焚化技術」可達 1350℃，此爲氣化技術中，燃燒合成氣體以熔化飛灰的溫度，並非廢物燃燒的溫度。上述的技術檢討結果顯示，由於熔化飛灰的運作成本十分高昂，因此在國際間並沒有普遍採用。至於氣化技術，截至 2008 年，世界各地只有約 90 座氣化技術設施處理都市固體廢物，遠小於已經設立在全世界各地超過 900 座的活動爐排焚化設施。此外，由於這技術不適合處理不同大小和品質的混雜都市固體廢物，因此通常需要預先把廢物切碎至細小顆粒。目前，這項技術僅採用於相對細小規模的都市固體廢物處理（即少於每日 530 公噸）。檢討還發現，一些主要的氣化技術供應商最近退出了國際市場。鑒於其在大型都市固體廢物處理的紀錄有限、處理混合不同</p>	<p>ES:2.1.1.2</p> <p>EIA: S2.3</p> <p>Not under the jurisdiction of EIAO</p> <p>ES:S3.2</p>

¹如歐盟指引| EU 2000/76/EC，日本”Structural Standards for Waste Incinerators (Article 1-7, Order of the Ministry of the Environment under the Waste Management and Public Cleansing Law (Outline))”

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	<p>示，長時間吸入將導致呼吸系統出毛病，甚至患癌。資料顯示成人及兒童的高致癌病發、嬰兒出生的缺陷，與垃圾焚化爐所產生的污染有密切關。由於石鼓洲距離長洲只有約一海里，每年夏季經常吹西南風；即使不會釋出大量二噁英，但其他有毒氣體、污染物等將直接吹襲長洲。且島上大部份商店及食肆皆以遊客生意為主，空氣污染將直接打擊長洲的旅遊業，影響居民生計；至於貴局所說焚化爐設施可帶動本區的發展潛力，顯然是一種謬論。</p> <p>5. 破壞環境及生態。 在石鼓洲旁建人工島，需要填海約11.8公頃，及建造約 4.1公頃的防波堤；被防波堤封閉的範圍（包括防波堤的面積）約有31公頃。令近海捕魚之漁民，永久喪失這些公頃之捕魚區；且焚化爐建造時，挖掘海床淤泥工程，對捕魚業、養魚業及附近生活的海洋生物影響至巨，污濁的海水將使全港最大的養魚場無法養殖。石鼓洲附近海域是江豚及中華白海豚的棲息地，污濁的海水也使這些稀有動物難以生活。石鼓洲島上生存著全世界稀有品種的蜥蜴和蛇，及是白腹海鵬的棲息地；島上的蝴蝶品種也佔全港總數的2/3，且島上還有很多珍貴的古物。焚化爐將來排放出來的氣體，運作時的噪音等將也使島上的生物難以生存。從新界西南發展策略藍圖看，包括南大嶼山，索罟群島，長洲、石鼓洲都是風景名勝區和海岸線優美的島嶼。環境影響評估駁回在西貢島嶼和南丫島選址的部分原因就是景觀價值，那麼石鼓洲也應在此基礎上予以駁回。</p> <p>6. 虛擬數據欠真實。 《環境評估報告》避重就輕，大部分重要研究數據都欠奉。如醫療報告：直接影響著千萬人健康的設施，豈能沒有一些有關釋放出的有害物質對人身健康的詳細研究或測試報告？危機處理：如遇颶風、濃霧、撞船時等的應變措施全都欠奉。監管組織：除了政府的監察外，是否有更高的透明度，容許非官方成員參與監察？且報告既無會咀與石鼓洲之詳細比較，如彼此的建造價、潛在風險等？又無有關興建焚化爐結構等詳細資料：如香港現時之垃圾分類可否採用德國技術等？「活動爐排焚化技術」又隱瞞過往資料，對重金屬累積隻字不提等。貴局所提供的資料只是一些虛擬數據，當中技術之掌握，也缺少其他研究中心的諮詢。</p> <p>7. 愚弄公眾亂花費 為石鼓洲焚化爐構建一個人工島及相應設施，建造價及將來的運作保養將是一個龐大而昂貴的決定。政府在2008年估計單是焚化爐造價便四十億元，將來如果聯同其他相應設施一起建造，可能是一百億元以上的支出？雖然運送廢物的航程比會咀少四分之一。然而，貴局並沒有計算將已焚化廢物的300公噸灰渣及不能焚化及回收的200公噸廢物，運回新界西堆填區(屯門會咀附近)的航程費用。另外，貴局並未透露是否有其他不能焚化但可回收的廢物，需要運往其他地區再作處理？此外，每日將全港約有3,000公噸都市固體廢物，載於貨櫃內轉運抵石鼓洲的人工島；對繁忙的航空交通將構成一定壓力，對石鼓洲附近居住的居民也是不公平的。</p> <p>8. 《報告》選址不知所謂。 23個選址分析自相矛盾，只重視景觀、生態、康樂活動，卻漠視居民現有權益及健康；且空談一些未建成的虛擬計劃，捨棄現實民生於不顧，本末倒置，何其謬誤？貴局的選址分析也沒有透露當時是否有反對意見或另類提議；一切含含糊糊，簡直不知所謂。例如：選址分析西貢的島嶼，被認為會影響多種康樂活動的舉行，包括游泳、潛水、高爾夫球、遠足等。還會影響被建議劃作景觀保護區。難道居民的健康及生計，還比不上康樂活動及旅遊觀賞重要嗎？……</p>	<p>大小和類型廢物的能力不足、以及供應商有限（少於五個主要的國際供應商），檢討認為，氣化技術是不適合用於建議的綜合廢物管理設施發展計劃。</p> <p>3. 政府積極推動廢物回收 為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》（以下簡稱《政策大綱》）所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <p>(a) 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳；</p> <p>(b) 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。</p> <p>(c) 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經濟誘因；及</p> <p>(d) 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施（包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物／有機廢物的有機資源回收設施）和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。</p> <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處理我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>4. 空氣污染難監管。 經過多年的發展，廢物焚化技術已非常成熟，亦為世界上不同城市廣泛採用。目前，世界上現在運作的具備排污控制的焚化設施共約 2,000 座。除了新加坡，鄰近香港的廣州、澳門，以及日本的主要城市，均早已採納焚化技術，以協助處理沉重的都市固體廢物問題。在焚化設施被廣泛採用的同時，國際間亦發展了一套以歐盟為最高指標的排放標準，對這類型設施的排放作出規定，確保設施在運作期間對居民健康不會有影響。 綜合廢物管理設施將會採用先進的 3T 技術確保設施的排放符合國際上最嚴格的歐盟標準。3T 技術所指的是在焚化過程中做到的三個規格，包括：</p> <ul style="list-style-type: none"> - 高溫達攝氏 850 度的規格(“Temperature”)：利用嚴謹的程序控制，以 850 度以上的高溫燃燒，可以完全分解有機物及二噁英； - 高湍流的規格(high“Turbulence”)：透過燃燒過程中不斷引入高湍流的技術，以達至完全燃燒的狀態； - 留存時間達最少 2 秒以上的規格(“Time”)：維持煙氣在攝氏 850 度或以上留存時間最少 2 秒，以達至完全燃燒，將污染程度進一步降低。 	<p>ES:S1</p> <p>Not under the jurisdiction of EIAO</p>

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	<p>南丫島的舊石礦場不適宜建焚化爐是因為「它正對著一個旅遊景點索罟灣。該處有海鮮食肆和水產養殖區，而且亦靠近一些原有村落。且舊石礦場具備發展旅遊和康樂活動的潛力等。難道石鼓洲附近沒有養魚區嗎？長洲沒有海鮮食肆及不是旅遊區嗎？</p> <p>9. 鬼話連篇： 如要建做一個人工島，焚化爐最早到要2018年才能運作使用；比屯門會咀遲兩年，到時堆填區可能已滿了。於石鼓洲興建焚化爐將需要額外六項的建設工程，未計及法定刊憲程序、裝設公用設施、更複雜的技術要求及填海工程而引發的時間風險。石鼓洲便需要額外21個月才能投入服務，選址石鼓洲的工程風險是一個非常不利的因素。選址會咀鄰近龍鼓灘發電廠及無需作任何填海工程，只涉及有關基礎建設工程及地盤平整等；既便宜又較快速，為何捨易取難？ 3月10日貴局官員及額顧問公司面對居民的質詢無以言對，進一步顯示局長的「垃圾」政策嚴重背離事實。縱使邱局長出席3月13日電台節目《政壇新秀訓練班》時，也無法面對80後青年的質詢；這都顯示事實勝於雄辯，真理越辯越明。</p> <p>10. 政策須進一步討論 即使政府的首選選址不能2018年前投入使用，諮詢期只有一個月是在太急，進一步的公眾討論是必需的。政府也必需在石鼓洲以外地方，找合適建焚化爐的方案。</p> <p>由於整個項目涉及大量公帑，亦關乎公眾利益，也侵害了我們長洲人的健康及權益。我們認為石鼓洲並非一個合適興建綜合廢物管理設施的地點，故反對選址石鼓洲興建綜合廢物管理設施。我們並不是盲目的反對興建焚化爐，我們只是希望邱局長先詳細諮詢各方意見；認清香港實際境況，積極推行源頭減廢及回收再造政策，才考慮興建焚化爐。希望當局能在公開、公平、公正的原則下，繼續作廣泛諮詢。謝謝關注。</p>	<p>在 3T 技術以外，設施會額外加裝先進的氣體潔淨系統，包括清除氮氧化物的選擇性催化還原、清除二噁英的活性碳、，以及排放物持續監察系統，確保設施的排放符合國際上最嚴格的歐盟標準。</p> <p>設施落成後，會採用公開和高透明度的監控系統，市民及長洲居民每日 24 小時均可以讀取由連續性排放監控系統所得的即時數據，以確保知道綜合廢物管理設施有效運作並符合排放標準。</p> <p>根據環評報告，在可能受到綜合廢物管理設施影響的地區內，已考慮了該地區內其它污染源，而本項對累積濃度的貢獻是微小的。各個選址方案中所預測最高累積濃度在各個具代表性的空氣質素敏感受體，都是相若及全部符合相應的香港空氣質素指標。</p> <p>6. 環境及生態 毗鄰石鼓洲的人工島選址不在法定或擬議的生態保護區，環評研究顯示石鼓洲附近的海域不是中華白海豚經常出沒的區域，在大嶼山和南丫島以南的海域，包括石鼓洲附近地區，是江豚（<i>Neophocaenaphocaenoides</i>）的重要生境。擬建的人工島可能令江豚永久失去 31 公頃生境。其實，江豚出沒的區域非常廣闊，夏天及秋天較多在蒲台島附近出沒，而冬天及春天較多在大嶼山以南（包括索罟群島、石鼓洲、長洲、及近大嶼山等附近的海域）和南丫島以南的海域出沒。雖然如此，為了緩解 31 公頃生境損失，環評研究建議在石鼓洲和索罟群島之間的海域內，劃出約 700 公頃的合適範圍作為海岸公園。為此我們會進行一項海岸公園研究，以便找出設立海岸公園的適當地點和範圍，並決定在擬建的海岸公園內應該實施的海洋生態改善措施，例如放置人工魚礁和釋放魚苗等。</p> <p>此外，環評研究也建議了多項措施，緩解綜合廢物管理設施在施工和運作階段可能對江豚造成的間接影響。這些措施包括避免在江豚最活躍的季節進行高噪音工程、對專用區進行監察、採用固定的交通航線，以及在較多發現江豚的地區限制船隻時速在十海里以內等。在實施各項建議緩解措施後，本工程項目對江豚造成的不良影響會被降低至可接受水平。</p> <p>在毗鄰石鼓洲的人工島發展綜合廢物管理設施，需要進行約 16 公頃填海工程。為了盡量減少填海挖泥和填土工程及其環境影響，我們已將填海面積比原先的建議減少約四成，環評研究亦建議以“格孔式圍堰”的填海方法來取代斜坡式海堤。所謂“格孔式圍堰”，即是先以筒狀的金屬物料興建圍堰劃定填海範圍，再注入填料進行填海的方法，使人工島防波堤的建造工程無需進行大規模的沉積物挖掘。此外，我們在工程期間會使用隔泥幕系統、控制挖泥和填土速度等多項緩解措施，減少工程影響海洋水質。長遠來說，更重要的一點是未來的設施將會做到零排放的目標，在廢物處理過程所產生的污水經處理後會全部回用。</p> <p>環評研究據此進行了水質影響的定量評估，結果顯示在實施緩解措施的情況下，工程所產生的水質影響會是局部和輕微的，對附近海域捕漁業造成的間接影響亦只是輕微的和暫時性質的。而大嶼山長沙灣養魚區距離人工島選址超過九公里海程，預計興建人工島的填海工程不會影響養魚區的水質及其運作。施工及運作期間會進行嚴密的水質監察，並在互聯網上公布監察結果，以維持高度透明。</p> <p>因興建人工島發展綜合廢物管理設施，香港南部海域會永久失去 31 公頃捕魚區。環評研究顯示該海區只支持低至中等的漁業產量(每公頃約 100-200 公斤)，加上會永久失去的 31 公頃只佔香港整體捕魚區的極小部份，因此綜合廢物管理設施項目應不會對香港整體的漁業產量構成任何重要的影響，項目對漁業造成的影響會在可接受水平。上面提及的江豚生境生態緩解措施，亦助提昇漁業資源。</p>	<p>ES: S4.3.1</p> <p>ES: S4.3.5</p> <p>ES: S4.3.5 & S4.3.6</p>

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		<p>7. 我們有就關於運送灰燼、不能焚化及回收噸廢物運到新界西堆填區的海上航程，和運送廢物、灰燼等有關的陸路運輸作出估計。發現海路及陸路運輸的總運送路程，毗鄰石鼓洲的人工島為每年約 282,690 公里，而曾咀選址為每年約 646,000 公里。在運輸角度考慮，毗鄰石鼓洲的人工島所需的運輸航程較為短。未來，所有運往綜合廢物管理設施的都市固體廢物，都會載於密封貨櫃內，由專用貨櫃船從現有的港島及九龍廢物轉運站送抵人工島選址，每天運送總共只需 3 航次，對海上交通的影響不會太大。</p> <p>8. 在選址過程中，西貢並未有被篩選作為綜合廢物管理設施的發展地點，除了因為西貢及附近海域都是多種康樂活動的熱門地點和有些地方已被建議劃作景觀保護區，西貢位於盛行風向的上風位置，固並非發展綜合廢物管理設施的理想地點。</p> <p>南丫島的舊石礦場沒有被考慮作為綜合廢物管理設施的發展地點因為綜合廢物管理設施的發展計劃，亦未能配合舊南丫島石礦場其餘部份作為旅遊及康樂用途，以及毗鄰的「綜合發展區」作為綜合性低層住宅區的規劃意圖。</p> <p>9. 是次環評研究根據《環境影響評估條例》及《環境影響評估程序技術備忘錄》的要求為綜合廢物管理設施進行環評，評估所有有關的環境影響，包括本工程項目與其他發展項目對有關地區所導致的累積影響，範圍涵蓋噪音、空氣、水質、廢物、生態、景觀、文化遺產等。環評亦出採取適合的緩解措施以確保對環境的影響可達至可接受水平，及建議環境監察與審核計劃，以確保各項緩解措施的成效。是次環評研究是根據在屯門曾咀及毗鄰石鼓洲的人工島兩個地點發展一個處理能力達每日 3,000 公噸的設施而進行。</p> <p>是次環評研究根據兩個可能選址，評估了三個情景： 只於曾咀選址發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施； 只於石鼓洲附近的人工島上發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施；及 在兩個可能選址各自發展一個處理能力達每日 3,000 公噸的綜合廢物管理設施（並存情況）。</p> <p>環評報告顯示，在上述兩個地點興建現代化的焚化設施，採取先進的技術及適當的緩解措施後，上述三個情景在環境上都是可以接受。</p>	<p>Not under the jurisdiction of EIAO</p> <p>ES:S2.2.3.2</p> <p>ES:3.1.16</p> <p>ES:3.1.3.4</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p>

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	<p>Though the environmental impact assessment strives to make Shek Kwu Chau appear a suitable site for an incinerator, various factors show this is not the case. Among these:</p> <p>雖然環境影響評估總結出石鼓洲為一個非常合適興建焚化爐的地點，但各種因素顯示並非如此。其中包括：</p> <p>Cost Constructing an island for an incinerator – which will be a substantial industrial facility – will be expensive. Infrastructure is currently lacking.</p> <p>成本 為焚化爐構建一個人工島將是一個重大的昂貴工業設施。基礎設施是當前缺乏的。</p> <p>Timing As an island must be built, the incinerator cannot become operational until 2018 at the earliest. This may well be after existing landfills are full.</p> <p>時機 如要建做一個人工島，焚化爐最早到要 2018 年才能運作使用。這時堆填區已滿了。</p> <p>Potential air pollution Available information shows that pollution from the incinerator will not only affect the immediate vicinity, including Cheung Chau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon. Given the incinerator will be built on an artificial island, it may not be possible to build a first-rate incinerator, with full waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements.</p> <p>潛在空氣污染問題 有資料表明，從焚燒爐的污染不單只會影響附近，包括長洲，而且還將會擴散到東部和北大嶼山，甚至香港其他地區包括九龍。鑑於焚化爐將建立在一個人工島上，它不可能成爲一個先進一流的能完全將廢物分類和除濕的焚化爐。因爲它有先天的物理條件限制。</p> <p>Terrestrial biodiversity Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – are unique to the island. Shek Kwu Chau is one of only three islands in the world that are home to Bogadek's legless lizard. The butterfly diversity is amazing, with around two-thirds of Hong Kong's species recorded. This is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>陸地生物多樣性 石鼓洲具有顯著的生物多樣性。蛇類如亞物種- Hollinrake's racer 和玉葡萄樹蛇 Jade Vine Snake - 是該島獨有的。石鼓洲也是世界三個島嶼其中之一 Bogadek 無腿蜥蜴的家園。蝴</p>	<p>appropriate mitigation measures are implemented.</p> <p><u>Potential air pollution</u></p> <p>The IWMF will adopt modern advanced air pollution control and comply with emission standard equivalent to or more stringent than the most stringent international standards (i.e. EU standards). Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF. Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQO parameters at all concerned air sensitive receivers comply with the corresponding AQOs.</p> <p><u>Terrestrial biodiversity</u></p> <p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has therefore considered that reclamation is a more suitable option for the siting of the IWMF. Other mitigation measures are proposed to minimise potential impacts on wildlife to acceptable levels. No unacceptable impacts are predicted for terrestrial biodiversity.</p> <p><u>Marine biodiversity</u></p> <p>Considering the ecological value of the marine environment, the project has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limitation on vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimise the identified impacts. More details on the proposed mitigation measures are presented in Section 7b.8 of the EIA report. No unacceptable impacts are predicted for marine biodiversity.</p> <p><u>Scenic value</u></p> <p>The current location of the artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. Cheung Chau is located to the northeast of Shek Kwu Chau. The buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. The view of the IWMF will be partially blocked by the Shek Kwu Chau. Besides, with introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, the compatibility of IWMF with the surrounding natural setting would be improved.</p> <p>Sai Kung is not shortlisted for further site evaluation in the site search study. In addition to the facts that the islands in Sai Kung and their nearby waters are popular locations for various recreational activities including swimming, diving, golfing, hiking, etc., the southern parts of Kau Sai Chau and Jin Island have been proposed as Landscape Protection Areas and are to be used for seabirds/ other wildlife conservation, and the islands are also viewed by the nearby Sai Kung East Country Park, Sai Kung West Country Park, Kiu Tsui Country Park and Clear Water Bay Country Park, Sai Kung is less favorable for the development of the IWMF because it is</p>	<p>ES S4.3.1.3 to S4.3.1.4</p> <p>EIA: S7b.1.1.2,S 7b.8</p> <p>EIA: S7b.8</p> <p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p>

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	<p>蝶多樣性是驚人的，大約有三分之二的香港物種在那處可找到。它也是香港土生土長白腹海雕的繁殖地。</p> <p>Marine biodiversity Marine biodiversity is high, reflected in the waters of southwest Shek Kwu Chau being the best fishing ground near Cheung Chau, and 15 species of hard coral being found. This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. Reclamation of around 16 hectares plus breakwaters and berthing area will cause significant and unacceptable destruction and damage to the marine environment.</p> <p>海洋生物多樣性 石鼓洲的西南水域長洲附近，發現到 15 種硬珊瑚。這反映出高海洋生物多樣性。它也是香港三個主要頻臨絕種海洋哺乳動物黑江豚生活的水域之一。16 公頃填海加防波堤和停泊區將造成嚴重破壞和損害海洋環境。</p> <p>Scenic value As acknowledged in the Southwest New Territories Development Strategy, Shek Kwu Chau is in a scenic area of islands and coastline, including south Lantau, the Soko Islands, and Cheung Chau. The EIA rejected potential sites in Sai Kung islands and on Lamma in part because of scenic value; Shek Kwu Chau should likewise be rejected on this basis.</p> <p>景觀價值 在新界西南發展策略藍圖中，包括南大嶼山，索罟群島，長洲、石鼓洲都是風景名勝區和海岸線優美的島嶼。環境影響評估駁回在西貢島嶼和南丫島選址的部分原因就是景觀價值；那麼石鼓洲也應在此基礎上予以駁回。</p> <p>Tourism value Cheung Chau and south Lantau are highly important for tourism, serving as major leisure areas for Hong Kong people, and destinations for overseas visitors. Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines.</p> <p>旅遊價值 長洲及大嶼山南部是香港市民和海外遊客主要旅遊和休閒區。活動包括遠足，游泳，吃海鮮，欣賞美景。石鼓洲也是一個重要的景觀區，這裡的水域已經是人們和遊艇常到的休閒樂園。</p> <p>Further Discussions Needed</p> <p>The consultation has been rushed, even though the government's preferred option cannot become operational until 2018 at the earliest. Further public discussions are required.</p> <p>An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p>	<p>located at the upstream location of the prevailing wind direction (i.e. from the northeast direction). Considering the above mentioned factors, Sai Kung is not considered for the development of the IWMF.</p> <p>Ex-Lamma Quarry was not selected for further EIA and engineering investigation because the development of the IWMF would not be compatible with the existing land uses as well as the future planned development. The planning intention of the remaining portion of the ex-Lamma Quarry site is proposed for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p> <p><u>Tourism value</u></p> <p>As mentioned above, the IWMF facilities will include environmental education and leisure tourism elements. The facilities for environmental education and leisure tourism will attract tourists to visit IWMF during leisure time. Visitors can use the ferry services in Cheung Chau and travel to IWMF and this would also encourage tourists to visit Cheung Chau as well.</p>	<p>Not under the jurisdiction of EIAO</p>

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	<p>需要進一步討論 即使政府的首選選址不能 2018 年前投入使用，諮詢期只有一個月是在太急，進一步的公眾討論是必需的。</p> <p>政府也必需在石鼓洲以外地方，找合適建焚化爐的方案。</p>		
LPC003	<p>本人擬就垃圾焚化爐選址的環境影響評估發表以下意見：</p> <p>1. 先積極實行減廢及支持回收，循環再做行業，製定長遠策略及目標，至某一階段的減廢目標達成，始研究是否有需要興建焚化爐。政府一直忽略源頭減廢，減少市民和政府浪費的生活模式，人均產生垃圾的數量亦是亞洲四小龍之冠。只光從技術及環境影響角度審批興建焚化爐，只會令政府及市民持續這一種浪費的生活模式。</p> <p>我認為興建焚化爐的重點不是選址問題，而是焚化爐潛在的污染、不可持續性及政府短視的廢物處理手法。現時的科技根本無法做到「零二噁英」排放，而且爐底灰的毒性更強，仍需要堆填處理，根本無法保證日後不會滲漏，如果大家容許政府在沒有足夠資料證明不會造成污染的情況下興建焚化爐，很有可能變相遺禍下一代。</p> <p>我希望主席及各委員落實源頭減廢及回收再造的政策，訂定長遠的可持續發展社會模式，不要以焚化爐掩飾浪費及不負責任的環境政策。</p>	<p>為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》(以下簡稱《政策大綱》)所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <p>(a) 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳；</p> <p>(b) 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。</p> <p>(c) 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經濟誘因；及</p> <p>(d) 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施(包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物/有機廢物的有機資源回收設施)和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。</p> <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>綜合廢物管理設施將會採用先進的 3T 技術確保設施的排放符合國際上最嚴格的歐盟標準。3T 技術所指的是在焚化過程中做到的三個規格，包括：</p> <ul style="list-style-type: none"> - 高溫達攝氏 850 度的規格(“Temperature”)：利用嚴謹的程序控制，以 850 度以上的高溫燃燒，可以完全分解有機物及二噁英； - 高湍流的規格(high“Turbulence”)：透過燃燒過程中不斷引入高湍流的技術，以達至完全燃燒的狀態； - 留存時間達最少 2 秒以上的規格(“Time”)：維持煙氣在攝氏 850 度或以上留存時間最少 2 秒，以達至完全燃燒，將污染程度進一步降低。 <p>在 3T 技術以外，設施會額外加裝先進的氣體潔淨系統，包括清除氮氧化物的選擇性催化還原、清除二噁英的活性碳，以及排放物持續監察系統，確保設施的排放符合國際上最嚴格的歐盟標準。</p> <p>綜合廢物管理設施的焚化過程所產生的最終產品會包括爐底灰、飛灰和空氣污染控制殘渣。本工程項目會先檢查它們確實符合建議採用的焚化殘渣污染控制上限，然後運往堆填區棄置。在把飛灰和空氣污染控制殘渣棄置於堆填區前，會先進行預先處理。綜合廢物管理設施在運作期間會使用或產生有限數量的</p>	<p>ES:S1</p> <p>EIA S2.4.2.4</p> <p>EIA S6b.5.2.3, 6b.6</p>

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		<p>化學品或化學廢物。因此，已經建議了多項可以預防污染的良好施工方法和應變程序。在妥善地實施這些方法和程序後，設施在運作造成土地污染的可能性極微。</p>	
LPC004	<p>Comments on the proposed IWMF Agreement No. CE 29/2008 (EP)</p> <p>The Hong Kong Government has given two options for the planned waste incinerator: ash lagoons at Tsang Tsui, Tuen Mun; and an artificial island to be constructed off southwest Shek Kwu Chau. We are told the latter is the preferred choice, and a public consultation began last month.</p> <p>This public consultation is too short: the issues merit further discussions by Hong Kong people. Yes, landfills will fill up soon, yet the government's policies have contributed to this, making Hong Kong one of the world's most throwaway societies. Any sense of urgency must be countered by the fact the "preferred" option cannot become operational until 2018 at the earliest.</p> <p>The choice of Shek Kwu Chau is not appear justified on any scientific basis, and is environmentally unacceptable.</p> <p>Shek Kwu Chau Selection Contradicts Government Plans</p> <p>The selection of Shek Kwu Chau (really, waters to the southwest, where an artificial island will be constructed) is in direct contradiction to the intent of the government's Southwest New Territories Development Strategy Review. This recommended that south Lantau and nearby islands be protected for nature conservation and leisure tourism. Shek Kwu Chau was designated as a potential conservation area.</p> <p>Badly Biased Environmental Impact Assessment</p> <p>Reading the environmental impact assessment, it is clearly biased towards making Shek Kwu Chau appear environmentally acceptable as a site for the incinerator. Note, for instance, different approaches taken to "assessing" Sai Kung islands and Lamma sites, and Shek Kwu Chau: with the former, factors are covered that reject these sites; yet though similar factors can apply to Shek Kwu Chau, they are barely mentioned, and the EIA highlights supposed factors in favour of Shek Kwu Chau.</p> <p>This would appear to result from an overarching political imperative, and the EIA consultants seeking to do their paymasters' bidding.</p> <p>Among factors that make Shek Kwu Chau unacceptable:</p> <p>Location</p> <p>An artificial island with no infrastructure does not seem a sensible choice for locating a complicated, substantial industrial complex. Plus, Shek Kwu Chau is exposed to the elements, including tropical storms and typhoons.</p> <p>Cost</p>	<p>To identify a suitable site for developing integrated waste management facilities (IWMF), a study on Site Search for IWMF in Hong Kong for municipal solid waste was carried out in 2008. The study suggested an artificial island near Shek Kwu Chau (SKC) and a site at Tsang Tsui Ash Lagoons (TTAL), Tuen Mun, could be the potential sites for developing the IWMF. In the same year, the Environmental Protection Department briefed the Legislative Council, Tuen Mun and Island District Council as well as Advisory Council on the Environment (ACE) on the site selection outcome. A detailed Engineering Investigation and Environmental Impact Assessment (EI & EIA) Studies for the two potential sites commenced in November 2008. The EIA Study was conducted in accordance with the requirements of the Environmental Impact Assessment Ordinance. The areas covered in the Study included air quality, noise, water quality, waste management, ecology (terrestrial and marine), fisheries, landscape and visual impact, cultural heritage and health risks. According to the findings of the EIA Study, construction and operation of the IWMF on the artificial island near SKC or the TTAL site will be environmentally acceptable. The EIA report is being processed in accordance with the statutory procedures.</p> <p><u>Shek Kwu Chau Selection</u></p> <p>During the selection of the artificial island near Shek Kwu Chau for the development of the IWMF, the usage of the Shek Kwu Chau island were considered. South West New Territories Development Strategy Review has included Shek Kwu Chau as a conservation area. To avoid direct impact on the terrestrial ecology of Shek Kwu Chau and to conserve the natural shoreline of Shek Kwu Chau, the reclamation area will not be connected to Shek Kwu Chau. Instead, the coast of Shek Kwu Chau and the reclamation area will be separated by a water channel.</p> <p><u>Potential air pollution</u></p> <p>Advanced air pollution control system, including selective catalytic reduction (SCR) for Nitrogen oxides (NOx) removal and activated carbon for dioxins removal and continuous emissions monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stacks will meet the target emission limits that is the same as or more stringent than those stipulated in Hong Kong and the European Commission for waste incineration.</p> <p>Cumulative air quality impact assessment has been undertaken for the Project taking into account the emissions from both regional and local sources, including the emissions within the Pearl River Delta Economic Zone and major local air pollution sources in Hong Kong. The predicted maximum cumulative concentrations of relevant AQOs parameters at the representative air sensitive receivers in areas that might be impacted by the IWMF emission all complied with the corresponding AQOs.</p> <p><u>Location and Cost</u></p> <p>Developing the first modern IWMF on the artificial island near SKC will require a relatively longer construction period and a higher capital cost. On balance, it is considered important to achieve a more balanced distribution of waste facilities and more efficient interface with the refuse transfer station network. It would further minimize the impact on air quality, and reduce greenhouse gas emissions. The reclamation works will absorb a couple of million tonnes of construction waste, which would otherwise occupy space at the fill banks.</p> <p><u>Terrestrial biodiversity</u></p> <p>The proposed project has taken into account the ecological value of Shek Kwu Chau, and has recommended that the IWMF be built on an artificial island separated from the Shek Kwu Chau island by a water channel. Other</p>	<p>EIA S2.4.1.2</p> <p>ES 4, ES 5 and under various parts of EIA Reports</p> <p>ES S4.3.1.3 to S4.3.1.4</p> <p>EIA:</p>

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	<p>Even before building the incinerator, massive funding will be required for constructing the artificial island together with necessary infrastructure.</p> <p>Timing</p> <p>Building the island will take time, additional to the time needed for constructing the actual incinerator. The incinerator cannot become operational until 2018 at the earliest. Hence, it may not be available until after existing landfills are full. And, there may be pressure to rush the project, reducing efficiency and increasing pollution once it does begin operating.</p> <p>Potential air pollution</p> <p>Especially given the location, it is unlikely to incinerator will operate at anything approaching the efficiency possible with waste incinerators, which are complex, with potential for releasing a range of toxic chemicals that have been proven to cause cancer and other illnesses. For instance, dioxins are readily created by incineration, particularly if there is inadequate waste sorting and drying. Physical constraints will make it difficult or impossible to make subsequent improvements.</p> <p>Pollutants will not only affect the immediate vicinity, including Cheung Chau and south Lantau, but will also spread across east and north Lantau, and reach other areas of Hong Kong including Kowloon and Tuen Mun.</p> <p>Terrestrial biodiversity</p> <p>Shek Kwu Chau has remarkable biodiversity. One species and one sub-species of snake – Hollinrake's Racer and Jade Vine Snake – have been found nowhere else on earth. Shek Kwu Chau is one of only three islands in the world, all near Lantau, that are home to Bogadek's legless lizard. Around two-thirds of Hong Kong's species have been recorded: an astonishing diversity for such a tiny island. Plus, Shek Kwu Chau is one of few local breeding sites for Hong Kong's most magnificent resident bird of prey, White-bellied Sea-Eagle.</p> <p>Marine biodiversity</p> <p>Marine biodiversity is high around Shek Kwu Chau. The waters to the southwest of the island are the best fishing ground near Cheung Chau. Some 15 species of hard coral have been found.</p> <p>This is one of three key sites in Hong Kong for Black Finless Porpoise, a marine mammal that is globally Vulnerable to extinction. This fact alone should make Shek Kwu Chau an unacceptable location for the incinerator.</p> <p>Reclaiming around 16 hectares of land, plus breakwaters and berthing area will cause significant, irreparable and unacceptable destruction and damage to the marine environment.</p> <p>Scenic value</p>	<p>mitigation measures are proposed to minimize potential impacts on wildlife to acceptable levels. Therefore, no unacceptable impacts are predicted for terrestrial biodiversity.</p> <p><u>Marine biodiversity</u></p> <p>The ecological value of the marine environment has been carefully considered and assessed and the IWMF has avoided direct encroachment of the intertidal area and the near shore hard bottom substratum, along with their associated wildlife users (including intertidal and coral communities). Appropriate mitigation measures including water quality control, coral translocation, marine park designation, deployment of artificial reef, release of fish fry, limiting vessel speed limit at areas with high occurrence of Finless Porpoise etc. have been proposed to minimize the identified impacts. Therefore, no unacceptable impacts are predicted for marine biodiversity.</p> <p><u>Scenic value</u></p> <p>The artificial island is located to the southwest of Shek Kwu Chau, making use of Shek Kwu Chau to serve as a natural visual barrier to screen off the facilities in IWMF. For example, Cheung Chau is located to the northeast of Shek Kwu Chau, the buildings of IWMF will be almost blocked by Shek Kwu Chau when viewed from Cheung Chau Ferry Pier. The famous beaches in South Lantau, such as Pui O Beach, Cheung Sha Beach and Tong Fuk Beach, are located about 6 to 7 km from Shek Kwu Chau. Viewing from these areas, IWMF will be partially blocked by the Shek Kwu Chau. Besides, with the introduction of an architectural and landscaping design emphasizing nature as design concept to the IWMF, this can fuse IWMF into the surrounding natural environment.</p> <p>Sai Kung was not shortlisted for further site evaluation in the site search study. In addition to the facts that Sai Kung and the nearby waters are popular locations for various recreational activities and some areas have been proposed as Landscape Protection Areas, Sai Kung is located at the upstream location of the prevailing wind direction. Hence, Sai Kung is not a favorable place for the development of the IWMF.</p> <p>Ex-Lamma Quarry was not selected for the development of the IWMF because the development of the IWMF would not be compatible with the future planned development for tourism and recreation purposes, and the adjoining "Comprehensive Development Area" (CDA) site which is planned for comprehensive low-rise residential development.</p> <p><u>Tourism value</u></p> <p>The IWMF under planning will have an environmental education centre that will provide information on and demonstration of waste management and the most advanced waste-to-energy technology. There will also be information on the ecology of the area around SKC to promote education on environmental protection. Drawing on experience from the Sludge Treatment Facilities, the IWMF may also provide recreational and leisure facilities for visitors, such as a viewing terrace, and ferry services between Cheung Chau and SKC for visitors. It is anticipated that the facilities can attract visitors. As visitors will have to stop over in Cheung Chau, this will help boost the local tourism and catering business.</p> <p><u>Alternative Scale</u></p> <p>As recommended by the Advisory Committee on the Environment (ACE), IWMF would be implemented in phases. When deciding the scale of the Phase 1 IWMF, the Government has considered the factor of economies of scale and made references to the experiences of other densely-populated cities with demographic and geographic similarities as Hong Kong. It is concluded that the first IWMF should have a daily handling capacity of about 3,000 tonnes.</p>	<p>S7b.1.1.2,S7b.8</p> <p>EIA: S7b.8</p> <p>EIA Tables 10b.4, 10b.13, 10b.15, 10b.18</p> <p>ES:3.1.3.4</p> <p>Not under the jurisdiction of EIAO</p>

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	<p>As the Southwest New Territories Development Strategy acknowledges, Shek Kwu Chau is located in an area of islands and coastline with great scenic value, including south Lantau, the Soko Islands, and Cheung Chau.</p> <p>The EIA cited scenic value as an important reason for rejecting potential sites in Sai Kung islands and on Lamma. Shek Kwu Chau should also be rejected because of the landscape value.</p> <p>Tourism value</p> <p>Tourism – particularly involving people from urban areas in Hong Kong, as well as overseas visitors – is very important for nearby Cheung Chau and south Lantau. Indeed, for Hong Kong city people visits to these areas give them a chance to escape the “concrete jungle”, and enjoy greenery, scenery, and fresher air.</p> <p>Activities include hiking, swimming, eating seafood, and enjoying the scenery. Shek Kwu Chau is an important island for these visitors, readily visible from many places – and the waters here are already popular for leisure boats, with potential for increased visits to appreciate the unspoiled coastlines. This situation is similar to the Sai Kung islands – and yet the EIA used leisure activities as a reason for rejecting the Sai Kung islands as a potential site, but not Shek Kwu Chau.</p> <p>There is potential for increased tourism to waters around Shek Kwu Chau.</p> <p>However, it is absurd to suggest (as some proponents have done) that an incinerator island by Shek Kwu Chau No one visiting Cheung Chau or south Lantau is intent on seeing an industrial complex with giant chimney belching fumes.</p> <p>Better Alternatives</p> <p>As the EIA makes clear, the site at Tsang Tsui ash lagoons is far better than Shek Kwu Chau on environmental grounds. If an incinerator were to be built here, there would be far less constraints on land area than at Shek Kwu Chau, and it would be possible to also use money “saved” (by not constructing an island) to maximise incinerator efficiency – such as using burning at temperatures of 1350C and above, rather than 850C as currently planned.</p> <p>Also, Green Island Cement has an alternative proposal, which would appear to have several benefits: far lower cost – partly as industrial land with infrastructure is already available; tried and proven in Hong Kong; higher capacity; trial operations yielded waste emissions substantially lower than government standards – for instance, dioxin levels 99 percent lower than the BMP standard.</p> <p>The government should also consider transforming existing Refuse Transfer Stations into Waste Processing Centres (including incinerators). The merits of this alternative is that i) we do not add any dirty facility to any district; ii) we are proposing improving the RTSs; iii) we avoid double-handling of wastes; iv) each district (LegCo district) solves their own problems and bears the same responsibility; v) if the incinerator can generate electricity, it can be provided free to all government facilities in the district directly.</p>	<p><u>Incineration Technology</u></p> <p>The temperature of 1350°C is actually the temperature at which syngas produced from gasification technology is burned to melt fly ash, not the temperature at which waste is burned. A technology review in 2009 showed that the operation cost of the ash melting is very high and therefore not widely used internationally. The gasification technology, as of 2008, has only been used in about 90 worldwide gasification facilities to handle municipal solid waste, much less than the number of moving grate incineration facilities in the world (with more than 900 moving grate incineration facilities). In addition, the gasification technology is not suitable for dealing with different size and quality of mixed municipal solid waste, and it is often necessary to pre-shred the waste into small pieces. At present, this technology is only used in relatively small-scale municipal solid waste (i.e. less than 530 tonnes per day). The technology review also found that some of the major supplier of gasification technology has recently withdrawn from the international market. In view of its limited track record in dealing with large scale municipal solid waste treatment, its lack of capacity in handling a mix of different sizes and types of waste, and the fact that the number of suppliers is limited (less than five major international suppliers), the technology review considered that it is not suitable for gasification technology to be used in the proposed integrated waste management facilities development plan.</p> <p><u>Eco-Co-Combustion System</u></p> <p>In order to identify the right technology for treating municipal solid waste (MSW), the Government invited companies from Hong Kong and overseas to submit expression of interest for the provision of waste management technology in 2002. A total of 59 submissions were received. Subsequently the Advisory Group on Waste Management Facilities (AG) was formed with members from professional bodies, environmental groups, and academia and business sectors to assess the submissions and recommend the waste treatment technology suitable for Hong Kong. The AG concluded that in light of the heterogeneous nature of MSW in Hong Kong, the IWMF should adopt a multi-technology approach with incineration as the core waste treatment technology. On the basis of the AG's recommendations, the feasibility and the latest development of various detailed thermal treatment technologies, including the moving grate technology, fluidised-bed, rotary kiln incineration, as well as the eco-cocombustion system, gasification, plasma gasification and pyrolysis, were further reviewed in the EI Study for the IWMF in 2009. According to the review, the moving grate incineration technology is being used in excess of 900 MSW treatment facilities in over 20 countries and has more than 100 years operational experience. It is the mainstream treatment technology for waste management facilities worldwide adopted on the merits of its environmental performance, technological soundness, reliability, operation, adaptability in waste treatment and cost effectiveness. As such, it is the most suitable technology for the first modern IWMF in Hong Kong. The conclusion is consistent with the views given by the AG previously. The Advisory Council on the Environment (ACE) was consulted on the findings of the feasibility study and the proposed moving grate incineration technology in December 2009. It supported the use of the moving grate incineration as the core technology for the IWMF.</p> <p><u>Local Consultation</u></p> <p>The Government has kept in touch with the respective District Councils (DCs) and local communities so as to enable them to have a better understanding of the modern incineration technology for waste treatment. For example, the Island DC was briefed on the latest progress of developing the IWMF in Hong Kong and the outcome of the site selection in March 2008; the meeting of the Cheung Chau Rural Committee (CCRC) and the public forum organized by CCRC were arranged in April and May 2008 respectively to listen to public views. In 2009, a delegation comprising representatives from the EPD and 26 members of the Tuen Mun and Islands DCs conducted a study visit to Tokyo and Osaka to inspect the use of advanced incineration technologies for waste and sludge treatment in Japan. The Government also briefed the Island DC on 15.11.2010, 21.2.2011 and</p>	

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	<p>Plus, should proponents of the Shek Kwu Chau site really believe it will benefit tourism: build it at Disneyland. Here, there is land available, transport will be easier, and Disneyland needs more attractions. [No, this is not a serious proposal; yet it helps highlight the absurd nature of plans for "Incinerator Island" by Shek Kwu Chau.]</p> <p>Woefully Inadequate Public Consultation</p> <p>To date, public consultation has been woefully inadequate. Even the information on the EPD website has been barely updated. A meeting on Cheung Chau involved EPD officials and AECOM consultants talking, hearing a multitude of complaints and questions, but giving no substantial answers: nor have answers been conveyed to participants.</p> <p>The government has produced propaganda videos, only in Chinese – even though English is an official language in Hong Kong, and this issue affects everyone in Hong Kong. At least one shows a pretty girl happily talking about the situation in Japan, in a manner recalling a beauty products company promotion.</p> <p>Further discussions, and genuine public consultations are needed. An alternative to constructing an artificial island with incinerator by Shek Kwu Chau must be found.</p>	<p>21.3.2011 as well as CCRC and residents on 8.3.2011 and 10.3.2011 on the latest progress of developing the IWMF in Hong Kong. From February to April 2011, more than 25 meetings have been arranged, meeting more than 1000 people and about 40 groups/organizations, to further explain the project and the responses to the questions. The Government will continue discuss with the professional institutes, environmental groups, local concern groups, business and academic to gain understanding and to respond to comments.</p>	
LPC005	<p>你好！環保局就處理家居及工商業的回體垃圾問題，在沒有落實源頭減廢及回收再造的政策的情況，就提出垃圾焚化爐的終端處理方法，並完成選址的環境影響評估，在草草一個月的諮詢後，交由委員會審批。主席閣下與諸委員是保護香港環境的把關者，是促進香港可持續發展的監察者，任重而道遠。</p> <p>十多年前，香港不少環保組織已提出從源頭及回收再造兩個政策處理香港廢物問題，可惜，香港政府口惠而不實，一直沒有積極推行，香港的垃圾逐年遞增，而人均產生垃圾的數量亦是亞洲四小龍之冠。廢物當中九成多有回收價值的「資源」被當作垃圾處理，光是廚餘，便佔 41.4%，紙類佔 23%等，興建垃圾焚化爐，只會燒掉大量有用資源；而興建焚化爐後，只會令政府及市民失去減廢的動力。所以，我們希望主席及各委員不要只光從技術及環境影響角度審批興建焚化爐。</p> <p>興建焚化爐更加不是選址問題，而是焚化爐潛在的污染、不可持續性及政府短視的廢物處理手法的全港性問題等。日本福島核電廠因天災引發的破壞性影響絕非人類可預料，也非科技可以解決，禍延下一代。香港政府不斷強調日本焚化爐的技術，卻沒有提及日本及其他地區的回收再造的政策，偷換概念，欺騙公眾。根據現時的科技，根本無法做到「零二惡英」排放，而且爐底灰的毒性更強，仍需要堆填處理，根本無法保證日後不會滲漏，如果大家容許政府在沒有足夠資料證明不會造成污染的情況下興建焚化爐，很有可能變相遺禍下一代，諸君責無旁貸。</p> <p>根據環保署資料，99%回收後的廢物都是輸出到其他地區再造，真正留在本港循環再造的不足一成。回收再造可以創造大量的就業機會，但因政府沒有政策的配合，回收業難以生存，結果只能將廢物棄置或出口，為甚麼政府不把這些資料開創綠色產業，創造基層的就</p>	<p>為了全面地處理這個迫在眉睫的廢物問題，香港特區政府根據 2011 年 1 月時的最新發展，檢討了於 2005 年發表的《都市固體廢物管理政策大綱(2005-2014)》(以下簡稱《政策大綱》)所闡述的行動計劃。為了確保香港能夠繼續妥善地處理固體廢物，而且不會造成環境問題，政府會採取下列行動：</p> <p>(a) 把 2015 年的都市固體廢物回收率目標提高至 55%，並加強有關減少廢物和把廢物循環再造的推廣和宣傳；</p> <p>(b) 加快立法建議，引進新的「生產者責任計劃」，並擴大現時的「生產者責任計劃」，鼓勵減少廢物。</p> <p>(c) 鼓勵市民繼續參與討論各種方案，以便引入都市固體廢物收費，作為在源頭減少廢物的直接經濟誘因；及</p> <p>(d) 於 2012 年初向立法會財務委員會申請撥款，務求先進廢物處理設施(包括一所每日能夠處理 3,000 公噸都市固體廢物的綜合廢物管理設施、一所每日能夠處理 200 公噸食物/有機廢物的有機資源回收設施)和現有堆填區的擴建都能夠及時啓用，確保以不間斷及更加可持續的方法管理固體廢物。</p> <p>香港必須盡快確定發展第一個綜合廢物管理設施，以便大幅減少都市固體廢物的體積，否則，在堆填區可用容量日漸減少的情況下，到了 2018 年時，便沒有合適的設施處置我們所產生的都市固體廢物。由於項目規劃和準備工作以及相關的法律及行政要求等都需要一段時間才能完成，因此必須及時採取行動。倘若未能及時提供足夠和適當的廢物處理和棄置設施，香港便難以維持一個世界級城市應有的環境衛生水平。</p> <p>綜合廢物管理設施將會採用先進的 3T 技術確保設施的排放符合國際上最嚴格的歐盟標準。3T 技術所指的是在焚化過程中做到的三個規格，包括：</p>	ES:S1

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	<p>業機會，反而要興建壽命不足二十年的焚化爐，就一把火毀掉不少依賴回收維生的基層市民生計。</p> <p>興建垃圾焚化爐既非合乎可持續的原則，更會做成社會的分化。處理垃圾的問題，必須全民參與及共同分擔，政府推行的垃圾焚化爐的政策，只會令市民以為科技可以解決垃圾的問題，便失去意欲，實踐「零廢物」的生活目標，反而會阻礙推行「零廢物」的文化。香港社會現時面對「深層次」矛盾，在政策製訂過程中應重視市民的參與及共識，而非製造矛盾與分化。</p> <p>我們盼主席及各委員緊守把關者及監察者的角色，敦促政府收回垃圾焚化爐方案，落實源頭減廢及回收再造的政策，訂定「零廢物」的目標。</p>	<ul style="list-style-type: none"> - 高溫達攝氏 850 度的規格(“Temperature”)：利用嚴謹的程序控制，以 850 度以上的高溫燃燒，可以完全分解有機物及二噁英； - 高湍流的規格(high“Turbulence”)：透過燃燒過程中不斷引入高湍流的技術，以達至完全燃燒的狀態； - 留存時間達最少 2 秒以上的規格(“Time”)：維持煙氣在攝氏 850 度或以上留存時間最少 2 秒，以達至完全燃燒，將污染程度進一步降低。 <p>在 3T 技術以外，設施會額外加裝先進的氣體潔淨系統，包括清除氮氧化物的選擇性催化還原、清除二噁英的活性碳，以及排放物持續監察系統，確保設施的排放符合國際上最嚴格的歐盟標準。</p> <p>綜合廢物管理設施的焚化過程所產生的最終產品會包括爐底灰、飛灰和空氣污染控制殘渣。本工程項目會先檢查它們確實符合建議採用的焚化殘渣污染控制上限，然後運往堆填區棄置。在把飛灰和空氣污染控制殘渣棄置於堆填區前，會先進行預先處理。綜合廢物管理設施在運作期間會使用或產生有限數量的化學品或化學廢物。因此，已經建議了多項可以預防污染的良好施工方法和應變程序。在妥善地實施這些方法和程序後，設施在運作造成土地污染的可能性極微。</p>	<p>EIA S2.4.2.4</p> <p>EIA S6b.5.2.3, 6b.6</p>