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## A spot of fog

**Tom Yam** says officials have only themselves to blame for the delay in incinerator plans – their choice of location fails an objective assessment

Legislators should be applauded for withholding support for a HK\$15 billion waste incinerator to be built on Shek Kwu Chau, leaving the issue to incoming chief executive Leung Chun-ying's administration. The current administration has clearly botched the job. Many would agree with the government that incineration is part of the solution to Hong Kong's waste disposal problem, but where to put the incinerator? The Environmental Protection Department decided it should be built on Shek Kwu Chau, and cast local opposition as "not in my neighbourhood" resistance by residents in the vicinity. In fact, the real issue is the department's unprofessional and indefensible decision-making that led to the selection of a site in an ecologically sensitive area, instead of an existing industrial zone – the Tsang Tsui ash lagoons in Tuen Mun.

The department failed to make an objective analysis and comprehensive comparison of the two sites. Its documents and presentations are biased towards its selection, describing only the advantages of Shek Kwu Chau. Any unbiased comparison clearly shows Tsang Tsui to be the better choice for environmental, economic and technical reasons.

Two consultants engaged by the department studied the feasibility of both sites under 20 criteria.

It's easy even for a layman to see from their reports that Tsang Tsui is the better site in 12 criteria:

engineering, technical and economic, less ecological impact, more efficient land use.

Only one factor favours Shek Kwu Chau: lower transport costs.

Both sites were rated the same under the four criteria of air quality, noise, landscape and hazard.

The department provided no information for one criterion (operational cost), another was irrelevant

(land ownership) and the remaining one was not addressed (community impact on Tuen Mun,

Cheung Chau and South Lantau).

Construction of an incinerator in Tsang Tsui would cost 26 per cent less than in Shek Kwu Chau

(in 2011 prices) and be completed two years earlier. Massive land reclamation, seabed dredging and cable laying would be required to create the infrastructure in Shek Kwu Chau and this would have a severe impact on fisheries and wildlife habitats. In contrast, the site in Tsang Tsui is ready in situ among existing waste treatment facilities. Its location offers land and sea routes for transporting waste to the incinerator and removing ash to the nearby landfill.

In spite of Tsang Tsui's clear advantages, the department belatedly introduced a new criterion,

"balanced spatial distribution", as the key reason for choosing Shek Kwu Chau. In other words, since Tuen Mun already has waste treatment facilities, we should spread the problem around the rest of Hong Kong.

This is precisely what Lau Wong-fat, Heung Yee Kuk chairman and Tuen Mun district councillor, said

in January 2008, the day after the consultants hired by the department issued a report giving Tuen Mun the highest rating as an incinerator site. Lau was reported to have said:

"We already have a power plant and landfills. Why can't they pick another spot for the incinerator?" Four years later, the Environmental Protection Department did exactly that.

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## Burning doubt SCMP April 13 2012

### **Tom Yam** questions the Environmental Protection Department's decision to build a waste incinerator at Shek Kwu Chau without adequately counting or presenting its high financial and ecological costs

If the Environmental Protection Department has its way, Hong Kong will be saddled with the world's largest waste incineration plant on a site that is the most expensive to develop (HK\$14.96 billion at current prices), takes the longest time to construct,

has the highest construction risk, and inflicts the most ecological damage.

The plant is to be located in Shek Kwu Chau, an area of natural beauty south of Cheung Chau

and Lantau. The department ignored findings by its consultants, conducted no comprehensive

comparative analysis with the other potential site - the Tsang Tsui ash lagoons in Tuen Mun, presented no comparative cost and risk analysis, omitted and obfuscated information, and initiated

the project in Shek Kwu Chau prior to approval by the Legislative Council.

In 2007, the department engaged a consultancy, Camp, Dresser and McKee International, to study possible sites for the incinerator. The firm analysed eight sites and recommended two, Tsang Tsui and Shek Kwu Chau, for further evaluation in January 2008.

The consultants gave the Tuen Mun site the highest score because of the ease of integration **(The Shek Kwu Chau site was chosen long before the EPD revealed the cost estimates )**

with existing landfill and waste facilities, much lower impact on local ecology, shorter construction time, and lower construction costs.

The site is on existing ash lagoons in Nim Wan, in the northwestern New Territories. There are

Already industrial developments in the area, including the Black Point Power Station and the

West New Territories Landfill.

In contrast, the consultants said, the Shek Kwu Chau site was in an ecologically sensitive area and required extensive reclamation and seabed dredging, as well as construction of all infrastructure from scratch. Twelve hectares on Shek Kwu Chau's southwestern coast will have

to be reclaimed to build an artificial island, plus berths and a breakwater, for a total of 31 hectares.

There is no industrial development on Shek Kwu Chau.

The area near the island is home to rich fisheries and rare wildlife, and is frequented by the endangered finless porpoise. In 2008, the department engaged another consultancy, Aecom, to study the feasibility of the two sites and incinerator technology. Aecom's report became the definitive document it used to justify its decisions. In a presentation in February last year to Legco's environment panel, the department summarised analysis of incinerator technology in a clear, side-by-side comparison of the options in a table format under various criteria, including capital and operating costs, resulting in the selection of moving grate incinerator technology.

But there was no such cost comparison of the Tsang Tsui and Shek Kwu Chau sites.

Instead, there were 13 pages of dense script discussing the two sites in terms of such criteria

as air and water quality, noise impact, and ecology. There was no comparison of construction and operating costs for the two sites.

Close reading of these 13 pages shows that Aecom considered the two sites equally suitable, except in ecology and fisheries where the impact on Shek Kwu Chau would be great. It noted that the waters around Shek Kwu Chau were an important habitat for the finless porpoise and home to some 15 species of coral.

Also, the white-bellied sea eagle, an uncommon species with limited known breeding sites in Hong Kong, was known to breed around the site. "Permanent loss of 31 hectares of fishing ground, of which 15.9 hectares is a previously identified fisheries spawning and nursery ground, is expected," it concluded. Yet, not only did the department obfuscate the comparison of the two sites, it omitted mention of the serious impact on the island's ecology and fisheries in later presentations. Inexplicably, the findings of both consultancy reports were ignored in the department's "Explanation Booklet for the Proposed Waste Management Facilities" (March 2011) and in a document presented to Legco's environment panel on March 26 this year.

Instead, the department cited a completely new reason for selecting Shek Kwu Chau: that it would ensure "a more balanced spatial distribution" of waste facilities here. This was never among the 20 criteria considered by the two consultants.

The department reduces the complexity of the project to a simple matter of geography: spreading the waste processing around Hong Kong by despoiling a beautiful area. More gallingly, the Shek Kwu Chau site was chosen long before the department revealed the cost estimates.

It presented the costs to Legco only five days before it sought the go-ahead from Legco's environmental panel on March 26. And it was only on Tuesday, in a letter to the *South China Morning Post*, that a department official divulged the construction costs of the Tsang Tsui site: HK\$9 billion in September 2011 prices, versus HK\$11.383 billion for the Shek Kwu Chau site, a 26 per cent difference in capital cost. No operating cost for either site has been disclosed.

However, a year before the costs were made public and Legco's approval sought, the Lands Department had already issued a notice to reclaim land and dredge the seabed in the Shek Kwu Chau area. A cable junction has been installed on Cheung Sha beach in South Lantau to supply electricity to Shek Kwu Chau.

On November 24 last year, Aecom said, it had won a contract with the department to manage construction of the incinerator in Shek Kwu Chau. The department's dubious decision-making process lends credence to the perception that its selection of Shek Kwu Chau was influenced by politics and special interests than the best outcome for Hong Kong.

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