Minutes of the Special Meeting of the Sha Tin District Council in 2022

Date: 2 September 2022 (Friday)

Time : 2:30 pm

Venue: Sha Tin District Office Conference Room 441

4/F, Sha Tin Government Offices

Present		Time of joining	Time of leaving
		the meeting	the meeting
Chairman:	Mr MAK Yun-pui, Chris	2:30 pm	3:46 pm
Vice-Chairman:	Mr SIN Cheuk-nam	2:30 pm	3:46 pm
Members:	Mr CHENG Chung-hang	2:30 pm	3:46 pm
	Mr CHOW Hiu-laam, Felix	2:30 pm	3:43 pm
	Mr CHUNG Lai-him, Johnny	2:30 pm	3:46 pm
	Mr HUI Lap-san	2:36 pm	3:46 pm
	Mr WAI Hing-cheung	2:30 pm	2:49 pm
Secretary:	Mr SHIU Kan-yun, Roy	Senior Executive Officer (Dis	strict Council),
		Sha Tin District Office	

<u>In Attendance</u> <u>Title</u>

Mr WONG Ka-cheuk, Felix Engineer / New Territories East (Headworks 2),

Water Supplies Department

Ms CHAN Hoi-wing Engineer / New Territories East (Distribution 1),

Water Supplies Department

Mr TANG Kin-hung Senior Housing Manager / Tai Po, North & Shatin 3,

Housing Department

Ms YIP Yuk-yee, Silvia Liaison Officer i/c (North)3,

Sha Tin District Office

Absent

Dr LAM Kong-kwan (Application for leave of absence received)

Mr MOK Kam-kwai, BBS (")

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<u>The Chairman</u> welcomed Members and representatives of government departments to the special meeting of the Sha Tin District Council (STDC) in 2022.

Applications for Leave of Absence

2. <u>The Chairman</u> said that the STDC Secretariat had received the applications for leave of absence in writing from the following Members:

Dr LAM Kong-kwan Official commitment Mr MOK Kam-kwai "

3. The Council approved the applications for leave of absence submitted by the Members above.

Discussion Item

Matters Concerning Fresh Water Quality in the Areas of Sha Tin and Ma On Shan

- 4. The views of the Chairman were summarised below:
 - (a) he said in late July this year, the fresh water in some housing estates in Ma On Shan became yellowish suddenly, which worried residents in the district that the water was contaminated. He received reports from some residents that the slightly yellowish water was odorous and they sustained allergic reactions after drinking the water. They worried about the impact on health if they continued to drink the water:
 - (b) as he understood, the Water Supplies Department (WSD) found upon investigation that the discolouration of water was caused by the slightly higher level of manganese in the water, while the presence of trace amount of manganese in water would not have an adverse effect on health and the water was safe to drink. The water supply in Ma On Shan finally resumed clear after one week; and
 - (c) immediately after learning of the water discolouration in some housing estates in Ma On Shan, he requested an STDC special meeting. However, it had come to his knowledge that the WSD needed time to prepare the relevant information, and the Hong Kong Observatory issued Tropical Cyclone Warning Signal No. 8 on the morning of the original date of the special meeting, i.e. 25 August. Therefore, the special meeting was postponed until today. This meeting aimed to discuss the reasons for the sudden water discolouration in Ma On Shan area in late July this year, and to follow up and review the administrative procedures of departments concerned for handling the said issue and the management problems of housing estates reflected by the incident, etc.
- 5. The views of the Vice-Chairman were summarised below:
 - (a) he wished to know the measures taken by the WSD to prevent the recurrence of discolouration of fresh water;
 - (b) as he understood it, the discolouration of fresh water in Ma On Shan area was caused by the slightly higher level of manganese in the water. He wished to know the reason for this; and
 - (c) he said he had earlier written to the WSD to enquire about whether the WSD would bear the related cost if some housing estates in Ma On Shan had to arrange extra cleansing of fresh water tanks due to the water discolouration. In addition, some Ma On Shan residents reported that their domestic water filters had suffered from accelerated wear and tear during the period of water discolouration. He wished to know if the WSD would offer compensation to the affected residents, such as reduction of water charges.

- 6. The views of Mr Johnny CHUNG were summarised below:
 - (a) he said that a few Members had requested the WSD to arrange water wagons for residents in the district during the period of water discolouration in Ma On Shan, but the request was rejected by the Department on the grounds that there were no issues with the fresh water supply and the water quality was at a normal level. He would like to know the WSD's criteria for deploying water wagons for residents; and
 - (b) he said frail persons or young children needed water of higher quality. To ensure the water was safe for consumption, their caretakers would rather get water at a distant location. Furthermore, bottled distilled water sold in stores might not be suitable for all.

7. The views of Mr Felix CHOW were summarised below:

- (a) he noted that the water discolouration in Ma On Shan area was due to transient instability in the water treatment process at the Ma On Shan Water Treatment Works (MOSWTW). He wished to know whether similar situations had arisen in other places in Sha Tin District, including the vicinity of Sha Tin Wai and Yu Chui Court. He wished to know whether the water discolouration was related to the water supply networks, and whether the problem was caused by inadequate monitoring of water treatment process;
- (b) he wished to know whether the WSD could provide a preliminary investigation report on the said incident;
- (c) he wished to know what measures would be taken by the WSD to eliminate the problem of water discolouration;
- (d) he asked the Housing Department (HD) how many public housing estates (PHEs) in total it had arranged to have their fresh water tanks thoroughly cleansed or the water therein drained after the said incident, and whether the decision was made by the HD or the WSD; and
- (e) he said the sudden water discolouration led to worries among residents in the district about water contamination. He hoped the WSD could provide more relevant information to members of the public to quell their doubts.

8. The views of Mr CHENG Chung-hang were summarised below:

- (a) he considered that the efficiency of the WSD in handling the water discolouration in Ma On Shan area was unsatisfactory. He said that the information received by residents in the district at that time about the said incident was mainly from Members in the district and the media, whereas the WSD published relevant information on its website two days after the incident;
- (b) he hoped the WSD could take the initiative to contact the affected housing estates after the water discolouration incident to arrange follow-up actions;

- (c) he said he had earlier written to the WSD to enquire about issues such as the course and reason of the sudden water discolouration in Ma On Shan area, and hoped that the Department could respond to the questions in his letter in the meeting;
- (d) he wished to know when the WSD found that the fresh water supplied to Ma On Shan area appeared slightly yellowish and that the manganese reduction process at the MOSWTW had been unstable which led to water discolouration caused by excessive manganese in the water;
- (e) he wished to learn more about the water quality monitoring procedures at the MOSWTW and whether the procedures concerned could show real-time water quality test results;
- (f) he wished to know the highest amount of manganese per litre in the discoloured water found in Ma On Shan area, the maximum manganese handling capacity of the MOSWTW per litre of water, and the pre-set amount of manganese per litre of water to be handled at the MOSWTW under normal circumstances;
- (g) he wished to know how the MOSWTW would handle the situation when any abnormalities were found in water quality; and
- (h) he wished to know after the water discolouration incident, whether the WSD had monitored the real-time manganese content in the fresh water supplied by waterworks in Ma On Shan, e.g. public hydrants, service reservoirs and water treatment works.
- 9. The views of Mr HUI Lap-san were summarised below:
 - (a) he opined that the MOSWTW was well-equipped. It was bewildering that the water discolouration incident occurred;
 - (b) he was of the view that relevant departments lacked communication with housing estates affected by the water discolouration, which was the reason why some affected housing estates indicated that no instructions to arrange water tank cleansing were received from relevant departments. He said that Chung On Estate had immediately arranged water tank cleansing on the day when the water in the housing estate was found discoloured, i.e. 3 August this year, whereas Kam Fung Court nearby indicated that they had not received instructions from relevant departments, resulting in the protracted delay in the arrangements. He wished to know how the departments communicated with incorporated owners and management offices of various housing estates; and
 - (c) he wished to know whether the WSD would provide subsidies to the affected housing estates. In addition, he said that the domestic water filters of some Ma On Shan residents had suffered from accelerated wear and tear during the period of water discolouration. He wished to know if the WSD would offer compensation to these affected residents, such as reduction of water charges.

10. The views of the Chairman were summarised below:

- (a) he considered that the improper water treatment was human negligence. He said that when there were problems with water supply in the district, different types of housing estates in the district would be affected, but the WSD and the HD had not provided adequate instructions, causing some housing estates affected by the water discolouration did not know how to handle the said incident. He opined that the Sha Tin District Office (STDO) and the HD should contact the WSD for instructions after the said incident and step up communication with the housing estates concerned:
- (b) he wished to know after the said incident, whether the STDO and the HD had received instructions from the WSD to follow up on the matter. He asked the relevant departments to share their situations;
- (c) he opined that consuming water containing manganese might cause allergic reactions in some people; and
- (d) he wished to know why the WSD failed to deploy water wagons to provide safe drinking water to the affected residents during the incident.

11. <u>Mr Felix WONG, Engineer / New Territories East (Headworks 2) of the WSD,</u> gave a consolidated response as follows:

- (a) he said manganese was a naturally occurring mineral found in rocks and soils. Trace amount of manganese was usually present in raw water. As manganese oxides were dark brown in colour, the WSD would use ozone or chlorine to oxidise the manganese in water during the water treatment process. The manganese oxides produced would then be removed during the filtration process in filter bed to avoid the impacts of manganese oxides produced in the water supply system on the aesthetics of drinking water;
- (b) the water discolouration occurred in Ma On Shan area was due to partial clogging of individual valve component in the chlorine dosing system at the MOSWTW. The clogging led to uneven distribution of chlorine, causing transient instability in the relevant manganese oxidation process. The drinking water appeared slightly yellowish as a result;
- (c) he said the manganese level in the discoloured water was still far below the provisional guideline value in the World Health Organization (WHO)'s Guidelines for Drinking-water Quality (the Guidelines). Moreover, the water sampling test results constantly showed that the water quality complied with the Hong Kong Drinking Water Standards and was suitable for consumption; and
- (d) upon receiving reports from the public on 29 July on abnormality in water quality, the Department had immediately inspected every operating system at the MOSWTW (including the chlorine dosing system) and had taken follow-up actions. The manganese oxidation process at the MOSWTW thereby resumed normal and stable on 30 July.

- 12. <u>Ms CHAN Hoi-wing, Engineer / New Territories East (Distribution 1) of the WSD,</u> gave a consolidated response as follows:
 - (a) she sincerely thanked all Members for their assistance in keeping the residents in the district up to date on the latest situation during the incident;
 - (b) she said after the incident, the Department had thoroughly washed the relevant service reservoirs and discharged the slightly yellowish water in the government water distribution network via public hydrants to help the water in water mains resume clear as early as possible. The test results of all water samples taken from the relevant service reservoirs and government water distribution network indicated that the water quality was in compliance with the Hong Kong Drinking Water Standards;
 - (c) she said the Department had already published the latest news of the incident in a timely manner on the Department's website and social media to quell the doubts of residents in Ma On Shan area about drinking water safety. The Department had also reminded management companies of housing estates in the district by mobile phone short messages and emails to drain the discoloured water from the housing estates' water tanks as necessary to enable the water to resume clear as soon as possible. In addition, on the "FAQs" page of the Department's website, the Department had added information on water discolouration, including drinking water safety, the reasons for discolouration, the Department's follow-up actions and advices on water use, etc., to enhance the public's understanding of and confidence in the relevant water quality;
 - (d) she said that as regards the individual buildings reporting abnormalities in water quality, the Department had directly contacted their management companies and provided relevant technical support to help the water of the households resume clear as soon as possible;
 - (e) she said that as the water tanks of the housing estates' public water supply networks were situated upstream of the consumers' water meters, draining the remaining water in water tanks of housing estates was not counted as water consumption by consumers and water charges of consumers were not affected;
 - (f) she said the Department had replaced the component concerned in response to the clogging of the chlorine dosing system at the MOSWTW and had completed relevant inspections at other water treatment works to ensure proper operation. The Department would strengthen the inspection and monitoring of the operation of chlorine dosing systems at other water treatment works to prevent similar incidents from happening; and
 - (g) she said the Department highly regarded the STDC and was pleased to attend the STDC meeting to answer Members' questions, and would continue to maintain communication and contact with various stakeholders, including the STDO and the HD. Different channels such as the Department's website and social media would also be more flexibly utilised to consistently enhance the management and follow-up on information dissemination.

- 13. Mr TANG Kin-hung, Senior Housing Manager / Tai Po, North & Shatin 3 of the HD, gave a consolidated response as follows:
 - (a) he said the HD had all along been paying close attention to the drinking water safety and hygiene in PHEs, and had been cleansing the fresh water tanks in housing estates under its management every three months in accordance with the instruction by the WSD. When abnormalities in water quality were found, the Department would also arrange extra cleansing of water tanks by service contractor so as to ensure the supply of quality drinking water to the residents; and
 - (b) he said after receiving reports from PHE residents in Ma On Shan on fresh water at home being slightly yellowish, the Department immediately instructed the relevant management offices to report the situation to the WSD, and was informed that the water was still safe for consumption. Subsequently, the Department had also cleansed the water tanks in Lee On Estate, Chung On Estate and Yan On Estate on 2, 3 and 6 August respectively, and advised the two estates under Tenants Purchase Scheme (TPS estates) in the district (i.e. Heng On Estate and Yiu On Estate) to cleanse their water tanks. The Department understood that Heng On Estate completed the cleansing on 6 August, whereas Yiu On Estate would conduct the cleansing on its original schedule.

14. <u>Ms Silvia YIP, Liaison Officer i/c (North)3 of the STDO,</u> gave a consolidated response as follows:

- (a) she said the STDO received a few enquiries from Ma On Shan residents about fresh water becoming yellowish on 1 August. The STDO had enquired of the WSD about the reasons for the water discolouration in the district, and learnt that it was due to transient instability in the manganese reduction process of water treatment at the MOSWTW between 29 to 30 July, leading to the slightly higher level of manganese in water and hence the discolouration. The water sampling test results from the WSD showed that the discoloured water was in compliance with drinking water safety standards. The STDO then immediately relayed the information to the relevant housing estates and building management bodies; and
- (b) she said the STDO suggested that the WSD should issue notices to the housing estates in the district affected by the water discolouration to inform the residents of the situation. The STDO noted that the WSD had also published relevant information on its website on 1 August, and informed the affected housing estates and building management bodies through its mechanism.

15. The views of the Chairman were summarised below:

- (a) as he understood, the WSD did not on its own initiative contact the HD for followup when discovering the discolouration of fresh water in Ma On Shan area. He wished to know whether the WSD would on its own initiative contact the relevant departments for follow-up in future similar cases;
- (b) he asked whether the WSD would bear the cost of extra cleansing of fresh water tanks in the housing estates affected by the said incident, and offer reduction of

- water charges to the affected residents for compensating for the wear and tear of their domestic water filters during the water discolouration incident; and
- (c) he would like to know what contingency plans the WSD had if water discolouration happened again.

16. The views of Mr CHENG Chung-hang were summarised below:

- (a) he said during the water discolouration incident, the water did not appear slightly yellow as stated by the WSD but deep yellow;
- (b) he knew that some affected residents chose to turn on the water taps to drain off the water by themselves during the said incident, and some management offices also drained off water in the water metre room for residents. He believed that those actions would generate extra water charge. Together with the accelerated wear and tear of domestic water filters of a number of residents during the said incident, he considered it necessary for the WSD to pay compensation;
- (c) he wished to know in addition to changing the colour of raw water, whether the manganese oxidation process at the water treatment works could filter the manganese in raw water;
- (d) he could not understand why the WSD only advised the housing estates affected by the water discolouration to drain the water from the fresh water tanks without advising them to cleanse the tanks after draining; and
- (e) he asked at what time did the Department discover that the individual valve component in the chlorine dosing system at the MOSWTW had experienced partial clogging.

17. The views of the Vice-Chairman were summarised below:

- (a) he said although the HD had advised Yiu On Estate and Heng On Estate to cleanse their fresh water tanks, the HD could only rely on the estates' own decisions to arrange extra cleansing at their own expense since these two TPS estates were not public housing estates under the HD. He knew that the fresh water tanks in Yiu On Estate at last were only cleansed on the original schedule. He therefore recommended the WSD provide subsidy to TPS estates to encourage them to arrange extra cleansing of water tanks by service contractor;
- (b) he noted that the instability in the manganese oxidation process during the water treatment at the MOSWTW in late July was due to the clogging of valve component in the chlorine dosing system, and would like to know the reason; he also asked whether the WSD could make immediate deployment of water supplies from other water treatment works for consumption by residents in the district;
- (c) he considered that other than technical assistance, the Department should provide subsidy to the housing estates affected by the water discolouration;

- (d) he viewed that clean drinking water could be provided to residents only if the fresh water tanks in the housing estates were cleansed after draining the slightly yellowish water from the tanks; and
- (e) he viewed that the problem of water discolouration could not be effectively eliminated by only changing the clogged valve component.

18. The views of Mr Johnny CHUNG were summarised below:

- (a) he wanted the WSD to provide the criteria for arranging water wagons for the public, and asked whether the Department would consider deploying water wagons on a discretionary basis for those affected under special circumstances; and
- (b) he wished to know whether the WSD could make immediate deployment of water supplies from other water treatment works for consumption by residents in Ma On Shan area when abnormalities were found in the water supply in the district.

19. <u>Mr Felix WONG</u> gave a consolidated response as follows:

- (a) he said the chlorine dosing system consisted of different components which included valves. Their opening range was set in the daily operation according to the design of the required flow rate of the system, and frequent operation or adjustment was not necessary. The Department would carry out maintenance on the relevant components in accordance with established procedures. Upon receiving reports on water discolouration in Ma On Shan area, the Department had immediately inspected every operation system at the MOSWTW and replaced the clogged valve component. The WSD had also completed relevant inspections at other water treatment works and confirmed that the operations were in order;
- (b) he further explained that the Department would use ozone or chlorine in the water treatment process to oxidise manganese in raw water. The manganese oxides produced would then be removed during the filtration process in the filter bed to lower the manganese content in water. The incident was caused by transient instability in the manganese oxidation process during water treatment at the MOSWTW. The oxidation process of some manganese was therefore not completed, so the filter bed could not filter out all the manganese in the water. Subsequently, the manganese was oxidised by residual chlorine in water during the water distribution process. Trace amount of manganese oxides was formed, making the water appear slightly yellowish;
- (c) he reiterated that the water supplied by the Department for public consumption had all along been complying with the provisional guideline value in the Guidelines by the WHO;
- (d) he thanked Members for their understanding, and would actively study the cause of the partial clogging of the individual valve component in the chlorine dosing system;

- (e) upon receiving reports from the public on abnormality in water quality on 29 July this year, the Department had immediately inspected every operation system at the MOSWTW (including the chlorine dosing system) and taken follow-up actions. As a result, the manganese oxidation process resumed normal and stable on 30 July; and
- (f) he said supplementary information on deployment of water supplies across districts would be provided after the meeting.

[Post-meeting note: The WSD had provided supplementary information after the meeting, which was relayed to the STDO on 19 September 2022.]

20. <u>Ms CHAN Hoi-wing</u> gave a consolidated response as follows:

- (a) she said after receiving reports from the public on the abnormality in water quality, the Department immediately followed up on the matter and contacted the building management companies directly. The Department assisted in the inspection of the fresh water tanks of the buildings and explained the situation, and also provided relevant technical assistance to the management companies. To enable the water to resume clear at the earliest possibility, the Department proactively provided early assistance in a humane manner to handle the related matters;
- (b) the Department had confirmed that the manganese oxidation process in the water treatment process at the MOSWTW had resumed normal and stable on 30 July. At that time, it therefore successively contacted the management companies of the affected housing estates, advising them to drain the slightly yellowish water from the fresh water tanks of the housing estates and cleanse the tanks as necessary, so that the water supplied to the residents could resume clear as soon as possible;
- (c) she said immediately after receiving request on 31 July for deploying water wagon to Lee On Estate, the Department sent its staff to inspect the water tanks of the buildings together with the management company of Lee On Estate and explain the situation. At that time, the personnel of the management company also expressed their satisfaction with the water quality and did not further request the Department to deploy water wagon for temporary supply of fresh water;
- (d) she said the Department took the initiative to contact the management companies of the affected housing estates at that time and provided relevant technical assistance. Nonetheless, as the situations of different housing estates varied at that time, management companies of some housing estates did not immediately arrange cleansing of fresh water tanks. The Department could therefore only advise them to drain the slightly yellowish water from the fresh water tanks of the housing estates as necessary. The Department proactively contacted the management companies of these affected housing estates and followed up with them. Technical support and assistance were also provided to them when necessary;

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- (e) she said any person who wished to request for waiver of water charge or compensation for other cost in respect of the said incident could provide the Department with relevant information (e.g. receipt and photo, etc.) and means of contact. The Department would follow up and handle the cases in accordance with established procedures;
- (f) she said after collecting all views from Members in the meeting, the Department would provide written replies to the letters earlier sent from Members to the Department as soon as possible;
- (g) he thanked Members again for their assistance during the said incident in facilitating the residents in the district to better understand the latest situation of the incident. If Members further received enquiries from residents about the incident, Members might advise them to learn more about water discolouration from the "FAQs" page of the WSD website; and
- (h) she said the Department had all along been placing considerable value on Members' views, and would handle similar incidents in a practicable way in the future.

21. The views of the Chairman were summarised below:

- (a) he said that to his understanding, "humane" meant respecting human's basic biological need. He considered that in order to meet the residents' basic biological need of having clean water to drink, the WSD should make arrangement for draining the water from fresh water tanks and cleasing the tanks in the housing estates affected by the water discolouration, and should also deploy water wagons to the locations concerned for residents in the district;
- (b) he asked the WSD to submit a detailed investigation report after the meeting to provide supplementary information on deploying water supplies across districts and set out the reason for the partial clogging of individual valve component in the chlorine dosing system at the MOSWTW;
- (c) he considered it unsatisfactory that the WSD received reports from the public on abnormality in water quality on 29 July this year but not until early August did it give instruction to the management offices of the housing estates to handle the issue:
- (d) he wished to know whether the WSD could arrange water wagons for the affected residents if water discolouration happened again in the future, so that the impact brought by water discolouration could be alleviated;
- (e) he asked the WSD to strengthen communication and cooperation with the relevant departments when handling the problem on drinking water, and hoped that the WSD could continuously supply quality and safe drinking water to the public for consumption; and

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(f) he thanked the HD and the STDO for their assistance to the affected residents during the water discolouration incident.

Date and Time of Next Meeting

- 22. The next meeting was scheduled to be held at 2:30 pm on 29 September 2022 (Thursday).
- 23. The meeting was adjourned at 3:46 pm.

Sha Tin District Council Secretariat STDC 13/15/15/1

November 2022