

Report No. 16

Visit to Dongjiang Water Supply System (13 - 14 October 2014)



Advisory Committee on Water Resources and Quality of Water Supplies

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

CONTENT

Section	Description	Page
A	Introduction	1
B	The Visit	2
C	Press Conference	6
D	Conclusion	6

ANNEXURE

ROUTE OF VISIT

PHOTOS

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

SECTION A - INTRODUCTION

Over the years, members of the Advisory Committee on Water Resources and Quality of Water Supplies (ACRQWS) and its predecessor, the Advisory Committee on the Quality of Water Supplies visited the Dongjiang-Shenzhen Water Supply System (東深供水系統) annually. With a view to providing members with an update on the progress and development in protecting the quality of Dongjiang water made by the Guangdong (GD) Authorities and more importantly providing an opportunity for members to have a direct dialogue with the GD Authorities to reflect Hong Kong citizens' concerns on Dongjiang water quality in order to achieve the common goal of protecting precious water resources, a delegation comprising nine non-official members, three official members and five other HKSAR Government officials (see details at **Annex 1**) conducted a 2-day visit to Dongjiang Water Supply System during 13-14 October 2014.

2. The Chairman, Dr CHAN Hon Fai and the Vice-Chairman, Mr LAM Tin Sing, Enoch led the delegation to visit the Xiacun Section of the Dongjiang (東江蝦村段) and Dongjiang River Basin Water Quantity and Quality Monitoring and Control Centre (東江流域水量水質監控中心) on arrival at Huizhou (惠州). After that, the delegation proceeded to Dongguan (東莞) to visit Taiyuan Pumping Station (太園泵站) and Shima River Diversion Works (石馬河調污工程) and then went to Shenzhen (深圳) covering the spots like Shawan River Sewage Interception Works (沙灣河污水

截排工程), an earlier illegal pig farm at Dawang area (大望區) and Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd (粵港供水公司水環境監測中心). The visit was ended by holding a press conference in the headquarters of the Water Supplies Department (WSD). The itinerary is appended at **Annex 2**.

SECTION B – THE VISIT

3. On the first day, the delegation went to the first destination, the Xiacun Section of the Dongjiang which is the water intake point of Jiangbei Water Treatment Plant (江北水廠) in Huizhou. Phases 1 and 2 of the Plant started operation in 1999 and 2008 respectively with a total capacity of 400,000 cubic metres per day (m³/day). The Plant can be further expanded to an ultimate capacity of 600,000 m³/day after completion of the final phase. Together with other three water treatment works all under the Huizhou Water Supply General Company (惠州市供水有限公司), the plants have supplied fresh water to over 1.3 million people in Huizhou. As Huizhou is one of the cities along Dongjiang where the location is close (about 50 kilometres (km) upstream) to the water intake point of the Dongjiang water supplied to Hong Kong, the delegates inspected the water quality near the water intake point of the Plant and the Chairman also took this chance to feel the water quality by touching and smelling the water. The delegates considered that the water was clean and wholesome.

4. The delegation then travelled to the Dongjiang River Basin Water Quantity and Quality Monitoring and Control Centre managed by the Bureau of Dongjiang River Basin Administration (東江流域管理局). Dongjiang supplies water to over 40

million people in Heyuan, Huizhou, Dongguan, Guangzhou, Shenzhen, other cities of Guangdong Province and Hong Kong. To enhance the management and regulation of the water resource in Dongjiang, the GD Authorities developed this System focused on the management of quality and quantity of Dongjiang water and put it into trial operation in May 2014. Water regulation plan was formulated in the System to centralize the water quantity regulation as well as to monitor the water quantity and quality of main stream sections, water intake points, sewage discharge points, the three major reservoirs in the upstream of Dongjiang (i.e. Fengshuba Reservoir, Xinfengjiang Reservoir and Baipenzhu Reservoir) and hydroelectric power plants by collecting major water quantity and quality data of the river basin and accessing the existing database of the related rainfall and water quality data. Through closely monitoring the real-time situation of water quality and quantity of the Dongjiang Basin, the water supply of Dongjiang can be secured, in particular the Dongjiang water supplied to Hong Kong in terms of quality and quantity can be safeguarded. After the briefing by the Bureau of Dongjiang River Basin Administration about the System and a discussion with the officials of the Bureau, the delegates expressed their appreciation to the efforts made by the GD Authorities in developing such a large scale and robust integrated system.

5. After that, the delegation went to Dongguan to visit the Taiyuan Pumping Station and the Shima River Diversion Works.

6. The Pumping Station with a design capacity of 100 cubic metres per second (m^3/s) and a pump head of 11 metres (m) is the Dongjiang water intake where the water is abstracted and then conveyed through a dedicated aqueduct to Shenzhen Reservoir before importing to Hong Kong. The delegates were briefed about the

dedicated aqueduct through a model of the Dongjiang-Shenzhen Water Supply System. To prevent the polluted water from Shima River entering the dedicated aqueduct, the Pumping Station is located about 350 m upstream of the junction where the Shima River intersects with the Dongjiang.

7. The delegates were also advised that the GD Authorities planned to enhance the existing Shima River Diversion Works by constructing a water gate of height higher than the existing rubber dam, for the sake of further deterring the contaminated water from Shima River overflowing to Dongjiang. The delegates considered that this measure could further safeguard the quality of Dongjiang water before supplying to Hong Kong.

8. After finishing the visit at the Shima River Diversion Works, the delegation then moved to Shenzhen to prepare for the trip on the second day.

9. On the second day, the delegation visited the Shawan River Sewage Interception Works which is located at the downstream of the Shawan River (沙灣河) and right upstream of the Shenzhen Reservoir (深圳水庫). With the completion of the interception works, discharges of Shawan River which is occasionally polluted have been diverted to the Luofang Wastewater Treatment Plant (羅芳污水處理廠) for treatment before discharging into the Liantang (蓮塘) River. The interception works can improve the water quality of Shenzhen Reservoir and safeguard the water supplied to Shenzhen and Hong Kong.

10. The delegation then paid a visit to an earlier illegal pig farm at Dawang area

which was the alleged pollution spot as reported by media in early November 2013. Situated at the boundary between the Longgang (龍崗) district and Lo Wu (羅湖) district, the area concerned is classified as the second class protection area of Shenzhen Reservoir. In fact, the illegal pig farm was visited by WSD's representatives led by the Assistant Director, Mr MAK Shing Cheung, Vincent on the next working day when the incident was reported by the media. It was noted that the illegal pig farm was already cleared by the GD Authorities upon the report by the media and no further pig rearing activity was discovered. About one year later after the clearance, the delegates observed that the area was still kept clear of any pig farm. The delegates also noted that even though there was illegal pig rearing activity before, the sewage produced might not be easily flown to the Shenzhen Reservoir given its long distance from and indirect route to the Reservoir. The delegates were informed that the GD Authorities had set up a specific team to carry out regular inspections in the water resources protection areas so as to prevent illegal activities affecting the water quality.

11. Before ending the trip, the delegation went to the Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd established in 1988. Main functions of the Centre include carrying out routine monitoring of the water quality by taking samples from the main steam along the Dongjiang-Shenzhen Water Supply System, conducting the associated analyses and evaluations, inspecting the possible pollution sources and carrying out research works on water quality, so as to assure the water quality of the Dongjiang-Shenzhen Water Supply System. The Centre can carry out a series of tests and examinations complying with most of the required standards for the testing of surface water, drinking water for human consumption and sewage discharge. The delegates had a fruitful discussion with the

staff of the Centre on the monitoring work and were impressed that the staff were young, energetic and highly competent and considered that the Centre played an important role to safeguard the quality of Dongjiang water supplied to Hong Kong.

SECTION C – PRESS CONFERENCE

12. To conclude the visit, the Chairman, Dr CHAN Hon Fai (陳漢輝博士) hosted the press conference with five members, namely Mr LAU Yuet Fan, Ivan (劉乙凡先生), Ms TONG Po Chun (湯寶珍女士), Ms SO Yee Ching, Phyllis (蘇綺青女士), Ms LI Chun Chau (李進秋女士) and Ms LAU Pui Yuk (劉佩玉女士) in the headquarters of the WSD upon returning to Hong Kong. The Chairman started the press conference by giving a briefing summarizing the visit with the aid of a short video. Other members then shared their observation and experience in visiting various destinations during the 2-day visit. They advised the press that the water quality of Dongjiang was satisfactory and appealed to the public of Hong Kong to conserve water.

SECTION D – CONCLUSION

13. Delegates were thankful to the WSD as well as the officials of the Department of Water Resources of Guangdong Province (廣東省水利廳) and executives of the Guangdong Yue Gang Water Supply Limited (廣東粵港供水有限公司) to arrange a visit for them. They highly appreciated that the visit provided a valuable opportunity for them to reflect the concerns of Hong Kong people on the quality of Dongjiang water to the GD Authorities direct.

14. The delegates were grateful for the efforts made by the GD Authorities in maintaining a reliable quantity of Dongjiang water supplied to Hong Kong in full compliance with the required water quality standards. In addition, they considered that the visit should continue to be arranged for members in future as the visit can update members of the latest development in protecting the quality of Dongjiang water made by the GD Authorities and provide a chance for those members newly joined the Advisory Committee to get familiar with the Dongjiang-Shenzhen Water Supply System.

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

ANNEXURE

Annex 1	List of Participants
Annex 2	Itinerary

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

List of Participants

姓名 Name		職銜 Title
水資源及供水水質事務諮詢委員會 ACRQWS		
1	陳漢輝博士 Dr CHAN Hon Fai	主席 Chairman
2	林天星先生 Mr LAM Tin Sing, Enoch	副主席 Vice-Chairman
3	劉乙凡先生 Mr LAU Yuet Fan, Ivan	委員 Member
4	湯寶珍女士 Ms TONG Po Chun	委員 Member
5	蘇綺青女士 Ms SO Yee Ching, Phyllis	委員 Member
6	戚偉強先生 Mr CHIK Wai Keung	委員 Member
7	黃兆榮博士 Dr WONG Siu Wing, Eric	委員 Member
8	李進秋女士 Ms LI Chun Chau	委員 Member
9	劉佩玉女士 Ms LAU Pui Yuk	委員 Member
10	劉美璐女士 Ms LAU Mei Lo	委員 Member
11	黃仲良先生 Mr WONG Chung Leung	委員 Member
12	黃國輝先生 Mr WONG Kwok Fai, Alfred	秘書 Secretary
其他 Others		
13	麥成章先生 Mr MAK Shing Cheung, Vincent	水務署助理署長 Assistant Director, Water Supplies Department
14	周世威先生 Mr CHAU Sai Wai	水務署總工程師 Chief Engineer, Water Supplies Department
15	郭有定先生 Mr KWOK Yau Ting, Kelvin	水務署高級化驗師 Senior Chemist, Water Supplies Department
16	劉卓峰先生 Mr LAU Cheuk Fung, Calvin	水務署工程師 Engineer, Water Supplies Department
17	楊陽明先生 Mr YEUNG Yeung Ming	政府新聞處攝影師 Photographer, Information Services Department

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

Itinerary

Day 1 (Monday, 13.10.2014)

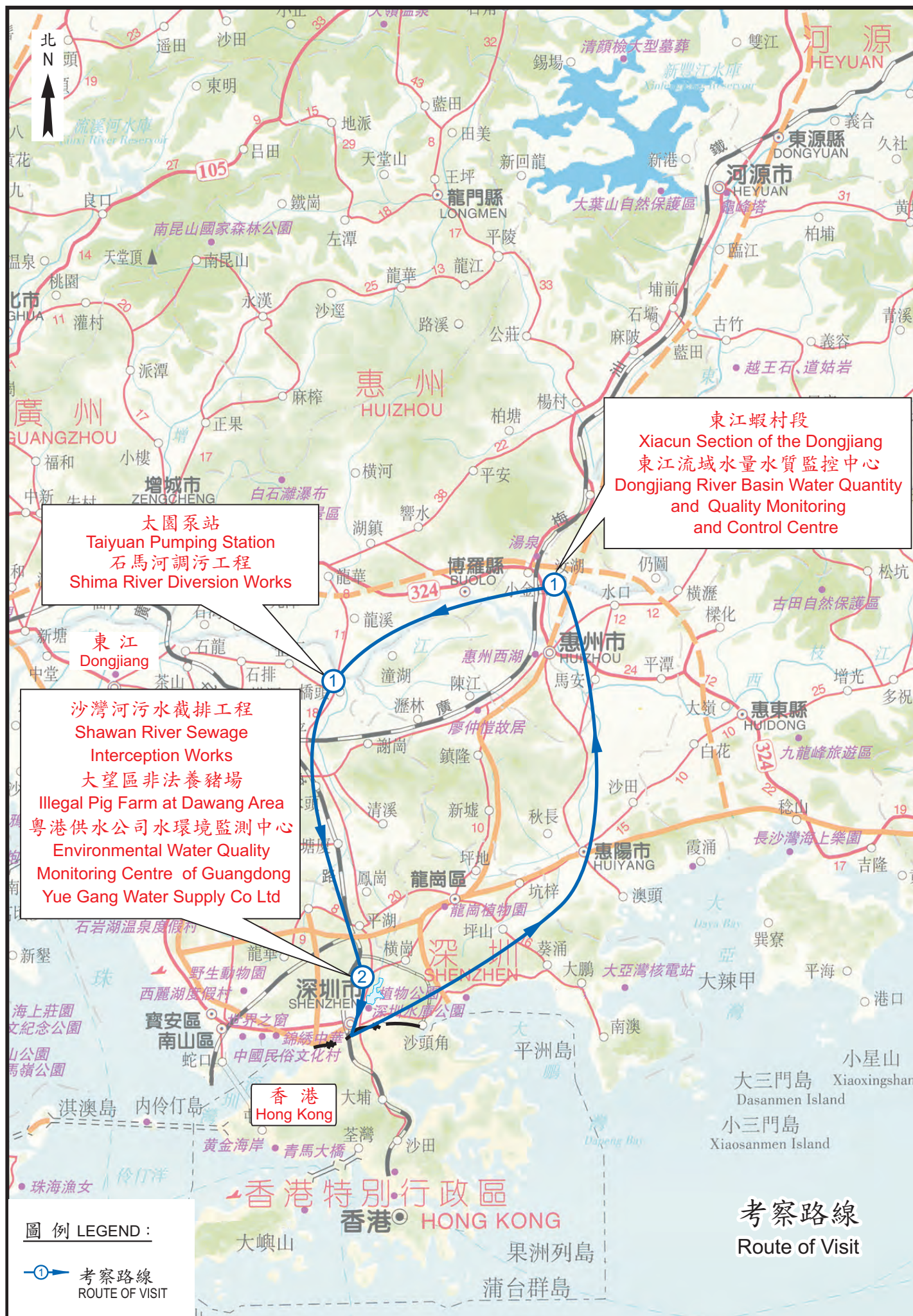
- 08:15 Depart at Hung Hom Station
- 11:00 Visit Xiacun Section of Dongjiang (東江蝦村段)
- 11:45 Visit Dongjiang River Basin Water Quantity and Quality Monitoring and Control Centre (東江流域水量水質監控中心)
- 12:30 Lunch
- 14:00 Visit Taiyuan Pumping Station (太園泵站) and Shima River Diversion Works (石馬河調污工程)
- 17:45 Arrive at Shenzhen (深圳市)
- 18:00 Dinner

Day 2 (Tuesday, 14.10.2014)

- 08:45 Visit Shawan River Sewage Interception Works (沙灣河污水截排工程)
- 09:45 Visit an earlier illegal pig farm at Dawang area (大望區)
- 10:45 Visit Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd (粵港供水公司水環境監測中心)
- 12:00 Lunch
- 13:45 Return to Hong Kong via Lo Wu
- 16:00 Convene a press conference at WSD Headquarters, Immigration Tower

Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

ROUTE OF VISIT



Advisory Committee on Water Resources and Quality of Water Supplies
Report No. 16 – Visit to Dongjiang Water Supply System
(13 – 14 October 2014)

PHOTOS



Photo 1 – The delegation at Xiacun Section of Dongjiang



Photo 2 – The Chairman of ACRQWS had a close inspection on the water quality at Xiacun Section of Dongjiang



Photo 3 – Director of Water Supplies and the Chairman of ACRQWS
(from left to right) at Xiacun Section of Dongjiang



Photo 4 – The delegation at Dongjiang River Basin Water Quantity and Quality
Monitoring and Control Centre



Photo 5 – The delegation at Dongjiang River Basin Water Quantity and Quality Monitoring and Control Centre



Photo 6 – The delegation at Taiyuan Pumping Station



Photo 7 – The delegation at Taiyuan Pumping Station



Photo 8 – The delegation at Taiyuan Pumping Station



Photo 9 – The delegation at Shima River Diversion Works



Photo 10 – The delegation at Shima River Diversion Works

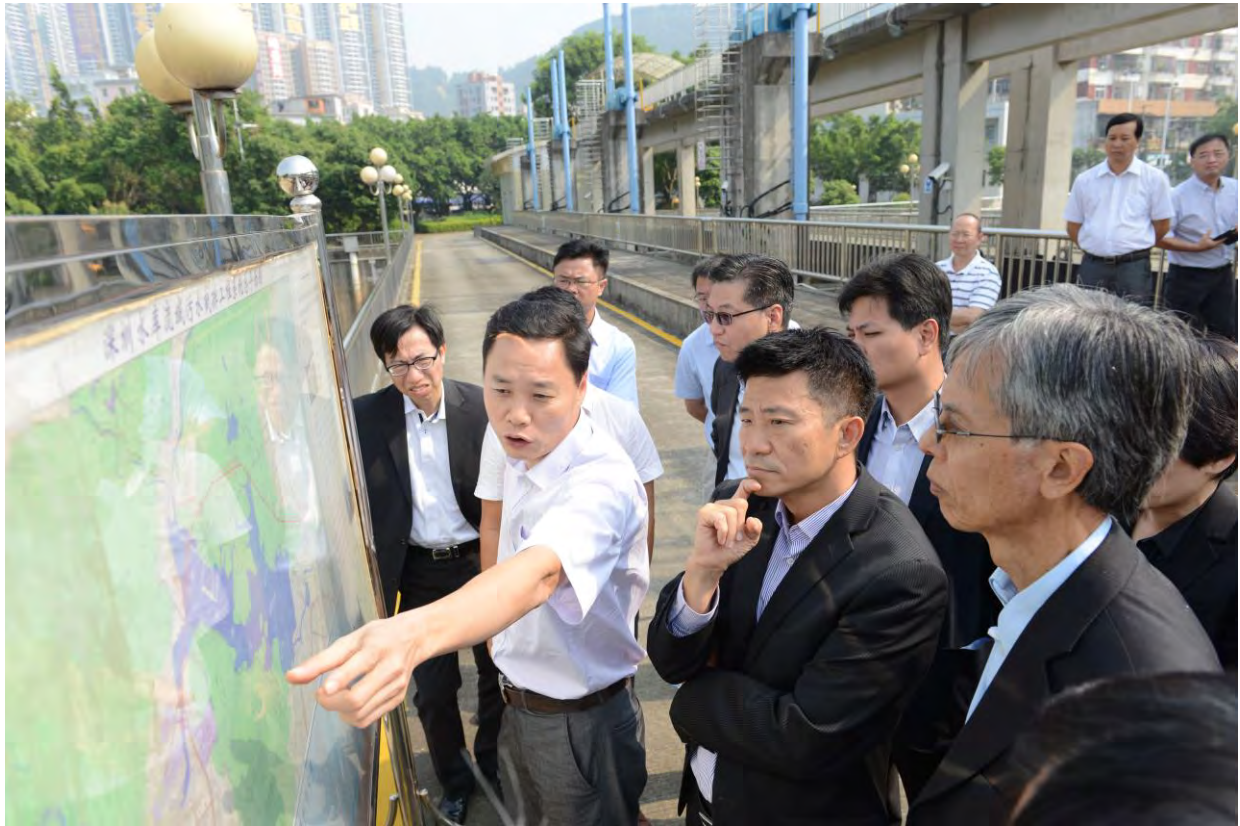


Photo 11 – The delegation at Shawan River Sewage Interception Works



Photo 12 – The delegation at Shawan River Sewage Interception Works

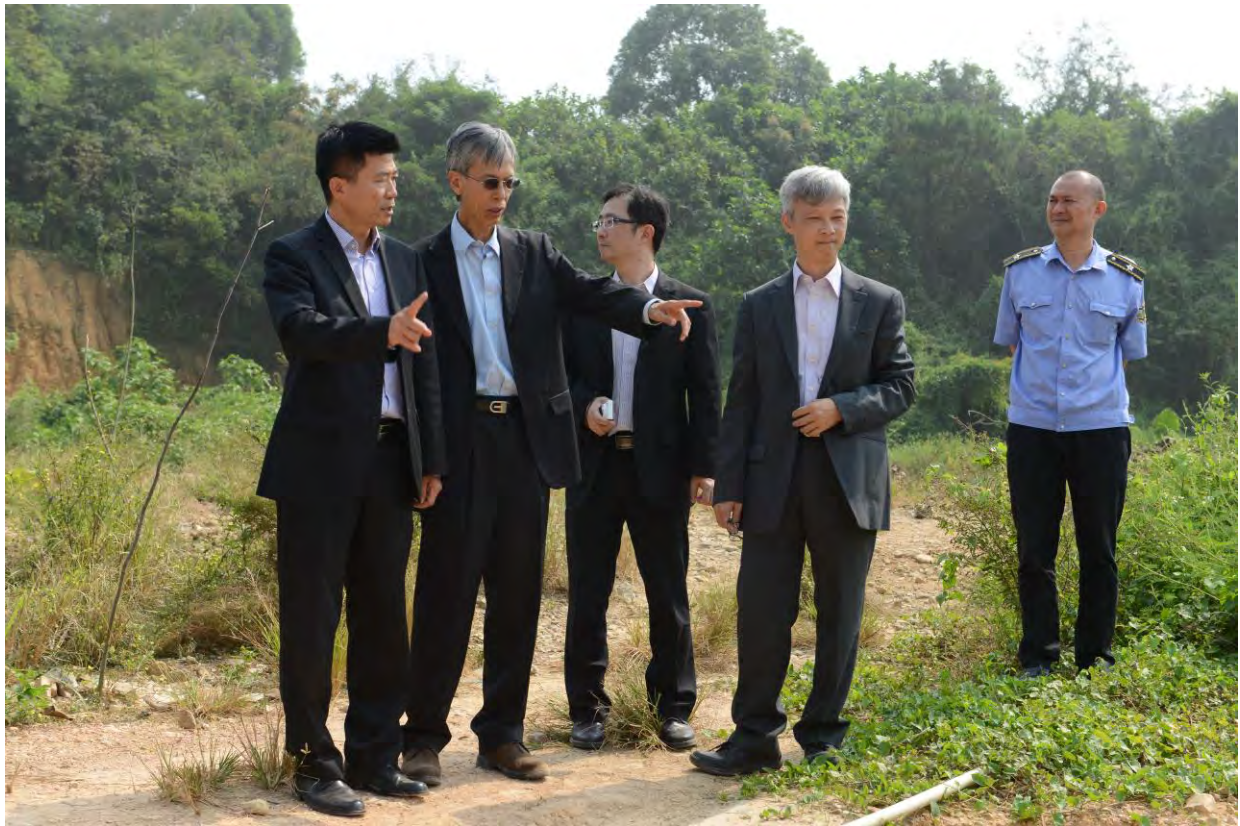


Photo 13 – The delegation at an earlier illegal pig farm at Dawang area



Photo 14 – An overview of an earlier illegal pig farm at Dawang area



Photo 15 – The delegation at Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd



Photo 16 –The delegation at Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd



Photo 17 – Laboratory of Environmental Water Quality Monitoring Centre of Guangdong Yue Gang Water Supply Co Ltd



Photo 18 – The press conference



Photo 19 – The press conference

