

「南科液晶電視及產業支援工業區(樹谷園區)開發計畫」 環境監測報告

一、依據「南科液晶電視及產業支援工業區開發計畫環境影響說明書」第八章 8.3 執行環境監測計畫，藉以建立環境品質資料庫，以研判受計畫工業區開發影響情形及程度，作為必要時提出改善、補救措施或適當調整施工計畫及作業方式之依據。

二、環境測定機構如下：

1 監測執行期間及項目

本季環境監測自 110 年 07 月至 110 年 09 月止，進行施工期間、營運期間及周邊環境品質調查，主要執行類別及點次摘要說明如下：

1.廠區內

- (1)放流水質：13 點次(每週 1 點次)。
- (2)地下水質：1 點次(每季 1 點次)。
- (3)噪音振動：2 點次(假日及平日各 1 點次)。

2.廠區外(每季或特定期間執行)

- (1)空氣品質：3 點次(每季 3 點次，100 年第三季起，加測服務中心) 9 點次(102 年 3 月起，每月加測懸浮微粒 PM₁₀ 中之鎳、砷、鎘、錳、鉍、鉛、總鉻化合物、氨氣及氯氣)。
- (2)噪音振動：4 點次(假日及平日各 1 點次)。
- (3)道路交通：4 點次(假日及平日各 2 點次)。
- (4)陸域動物：1 次【鳥類 (3~9 月針對環頸雉、彩鵲等珍貴稀有保育鳥類之繁殖棲地及巢位進行調查)、兩棲類(7 月)】。
- (5)地面水質：3 點次。
- (6)放流水質：3 點次。
- (7)營建噪音：6 點次。

2 執行監測單位

101 年 7 月 3 日之前是委託佳美環境科技股份有限公司，101 年 7 月

3日起本案監測係委託南台灣環境科技股份有限公司（環保署許可第050號環境檢驗測定機構）負責統包；其中陸域動物委託「屏東野鳥協會」辦理，農藥、空氣中酸氣、空氣中VOCs、噪音振動、懸浮微粒PM₁₀中之鎳、砷、鎘、錳、鉍、鉛及總鉻、氯氣及水中重金屬鉍、銻、鎳、錫、硒及酚類等委託上準環境科技有限公司執行。

3 分析方法

| 類別 | 檢測項目 | 檢驗方法 | 方法編號 |
|------|---|-----------------------------|---|
| 空氣品質 | 二氧化硫 | 紫外光螢光法 | NIEA A416.13C |
| | 氮氧化物 | 化學發光法 | NIEA A417.12C |
| | 一氧化氮 | 化學發光法 | NIEA A417.12C |
| | 二氧化氮 | 化學發光法 | NIEA A417.12C |
| | 一氧化碳 | 紅外線法 | NIEA A421.13C |
| | 臭氧 | 紫外光吸收法 | NIEA A420.12C |
| | 總碳氫化合物 | 火焰離子化法 | NIEA A740.10C |
| | 甲烷 | | |
| | 非甲烷碳氫化合物 | | |
| | 氫氟酸 | 離子層析電導度法 | NIEA A435.71C |
| | 鹽酸 | | |
| | 磷酸 | | |
| | 硝酸 | | |
| | 硫酸 | | |
| | 醋酸 | 離子層析電導度法 | NIEA A507.10B |
| | 總懸浮微粒(TSP) | 高量採樣法 | NIEA A102.13A |
| | 粒徑小於10微米之懸浮微粒(PM ₁₀) | 貝他射線衰減法 | NIEA A206.11C |
| | | 手動法 | NIEA A208.12C |
| | 砷 | 高量採樣法/粒狀污染物含量/連續式氫化砷原子吸收光譜法 | NIEA A102.12A NIEA A301.11C NIEA R318.11C |
| | 懸浮微粒(PM ₁₀)中之鎳、砷、鎘、錳、鉍、鉛、總鉻 | 感應耦合電漿質譜儀 | NIEA A305.11C |
| | 氯氣 | 離子層析電導度法 | NIEA A425.70C |
| | 氨氣 | 靛酚/分光光度法 | NIEA A426.72B |
| | 揮發性有機化合物(VOCs) | 不銹鋼採樣筒/氣相層析質譜儀法 | NIEA A715.14B |
| 風速 | 風杯法 | — | |
| 風向 | 風標法 | — | |
| 氣溫 | 吸引電熱法 | — | |
| 溼度 | 薄膜電容法 | — | |
| 噪音振動 | 噪音 | 環境噪音測量方法 | NIEA P201.96C |
| | 振動 | 環境振動測量方法 | NIEA P204.90C |
| 交通 | ※交通組成、服務水準、延遲時間 | 2011年台灣公路容量手冊 | — |

| 類別 | 檢測項目 | 檢驗方法 | 方法編號 |
|----------|----------------------|-----------------------------|---------------|
| 水質 水量 | 生化需氧量 | 水中生化需氧量檢測方法 | NIEA W510.55B |
| | 化學需氧量 | 密閉式重鉻酸鉀迴流法 | NIEA W517.53B |
| | | 重鉻酸鉀迴流法(高鹵) | NIEA W516.56A |
| | 懸浮固體 | 103°C~105°C 乾燥 | NIEA W210.58A |
| | 氨氮 | 流動分析法—靛酚法 | NIEA W437.52C |
| | 水溫 | 水溫檢測方法 | NIEA W217.51A |
| | pH 值 | 電極法 | NIEA W424.53A |
| | 導電度 | 導電度計法 | NIEA W203.51B |
| | 溶氧量 | 電極法 | NIEA W455.52C |
| | 透視度 | 透視度計法 | NIEA W221.50A |
| | 六價鉻 | 比色法 | NIEA W320.52A |
| | 硝酸鹽氮 | 鎘還原流動分析法 | NIEA W436.52C |
| | 亞硝酸鹽氮 | 鎘還原流動分析法 | NIEA W436.52C |
| | 凱氏氮 | 水中凱氏氮檢測方法 | NIEA W451.51A |
| | 磷酸鹽 | 維生素丙法 | NIEA W427.53B |
| | 總磷 | 維生素丙法 | NIEA W427.53B |
| | 總有機碳 | 紅外線測定法 | NIEA W532.52C |
| | 大腸桿菌群 | 濾膜法 | NIEA E202.55B |
| | 總菌落數 | 混合稀釋法 | NIEA E204.55B |
| | 油脂 | 索式萃取重量法 | NIEA W505.54B |
| | 真色色度 | 分光光度計法 | NIEA W223.52B |
| | 氟化物 | 分光光度計法 | NIEA W410.54A |
| | 氟化物 | 氟選擇性電極法 | NIEA W413.52A |
| | 總酚 | 分光光度計法 | NIEA W521.52A |
| | 酚類 | 線上蒸餾/流動分析法 | NIEA W524.50C |
| | 鉻、鋅、鎳、鎘 | 火焰式原子吸收光譜法 感應耦合電漿原子發射光譜法 | NIEA W306.55A |
| | 鉛、銅、錳、鐵 | | NIEA W311.54C |
| | 砷 | 自動化連續流動式氫化物原子吸收光譜法 | NIEA W434.54B |
| | 銀、硒 | 感應耦合電漿原子發射光譜法 | NIEA W311.54C |
| | 鎳 | 火焰式原子吸收光譜法 | NIEA W306.55A |
| | 汞 | 冷蒸氣原子吸收光譜法 | NIEA W330.52A |
| | 氯鹽 | 硝酸汞滴定法 | NIEA W406.52C |
| | 硫酸鹽 | 濁度法 | NIEA W430.51C |
| 揮發性有機物 | 吹氣捕捉/氣相層析質譜儀法 | NIEA W785.57B | |
| 有機氯農藥 | 液相萃取法/氣相層析儀/電子捕捉偵測器法 | NIEA W605.54B | |
| 達馬松 | 氣相層析儀/火焰光度偵測器法 | NIEA W610.52B | |
| 除草劑 | 分光光度計法 | NIEA W641.51A | |
| | 固相萃取與高效液相層析/紫外光偵測器法 | NIEA W646.50C | |
| 毒殺芬 | 氣相層析儀—電子捕捉偵測器法 | NIEA W653.51A | |
| 五氯酚 | 氣相層析質譜儀法 | NIEA W801.54B | |

| 類別 | 檢測項目 | 檢驗方法 | 方法編號 |
|----|------------------|--|--------------------------------|
| | 總毒性有機物 (TTO) | 氣相層析質譜儀法 吹氣捕捉／氣相層析質譜儀法 | NIEA W801.54B NIEA W785.57B |
| | 鉬 | 感應耦合電漿質譜法 | NIEA W311.54C |
| | 錫 | 感應耦合電漿質譜法 | NIEA W311.54C |
| | 鎘 | 感應耦合電漿質譜法 | NIEA W311.54C |
| | 銻 | 感應耦合電漿質譜法 | NIEA W311.54C |
| | 生物急毒性試驗 (TUa) | 水蚤靜水式法 羅漢魚靜水式法 | NIEA B901.14B NIEA B902.13B |
| 生態 | ※陸域動物 | 沿線調查法/定點觀察法 (鳥類) 綜合沿線調查/繁殖地調查 (兩棲類) | — |

備註：1. “—”表示環保署環境檢驗所未公告檢驗方法提供認證。

2. “※”表示無環保署公告檢驗方法，引用其他公告方法檢測分析。

三、監測結果綜合檢討分析

表 3-1 本季監測結果

| 監測項目 | | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 | |
|------------------|----------|----------------------|-----------|---------------------|--------------------|---|
| 空氣品質 | 二氧化硫 | 日平均值 | — | — | 0.004 | 各空氣品質項目,均符合空氣品質標準,與鄰近環保署監測站(善化站)資料及歷次監測數據比較,現場未發現異常現象。請參閱空氣品質監測結果比較圖。 |
| | | 最大小時平均值 | 0.075 ppm | — | 0.004~0.005 | |
| | 氮氧化物 | 日平均值 | — | — | 0.005~0.016 | |
| | | 最大小時平均值 | — | — | 0.012~0.037 | |
| | 一氧化氮 | 日平均值 | — | — | 0.004~0.012 | |
| | | 最大小時平均值 | — | — | 0.015~0.026 | |
| | 二氧化氮 | 日平均值 | — | — | 0.009~0.017 | |
| | | 最大小時平均值 | 0.1 ppm | — | 0.022~0.033 | |
| | 一氧化碳 | 最大 8 小時平均值 | 9 ppm | — | 0.4 | |
| | | 最大小時平均值 | 35 ppm | — | 0.4~0.5 | |
| | 總碳氫化合物 | 日平均值 | — | — | 2.03~2.22 | |
| | | 最大小時平均值 | — | — | 2.27~2.92 | |
| | 甲烷 | 日平均值 | — | — | 1.96~2.14 | |
| | | 最大小時平均值 | — | — | 2.16~2.79 | |
| | 非甲烷碳氫化合物 | 日平均值 | — | — | 0.07~0.08 | |
| | | 最大小時平均值 | — | — | 0.15~0.17 | |
| | 臭氧 | 最大 8 小時平均值 | 0.06 ppm | — | 0.022~0.033 | |
| | | 最大小時平均值 | 0.12 ppm | — | 0.031~0.049 | |
| | 氫氟酸 | 24 小時值 | — | — | ND<0.00119 | |
| | 鹽酸 | 24 小時值 | — | — | ND<0.00187~0.00625 | |
| 硫酸 | 24 小時值 | — | — | ND<0.00163~<0.00624 | | |
| 硝酸 | 24 小時值 | — | — | ND<0.00121 | | |
| 磷酸 | 24 小時值 | — | — | ND<0.00143 | | |
| 醋酸 | 24 小時值 | — | — | ND<0.00770 | | |
| 砷 | 24 小時值 | — | — | ND<0.0025 | | |
| TSP | 24 小時值 | — | — | 35~74 | | |
| PM ₁₀ | 日平均值 | 100µg/m ³ | — | 22~50 | | |
| PM ₂₅ | 日平均值 | 35µg/m ³ | — | 7~19 | | |

表 3-1 本季監測結果(續 1)

| 監測項目 | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 |
|---------------------|------|------|---------------------|--|
| PM ₁₀ 中砷 | — | — | <0.000280~0.0015 | 各空氣品質項目均符合空氣品質標準,與鄰近環保署監測站(善化站)資料及歷次監測數據比較,現場未發現異常現象。請參閱空氣品質監測結果比較圖。 |
| PM ₁₀ 中鎳 | — | — | ND<0.000484~0.027 | |
| PM ₁₀ 中鎘 | — | — | ND<0.0000471~0.0011 | |
| PM ₁₀ 中錳 | — | — | 0.0033~0.051 | |
| PM ₁₀ 中鉛 | — | — | 0.00099~0.042 | |
| PM ₁₀ 中鉻 | — | — | <0.00055~0.0094 | |
| PM ₁₀ 中鈹 | — | — | ND<0.0000216 | |
| 氨氣 | — | — | 0.021~0.17 | |
| 氯氣 | — | — | ND<0.00102 | |
| 丙烷 | — | — | <0.0020 | |
| 二氯二氟甲烷 | — | — | <0.0049 | |
| 二氟一氯甲烷 | — | — | ND<0.000672~<0.0039 | |
| 二氯四氟乙烷 | — | — | ND<0.00133 | |
| 氯甲烷 | — | — | <0.0021 | |
| 氯乙烯 | — | — | ND<0.000179 | |
| 1,3-丁二烯 | — | — | ND<0.000177 | |
| 甲醇 | — | — | ND<0.00147~<0.0062 | |
| 溴甲烷 | — | — | ND<0.000582 | |
| 氯乙烷 | — | — | ND<0.000501 | |
| 三氯一氟甲烷 | — | — | <0.0056 | |
| 戊烷 | — | — | ND<0.000502~<0.0030 | |
| 丙烯醛 | — | — | ND<0.000390 | |
| 1,1-二氯乙烯 | — | — | ND<0.000595 | |
| 丙酮 | — | — | 0.0059~0.014 | |
| 1,1,2-三氯-1,2,2-三氟乙烷 | — | — | ND<0.00161 | |
| 乙腈 | — | — | <0.0017~0.0017 | |
| 氯丙烯 | — | — | ND<0.000688 | |
| 二氯甲烷 | — | — | <0.0010~0.0049 | |
| 丙烯腈 | — | — | ND<0.000434 | |
| 順-1,2-二氯乙烯 | — | — | ND<0.000753 | |
| 正己烷 | — | — | ND<0.000458~<0.0039 | |
| 1,1-二氯乙烷 | — | — | ND<0.000850 | |
| 醋酸乙烯酯 | — | — | ND<0.000633 | |
| 丁酮 | — | — | <0.0029 | |
| 反-1,2-二氯乙烯 | — | — | ND<0.000634 | |
| 氯仿 | — | — | ND<0.000342 | |

備註：空氣中 VOCs 除苯、甲苯及二甲苯單位為 ppm 外，其餘測項為 mg/m³。

表 3-1 本季監測結果(續 2)

| 監測項目 | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 |
|----------------------|--------|------|---------------------|--|
| 1,1,1-三氯乙烷 | — | — | ND<0.00125 | 各空氣品質項目均符合空氣品質標準,與鄰近環保署監測站(善化站)資料及歷次監測數據比較,現場未發現異常現象。請參閱空氣品質監測結果比較圖。 |
| 四氯化碳 | — | — | ND<0.00113 | |
| 1,2-二氯乙烷 | — | — | ND<0.000324 | |
| 苯 | 0.5ppm | — | ND<0.000256 | |
| 正庚烷 | — | — | ND<0.000860 | |
| 三氯乙烯 | — | — | ND<0.000701 | |
| 1,2-二氯丙烷 | — | — | ND<0.000656 | |
| 甲基丙烯酸甲酯 | — | — | ND<0.000483 | |
| 一溴二氯甲烷 | — | — | ND<0.000416 | |
| 順-1,3-二氯丙烯 | — | — | ND<0.000656 | |
| 甲基異丁酮 (4-甲基-2-戊酮) | — | — | ND<0.000318 | |
| 甲苯 | 2ppm | — | 0.0053~0.011 | |
| 辛烷 | — | — | ND<0.000607 | |
| 反-1,3-二氯丙烯 | — | — | ND<0.000763 | |
| 1,1,2-三氯乙烷 | — | — | ND<0.000499 | |
| 四氯乙烯 | — | — | ND<0.000475 | |
| 二溴一氯甲烷 | — | — | ND<0.00654 | |
| 二溴乙烷 | — | — | ND<0.00136 | |
| 氯苯 | — | — | ND<0.000691 | |
| 乙基苯 | — | — | ND<0.000521~<0.0048 | |
| 對,間-二甲苯 | 2ppm | — | <0.0091 | |
| 鄰-二甲苯 | 2ppm | — | ND<0.000521~<0.0043 | |
| 苯乙烯 | — | — | ND<0.000511 | |
| 1,1,2,2-四氯乙烷 | — | — | ND<0.000824 | |
| 1,3,5-三甲基苯 | — | — | ND<0.000688 | |
| α-甲基苯乙烯 | — | — | ND<0.000483 | |
| 1,2,4-三甲基苯 | — | — | ND<0.000639 | |
| 1,3-二氯苯 | — | — | ND<0.000601 | |
| 對-二氯苯 | — | — | ND<0.000481 | |
| 氯化甲基苯 | — | — | ND<0.000621 | |
| 鄰-二氯苯 | — | — | ND<0.000661 | |
| 1,2,4-三氯苯 | — | — | ND<0.000742 | |
| 六氯丁二烯 | — | — | ND<0.000960 | |
| 以下空白 | | | | |
| | | | | |

備註：空氣中 VOCs 除苯、甲苯及二甲苯單位為 ppm 外，其餘測項為 mg/m³。

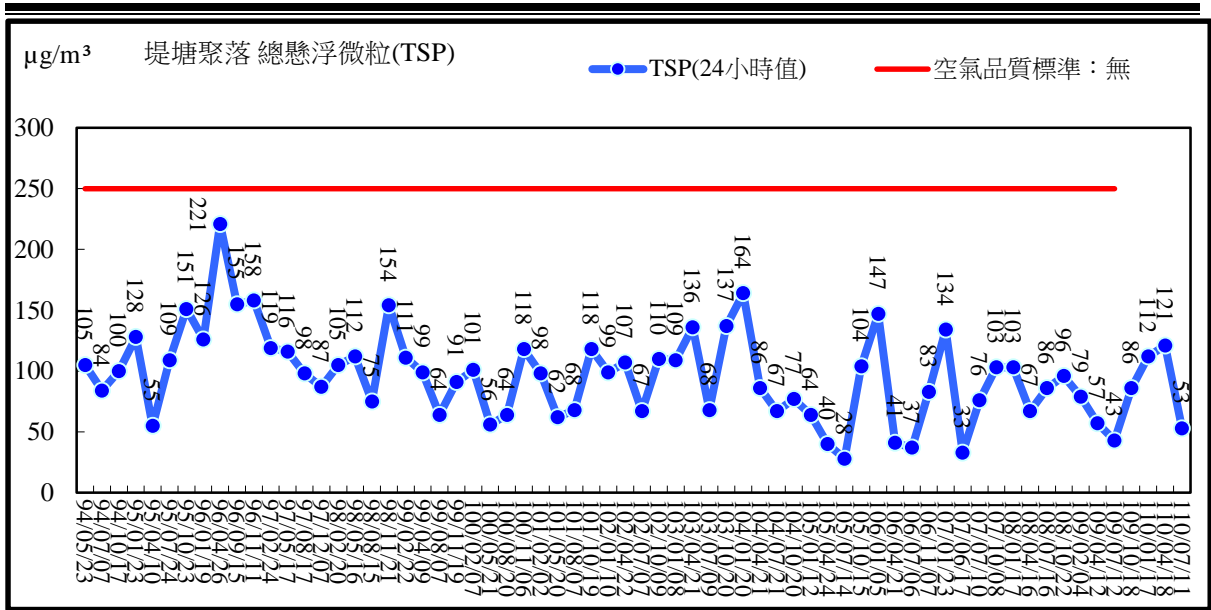


圖 2.1 空氣品質監測結果比較圖(堤塘聚落 TSP)

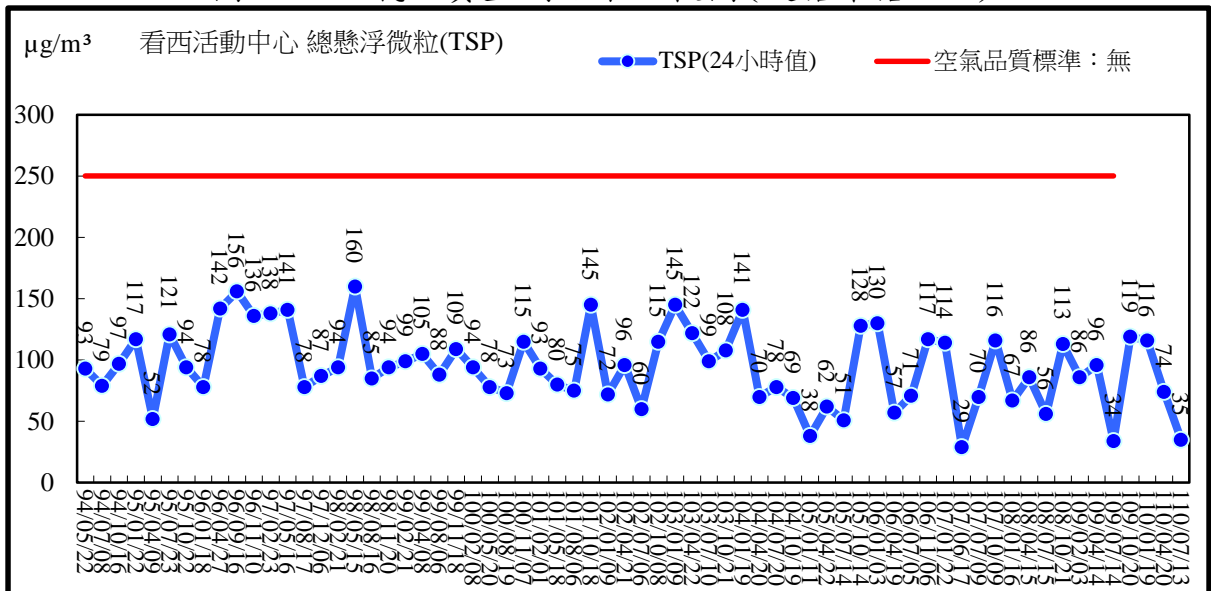


圖 2.2 空氣品質監測結果比較圖(看西活動中心 TSP)

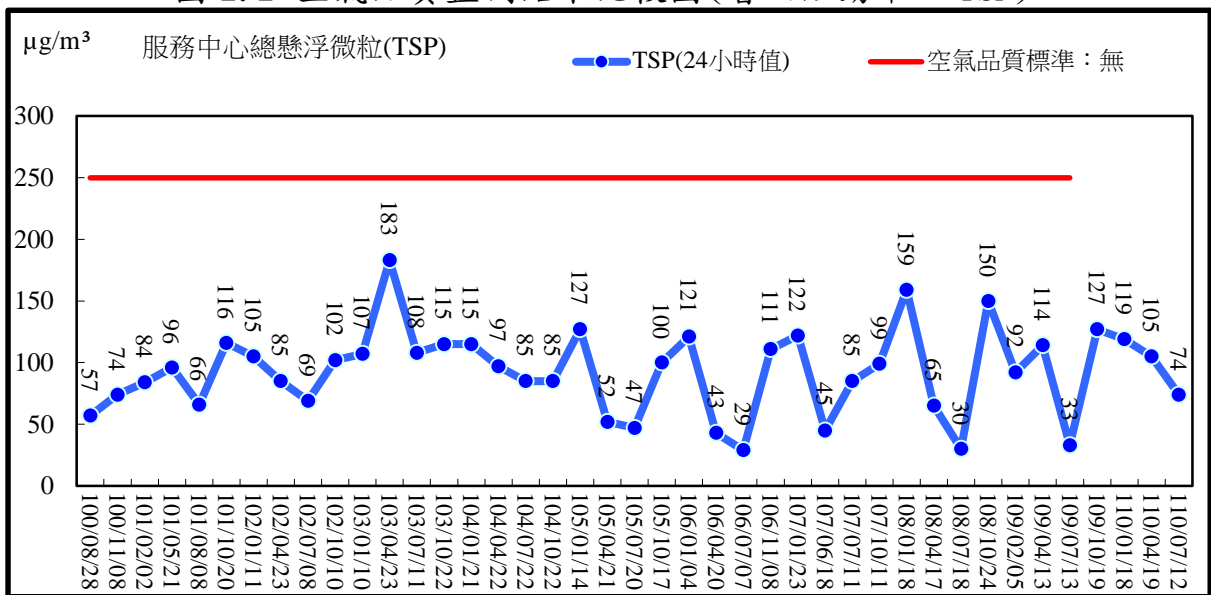


圖 2.3 空氣品質監測結果比較圖(服務中心 TSP)

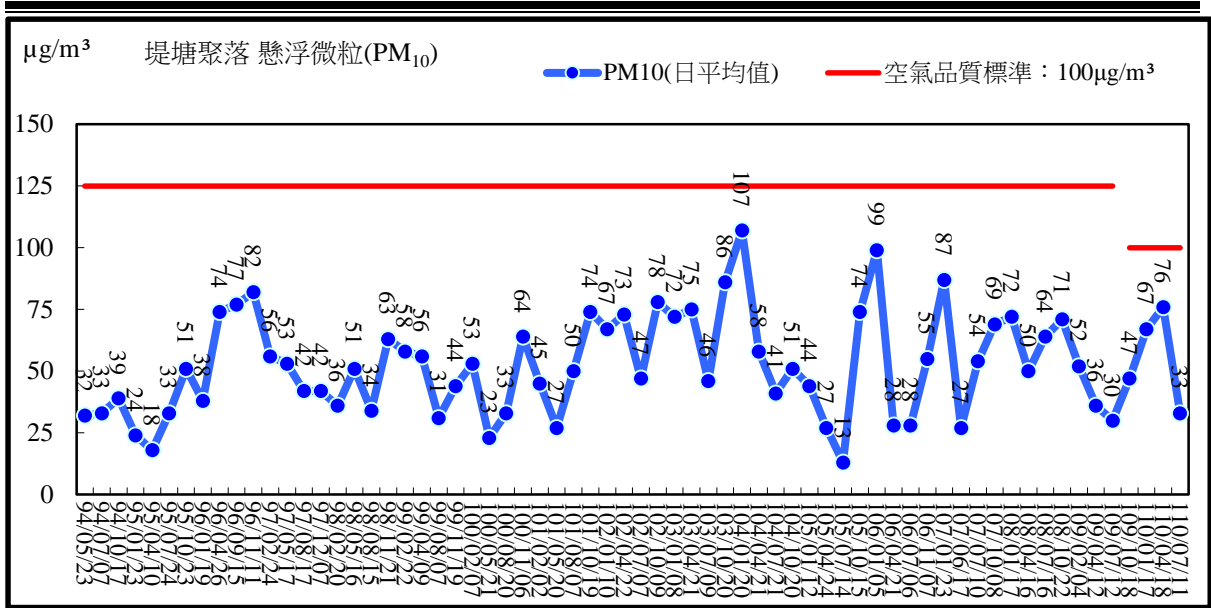


圖 2.4 空氣品質監測結果比較圖(堤塘聚落 PM₁₀)

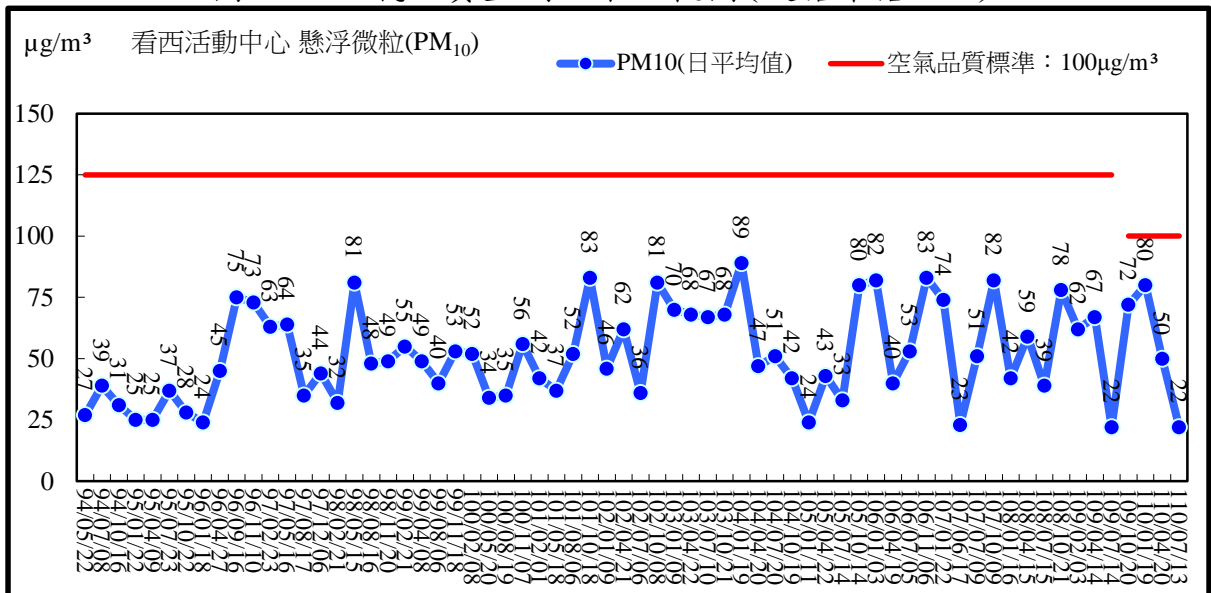


圖 2.5 空氣品質監測結果比較圖(看西活動中心 PM₁₀)

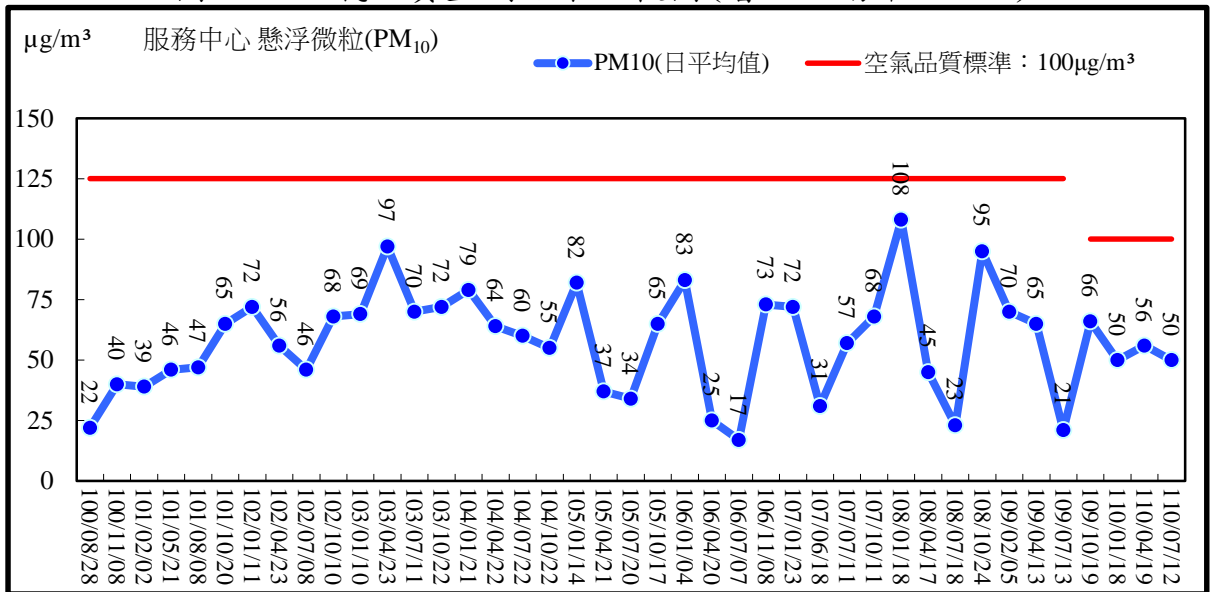


圖 2.6 空氣品質監測結果比較圖(服務中心 PM₁₀)

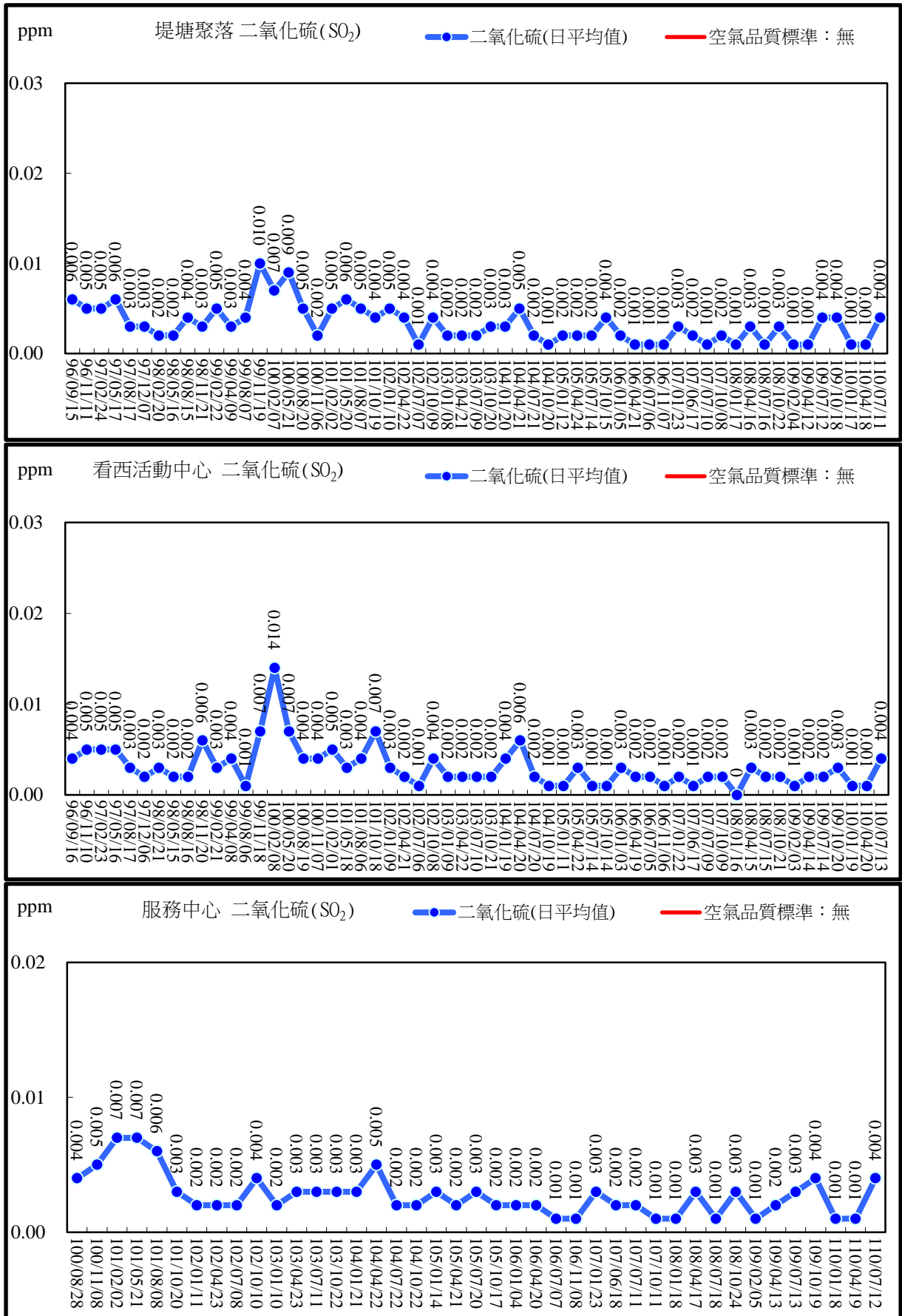


圖 2.7 空氣品質監測結果比較圖(二氧化硫日平均值)

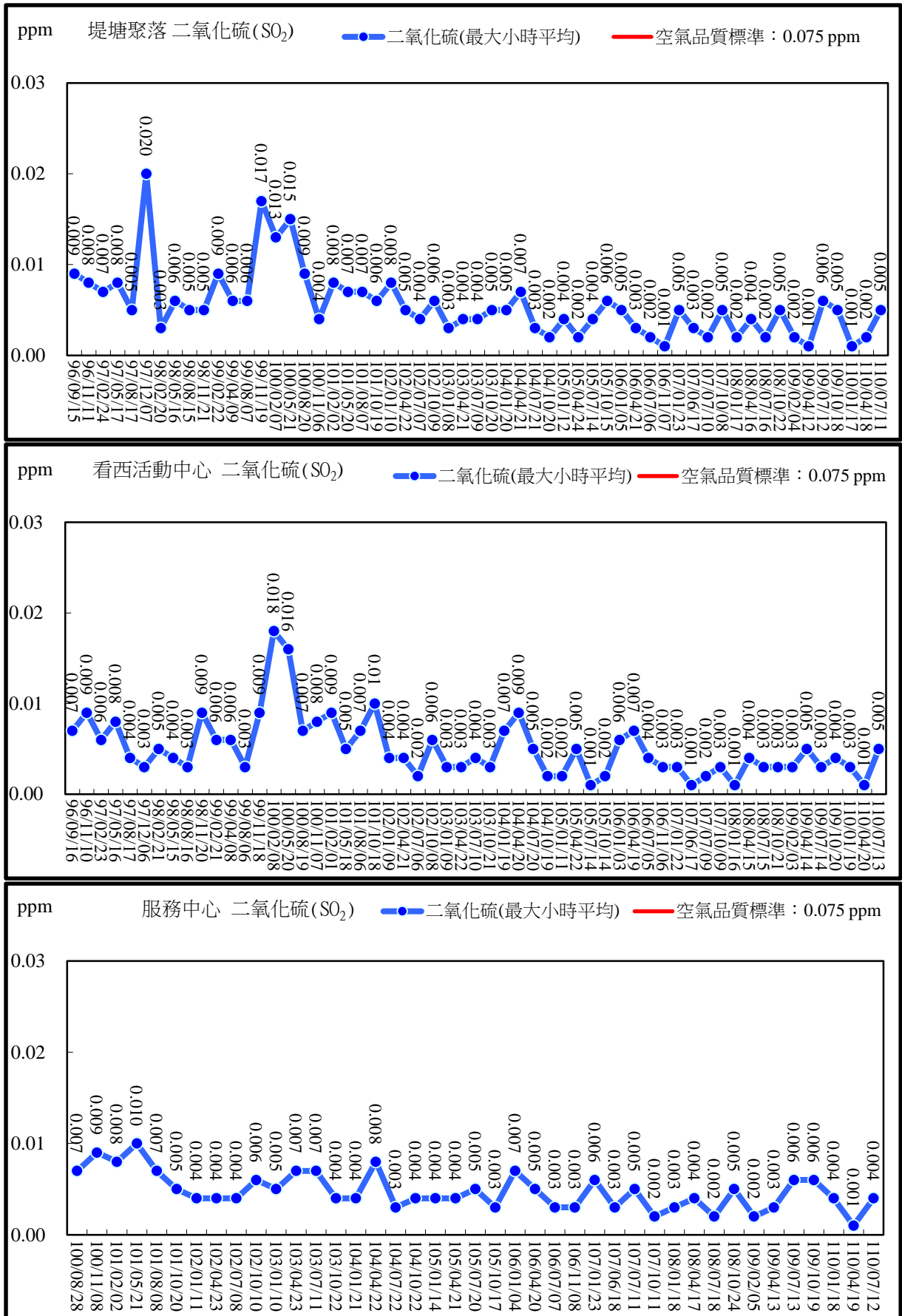


圖 2.8 空氣品質監測結果比較圖(二氧化硫最大小時平均值)

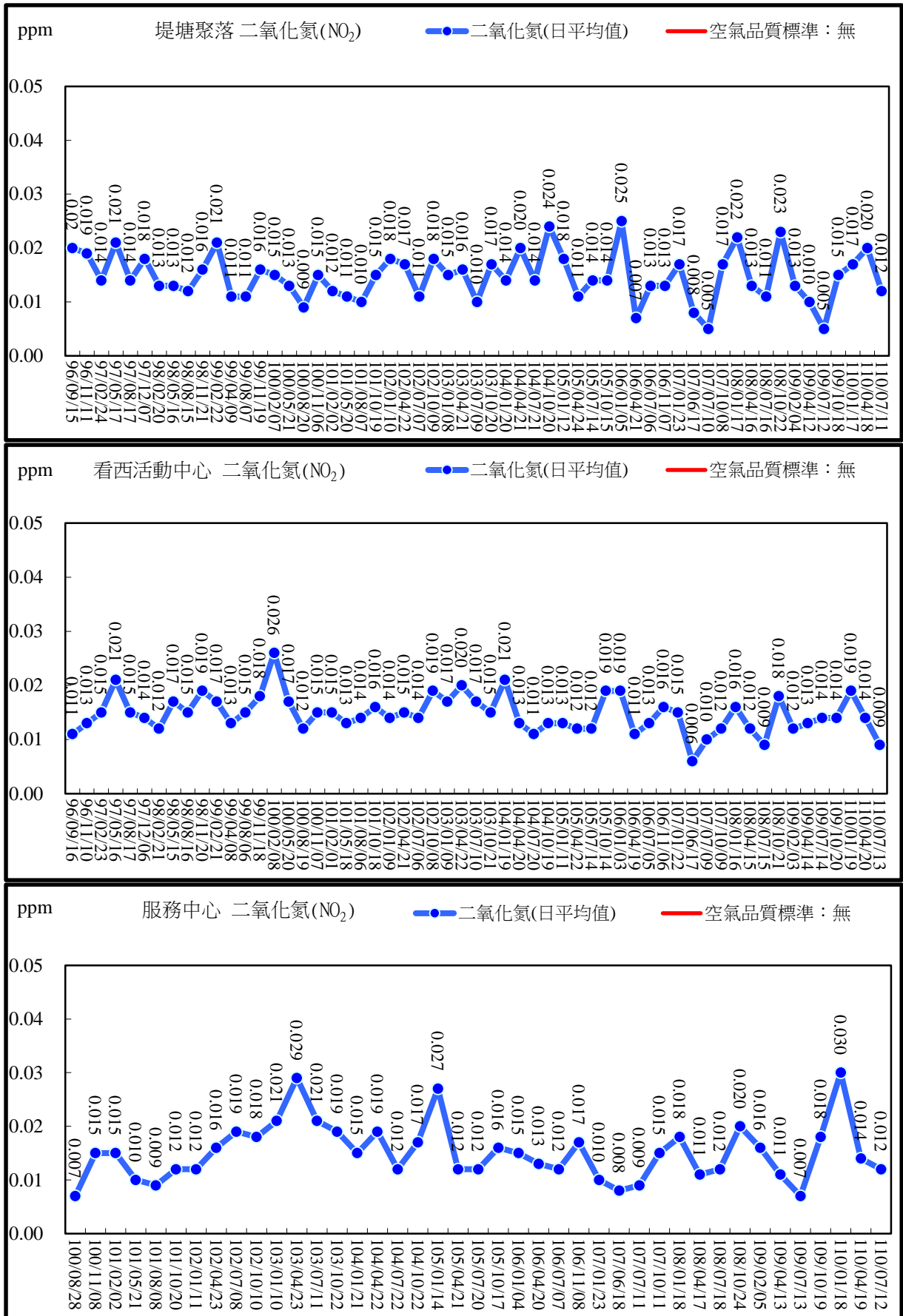


圖 2.9 空氣品質監測結果比較圖(二氧化氮日平均值)

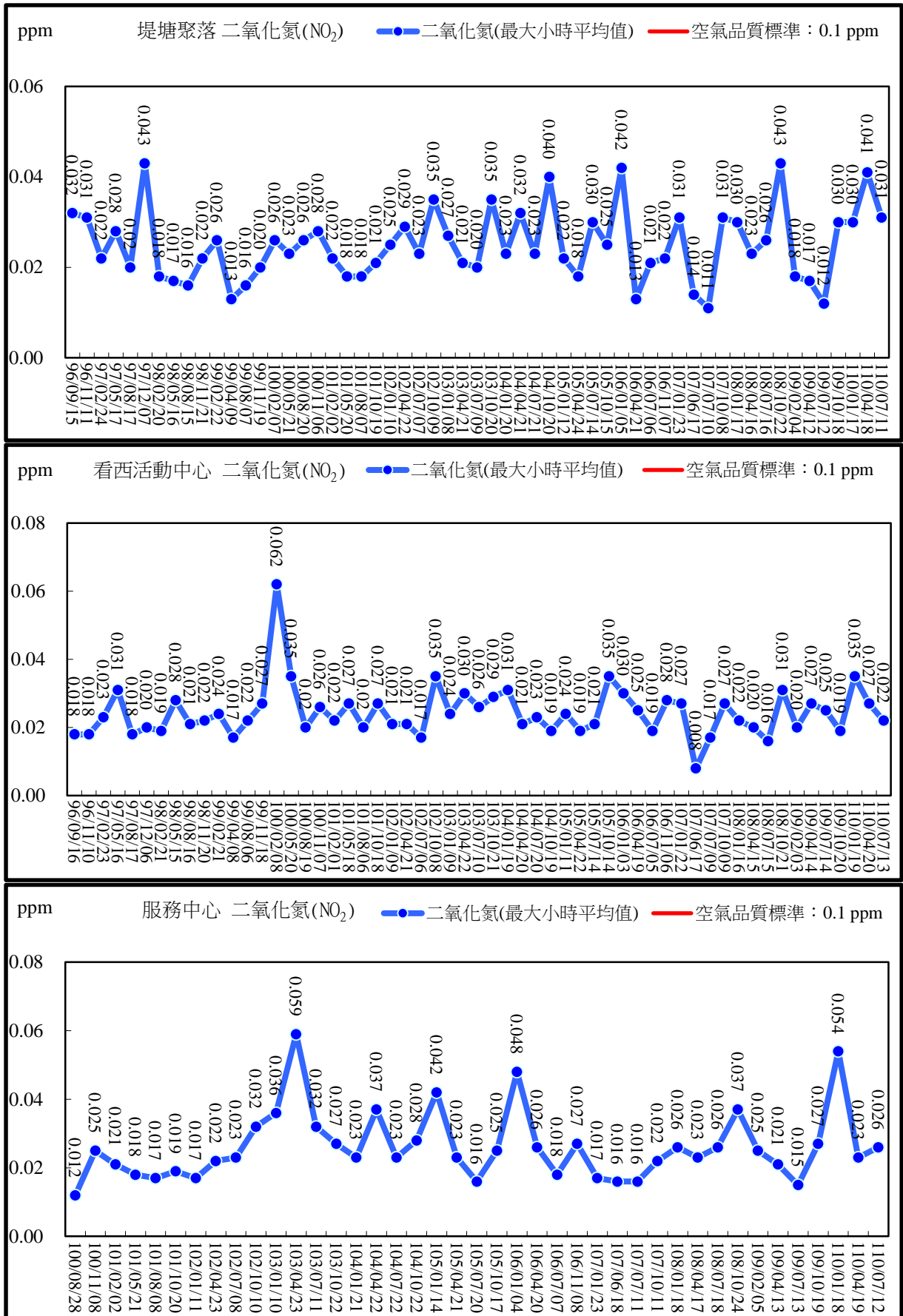


圖 2.10 空氣品質監測結果比較圖(二氧化氮最大小時平均值)

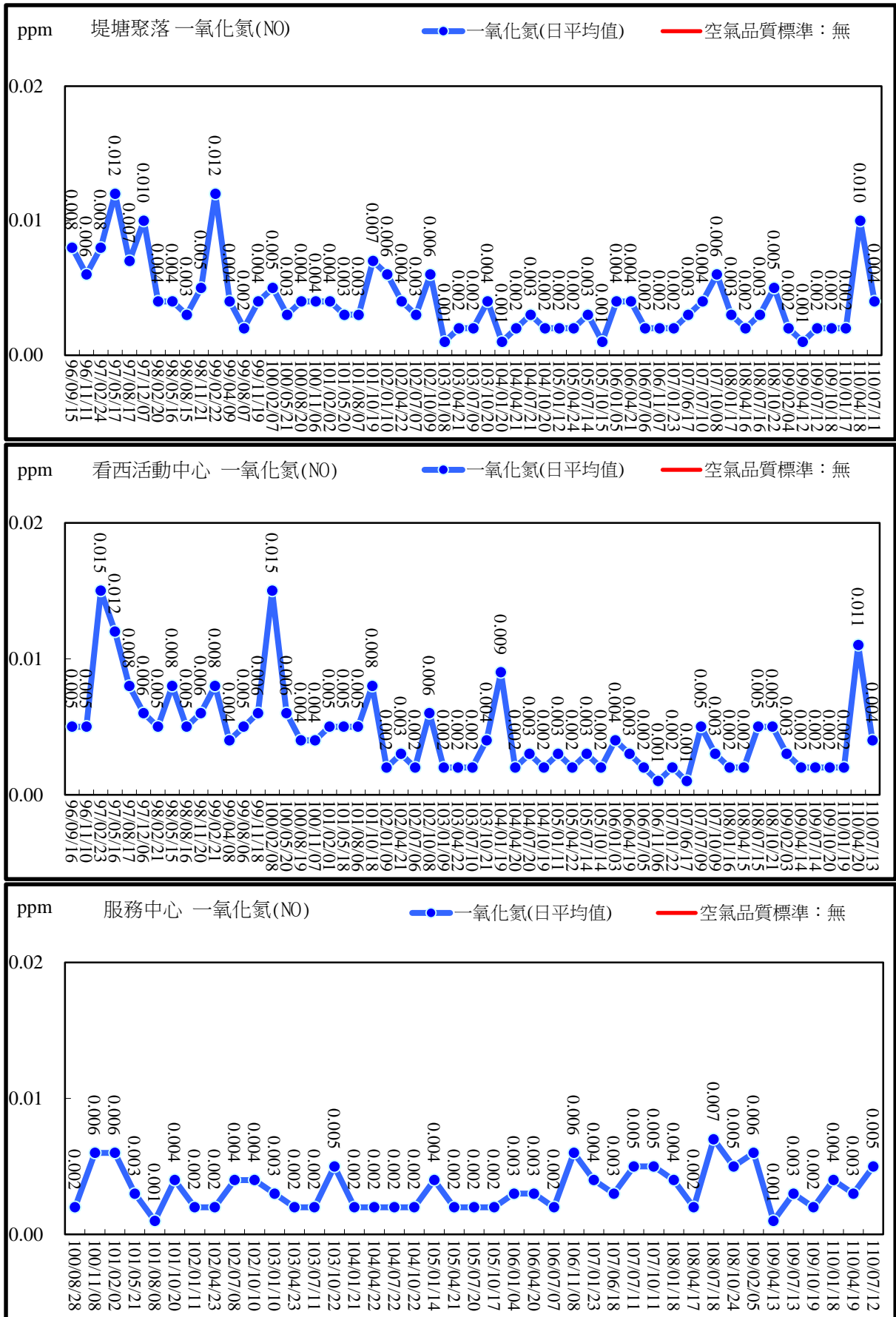


圖 2.11 空氣品質監測結果比較圖(一氧化氮日平均值)

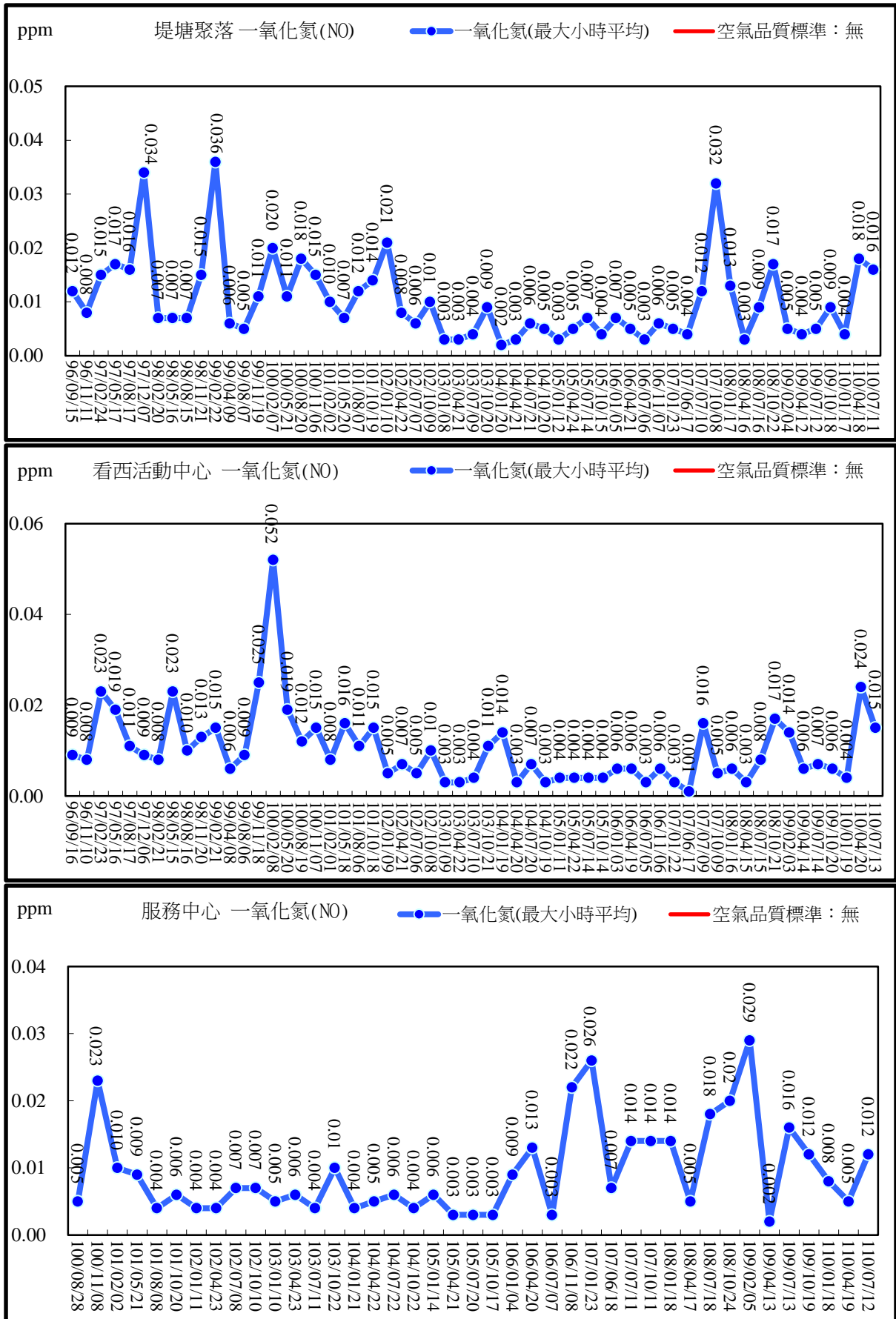


圖 2.12 空氣品質監測結果比較圖(一氧化氮最大小時平均值)

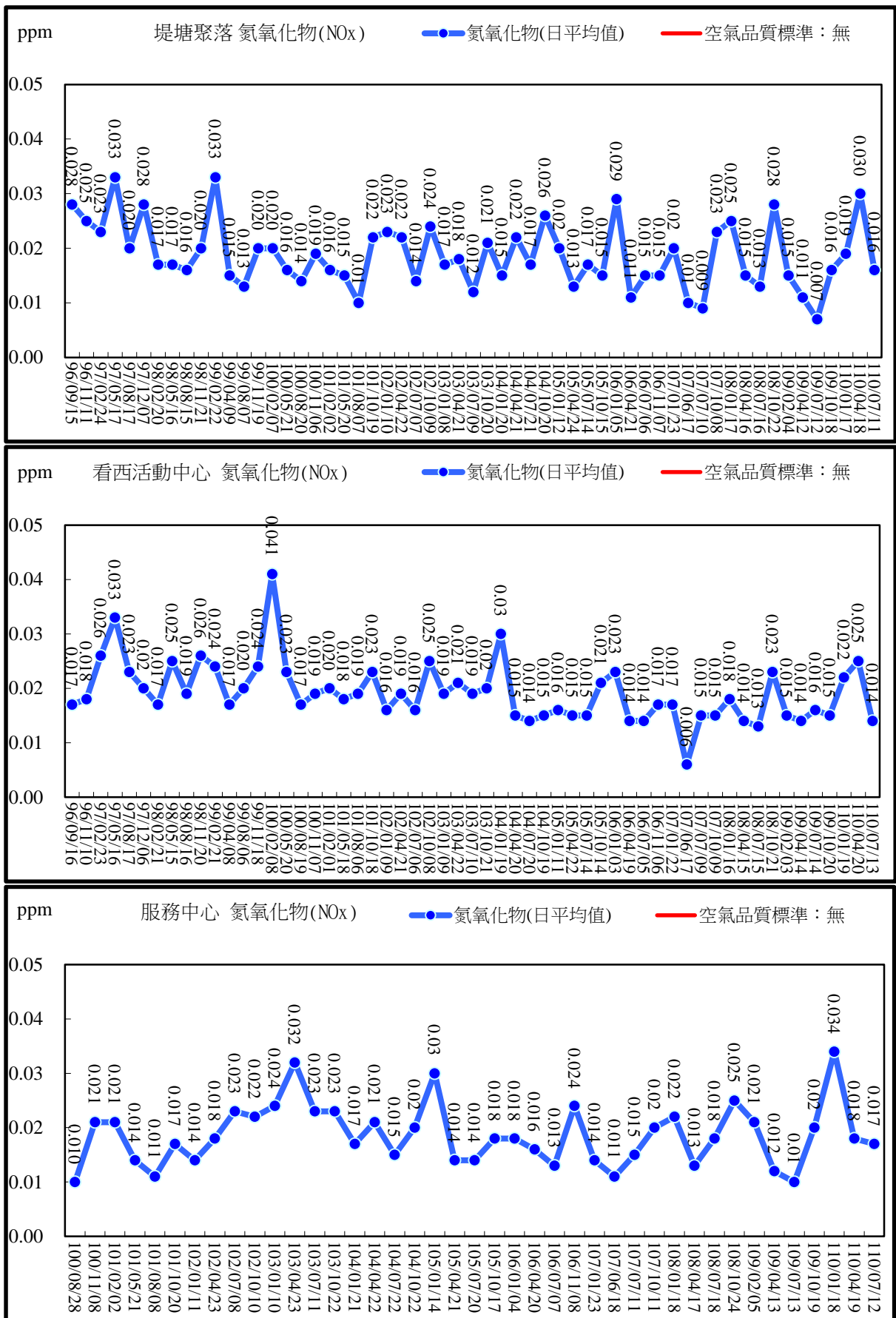


圖 2.13 空氣品質監測結果比較圖(氮氧化物日平均值)

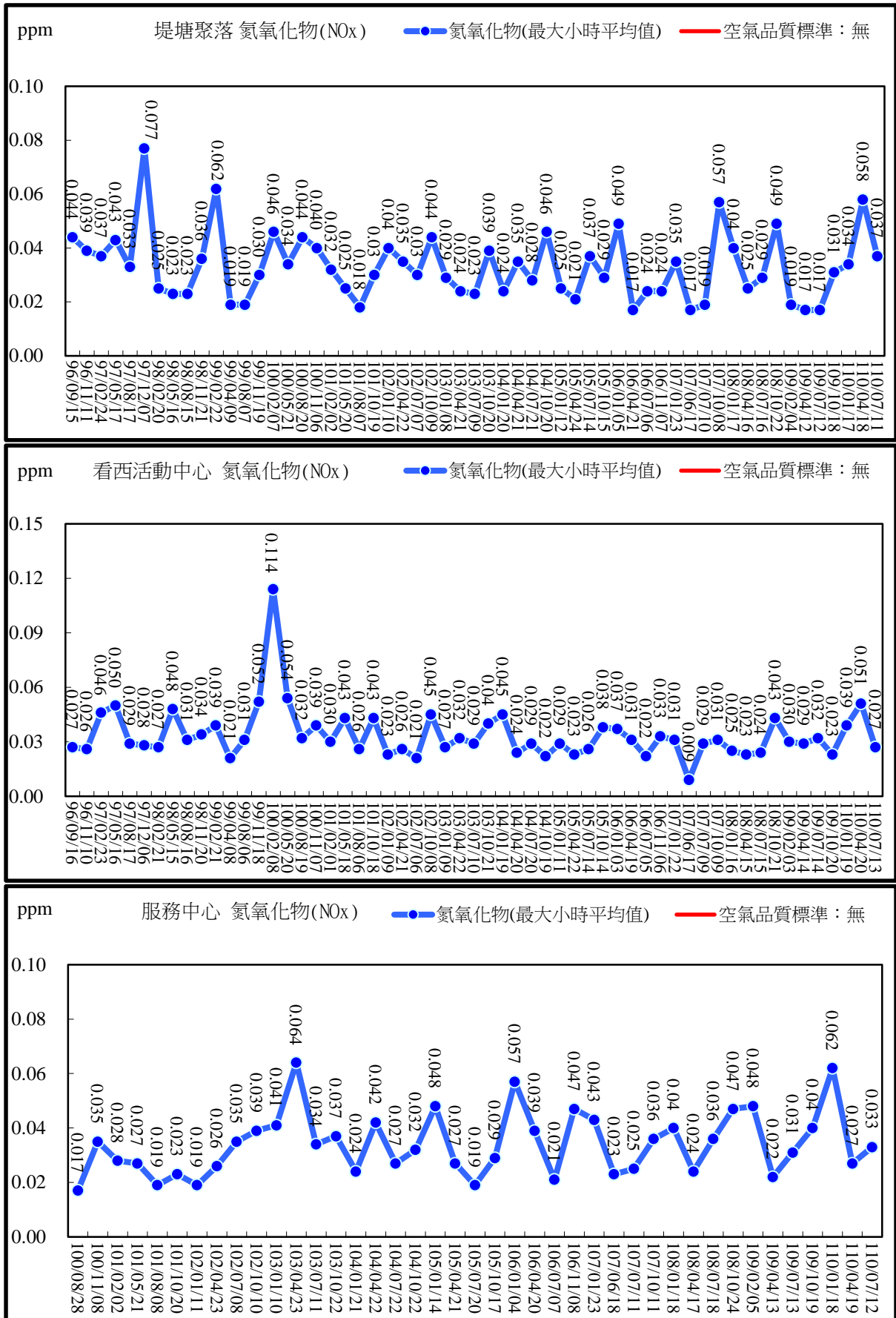


圖 2.14 空氣品質監測結果比較圖(氮氧化物最大小時平均值)

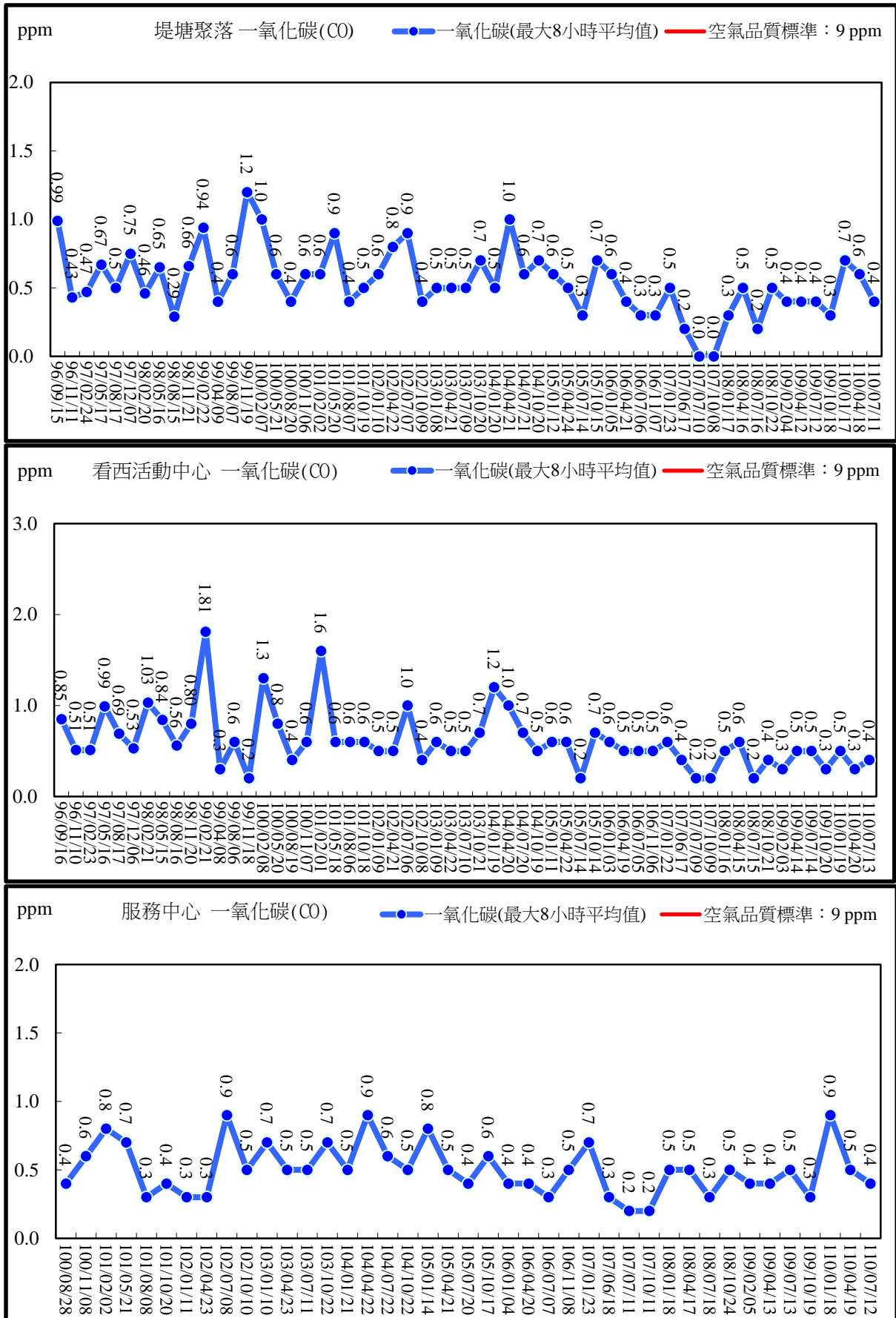


圖 2.15 空氣品質監測結果比較圖(一氧化碳最大八小時平均值)

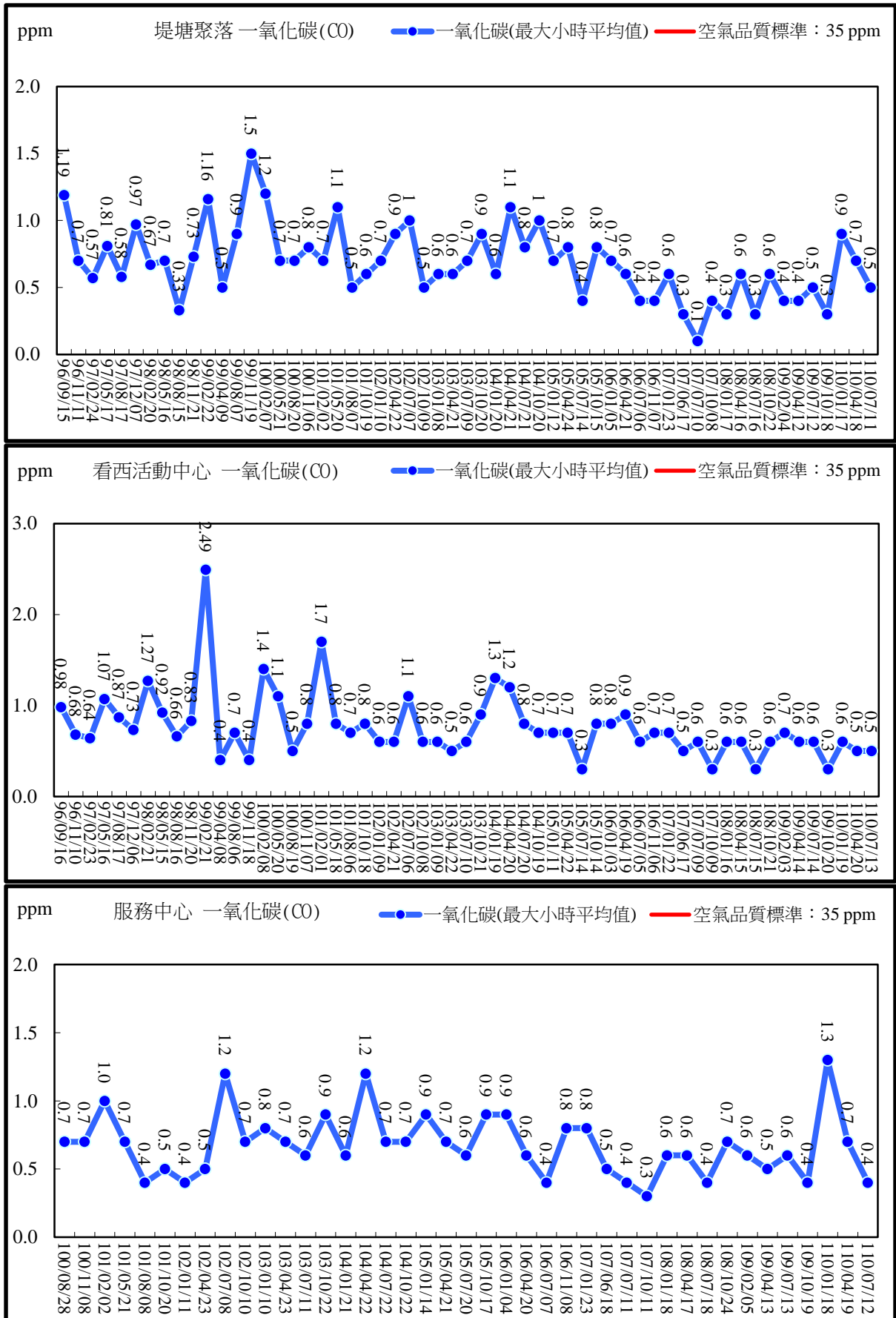


圖 2.16 空氣品質監測結果比較圖(一氧化碳最大小時平均值)

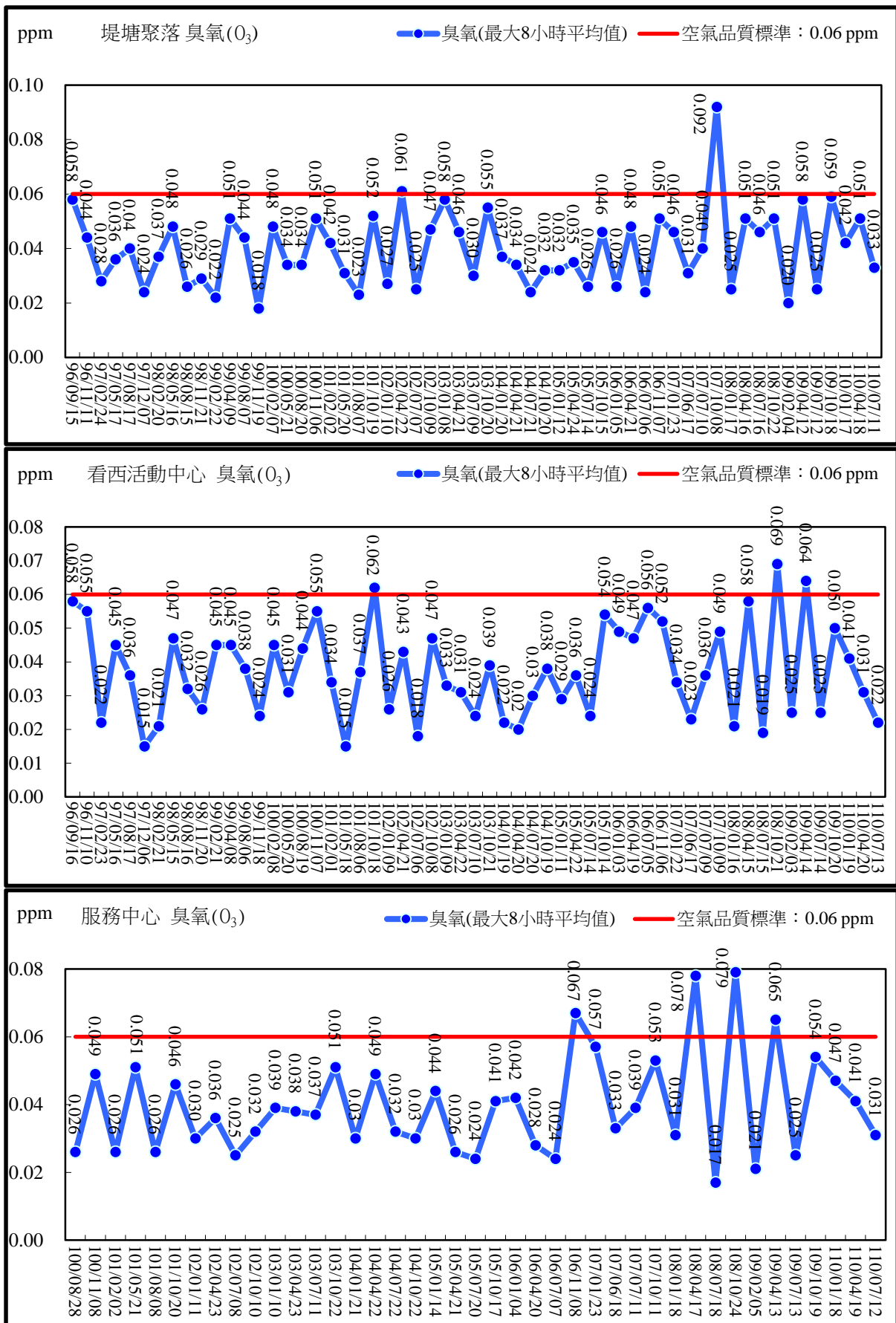


圖 2.17 空氣品質監測結果比較圖(臭氧最大八小時平均值)

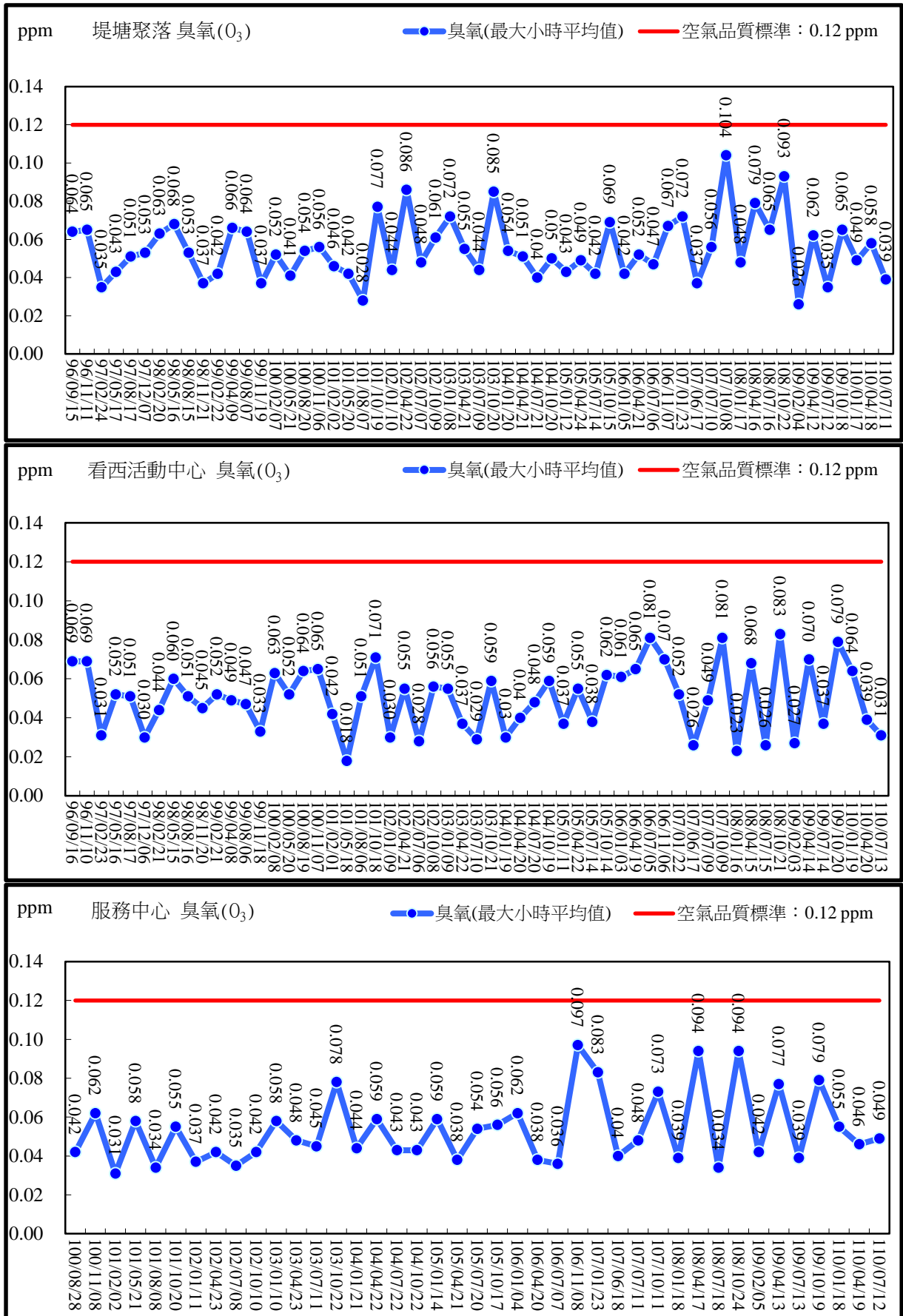


圖 2.18 空氣品質監測結果比較圖(臭氧最大小時平均值)

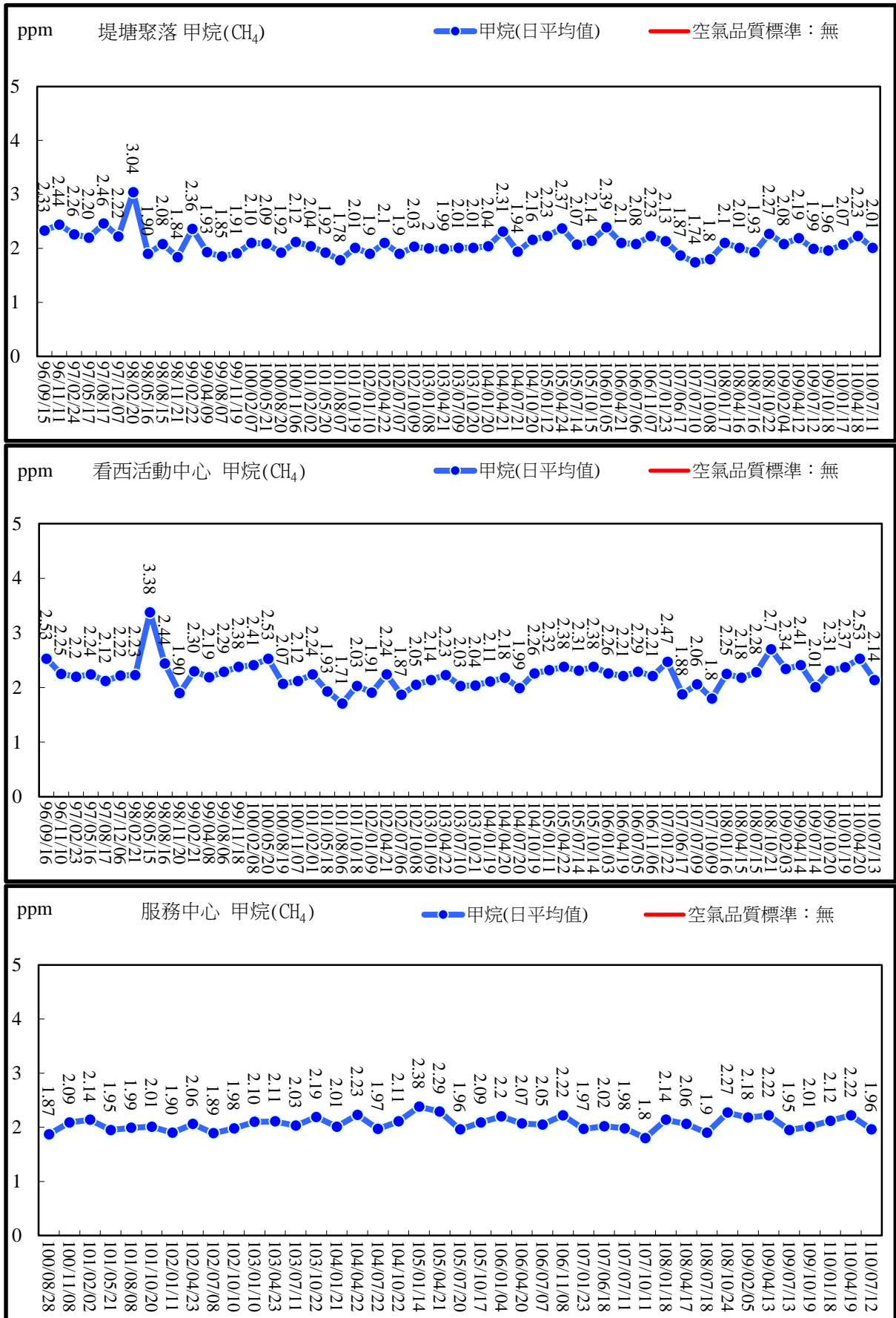


圖 2.19 空氣品質監測結果比較圖(甲烷日平均值)

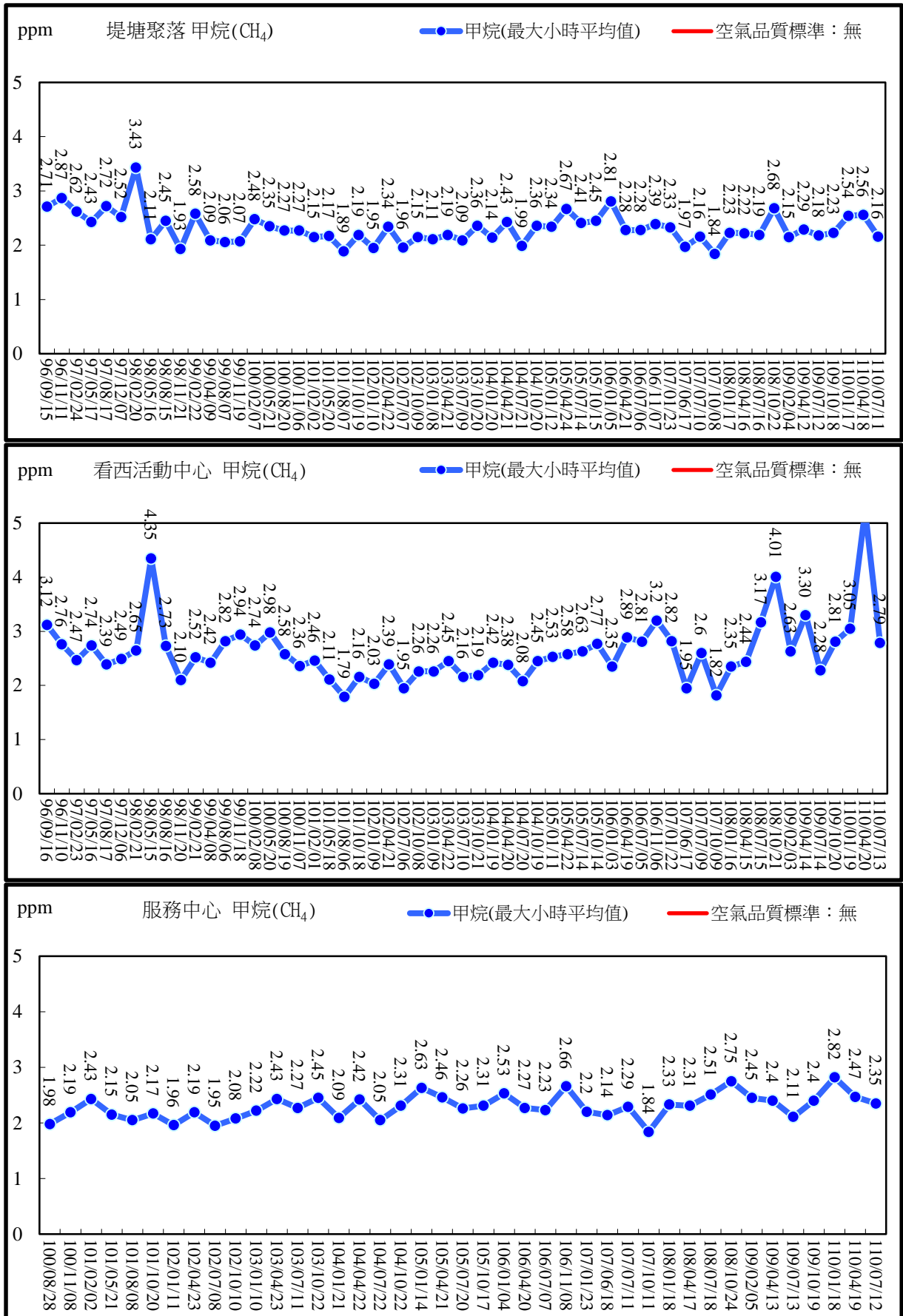


圖 2.20 空氣品質監測結果比較圖(甲烷最大小時平均值)

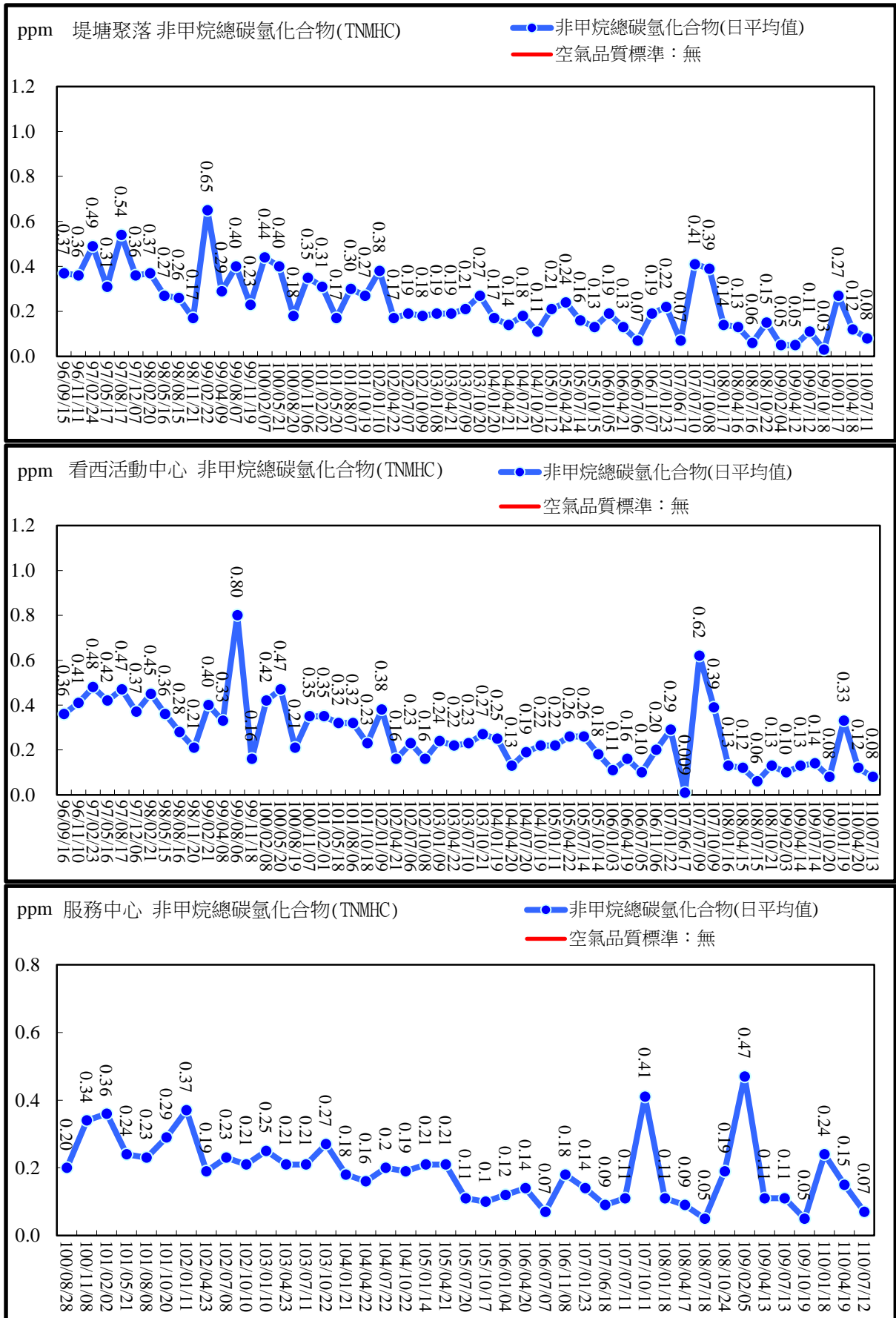


圖 2.21 空氣品質監測結果比較圖(非甲烷總碳氫化合物日平均值)

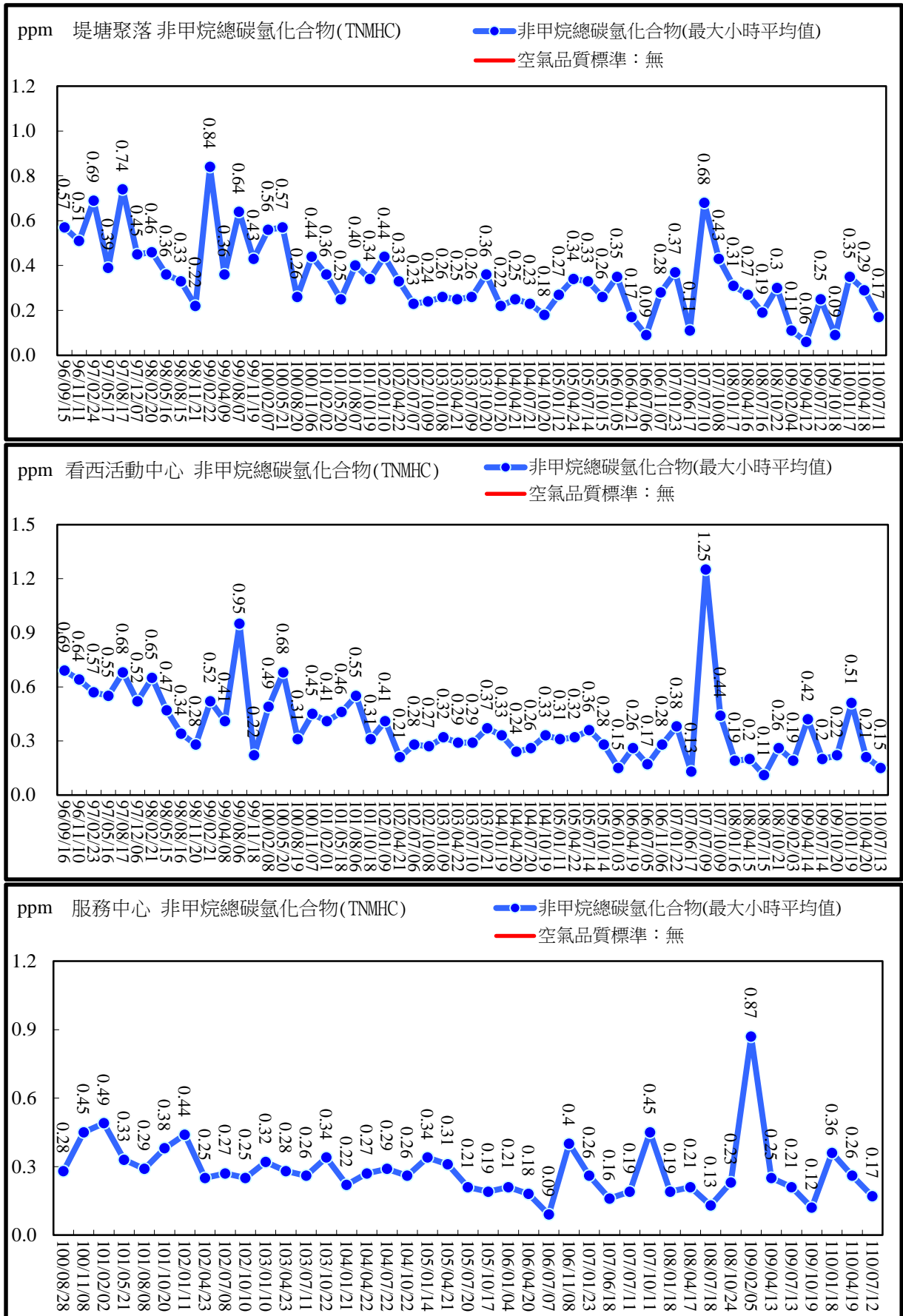


圖 2.22 空氣品質監測結果比較圖(非甲烷總碳氫化合物最大小時平均值)

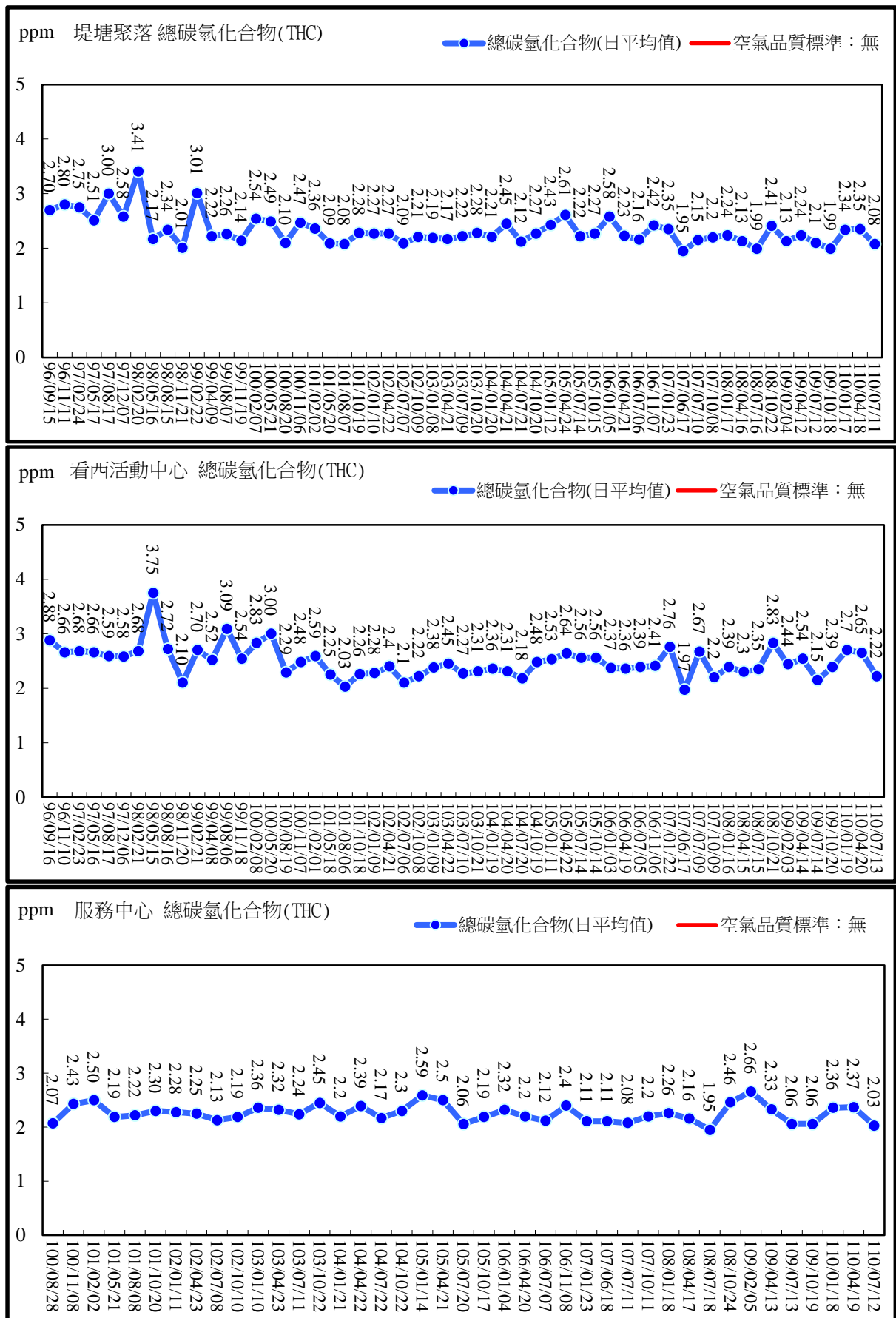


圖 2.23 空氣品質監測結果比較圖(總碳氫化合物日平均值)

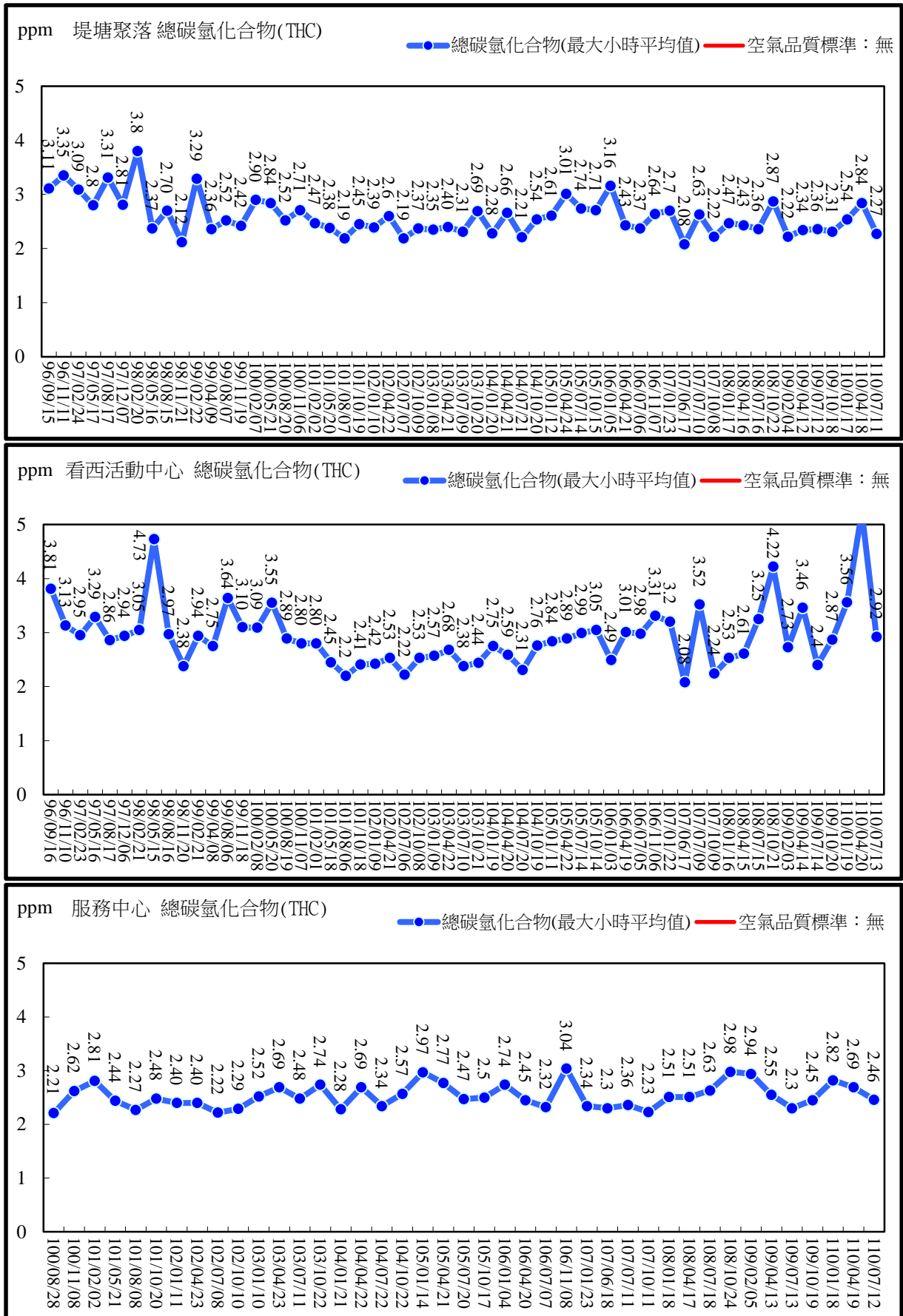


圖 2.24 空氣品質監測結果比較圖(總碳氫化合物最大小時平均值)

表 3-1 本季監測結果(續 3)

| 監測項目 | | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 |
|------------------|-------------|------------|------------|------------------------------|--|
| 水質 污水廠排放口(每週) | 生化需氧量 | 30 mg/L | 10 mg/L | ND<2.0~3.1 | 污水處理廠放流水所有測項均符合放流水標準及光電材料及元件製造業放流管制標準。所有測項與歷次數據比較皆在歷次範圍內，將持續觀察其測值變化，並持續維持污水廠之操作穩定度。請參閱污水處理廠放流口放流水質監測結果比較圖。 |
| | 硝酸鹽氮 | 50 mg/L | — | 1.48~4.90 | |
| | 亞硝酸鹽氮 | — | — | 0.01~0.18 | |
| | 凱氏氮 | — | — | <0.04~0.27 | |
| | 總氮 | — | 20 mg/L | 1.56~5.22 | |
| | 懸浮固體 | 30 mg/L | 10 mg/L | 1.4~5.6 | |
| | 油脂 | 10 mg/L | — | ND<0.5~2.1 | |
| | 化學需氧量 | 100 mg/L | 80 mg/L | 22.7~55.0 | |
| | 真色色度 | 400 | — | <25 | |
| | 總有機碳 | — | — | 3.5~16.2 | |
| | 氟化物 | 15 mg/L | — | 5.09~8.60 | |
| | 氫離子濃度指數 | — | — | 7.3~7.8 | |
| | 導電度 | — | — | 2960~4990 µmho/cm at 25°C | |
| | 溶氧量 | — | — | 4.4~7.3 | |
| | 六價鉻 | 0.5 mg/L | — | ND<0.0048~<0.02 | |
| | 鋅 | 5.0 mg/L | — | 0.04~0.17 | |
| | 鎘 | 0.03 mg/L | — | ND<0.0016 | |
| | 鉛 | 1.0 mg/L | — | ND<0.026 | |
| | 錳 | 10.0 mg/L | — | <0.02~0.16 | |
| | 銅 | 3.0 mg/L | — | ND<0.014~<0.05 | |
| | 汞 | 0.005 mg/L | — | ND<0.00019 | |
| | 砷 | 0.5 mg/L | — | 0.00032~0.0175 | |
| | 硒 | 0.5 mg/L | — | ND<0.0030~<0.020 | |
| | 銀 | 0.5 mg/L | — | ND<0.0024 | |
| | 靈丹 | 0004 mg/L | — | ND<0.00004 | |
| | 安殺番 I | 0.03 mg/L | — | ND<0.00004 | |
| | 安殺番 II | 0.03 mg/L | — | ND<0.00004 | |
| | 飛佈達 | 0.001 mg/L | — | ND<0.00004 | |
| | 環氧飛佈達 | 0.001 mg/L | — | ND<0.00004 | |
| | 2,4'-滴滴涕 | 0.001 mg/L | — | ND<0.00004 | |
| 4,4'-滴滴涕 | 0.001 mg/L | — | ND<0.00003 | | |
| 安特靈 | 0.0002 mg/L | — | ND<0.00004 | | |
| 除草劑 | 1.0 mg/L | — | ND<0.00014 | | |
| 毒殺芬 | 0.005 mg/L | — | ND<0.00022 | | |
| 五氯酚 | 0.005 mg/L | — | ND<0.00062 | | |
| 阿特靈 | 0.003 mg/L | — | ND<0.00004 | | |
| 有機磷劑 | 0.5 mg/L | — | ND~0.00109 | | |

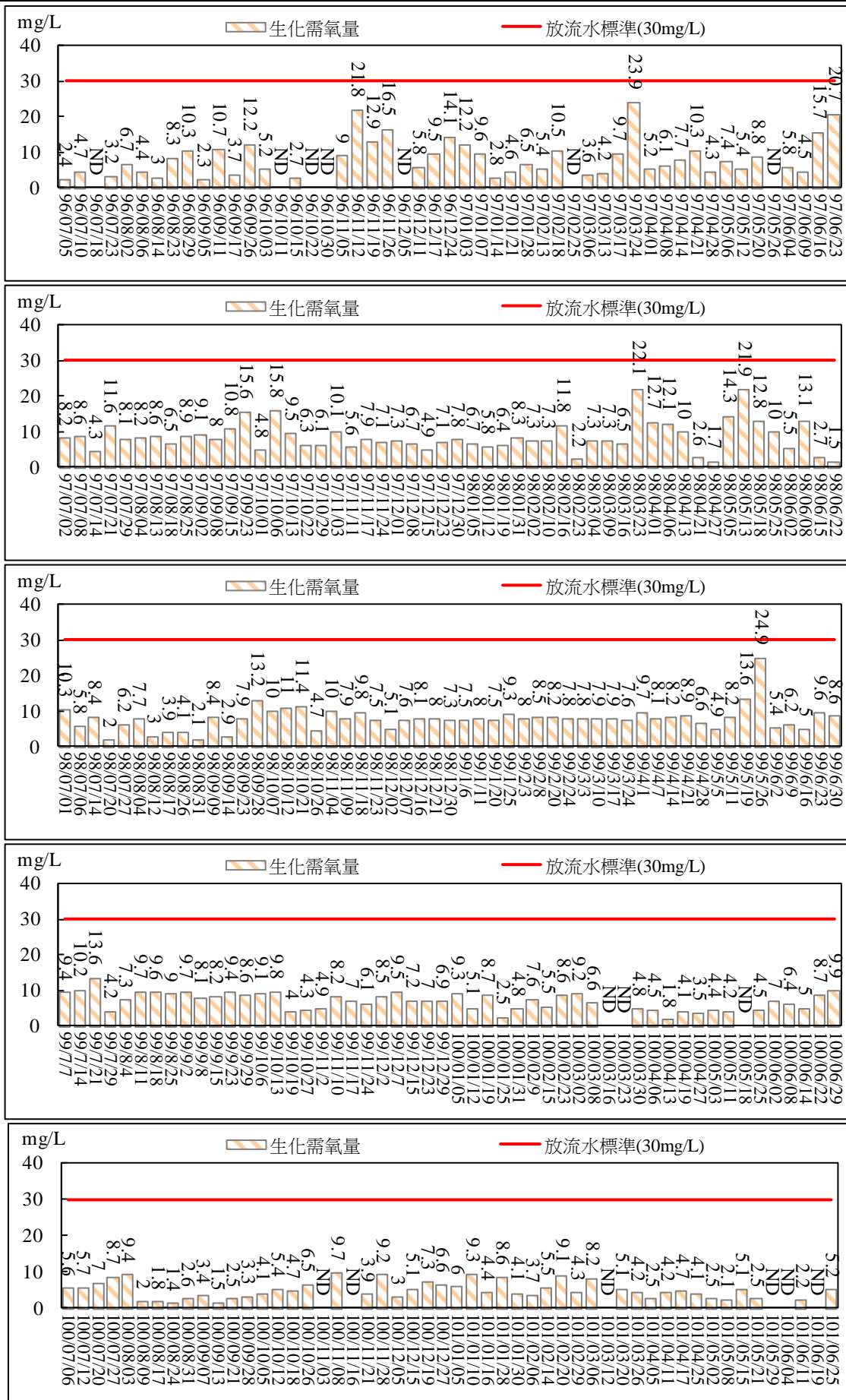
表 3-1 本季監測結果(續 4)

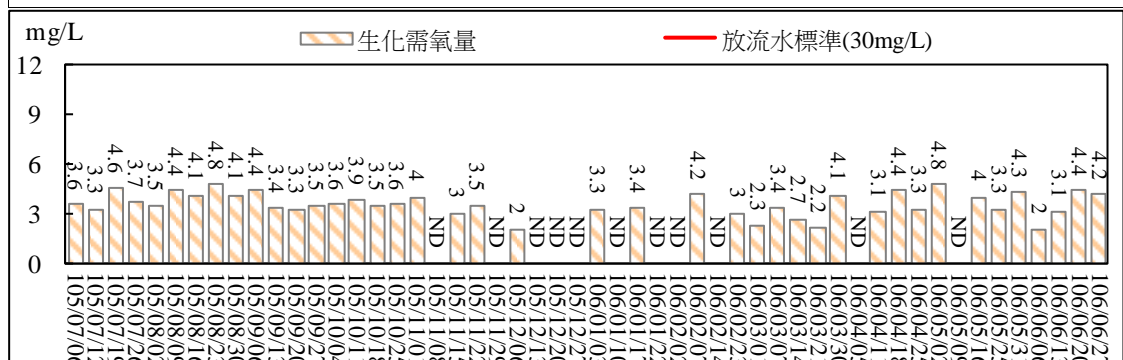
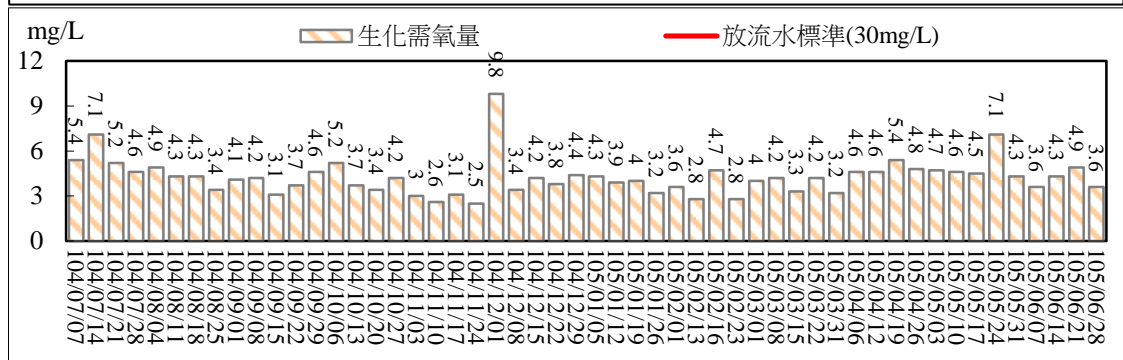
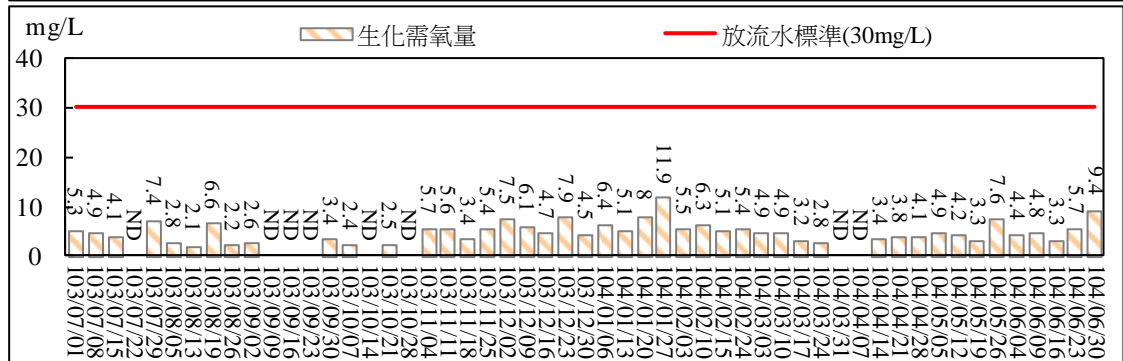
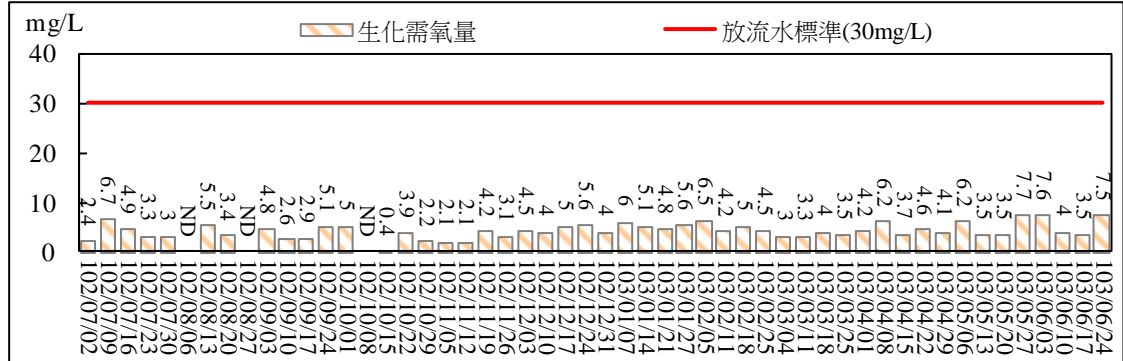
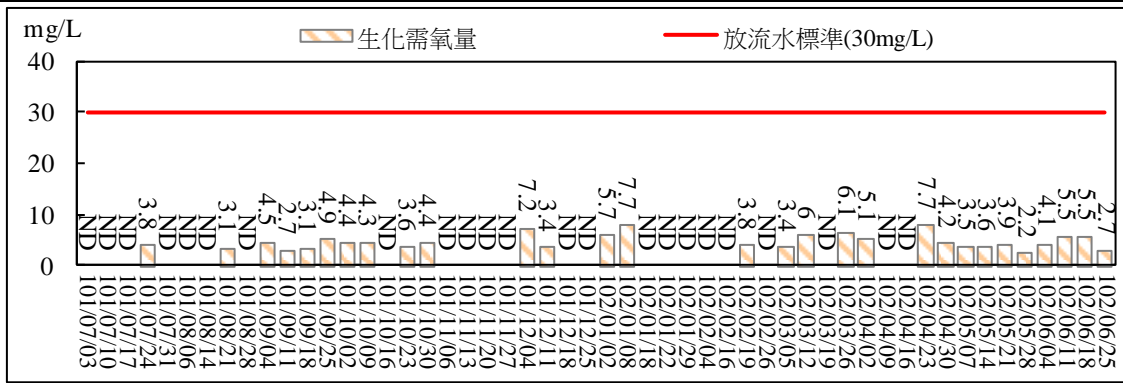
| 監測項目 | | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 | |
|---------|------------|--------------------|------------|---------|------------|--|
| 水質 | 污水廠排放口(每季) | 氨氮 | 10 mg/L | — | 0.23 | 污水處理廠放流水所有測項均符合放流水標準及光電材料及元件製造業放流管制標準。所有測項與歷次數據比較皆在歷次範圍內，將持續觀察其測值變化，並持續維持污水廠之操作穩定度。請參閱污水處理廠放流口放流水質監測結果比較圖。 |
| | | 凱氏氮 | — | — | 0.26 | |
| | | 總氮 | — | — | 5.22 | |
| | | 總磷 | — | — | 4.69 | |
| | | 硒 | 0.5 mg/L | — | ND<0.0030 | |
| | | 鉬 | 0.6 mg/L | — | 0.047 | |
| | | 錫 | 0.5 mg/L | — | ND<0.013 | |
| | | 鎳 | 0.1 mg/L | — | <0.020 | |
| | | 銻 | 0.1 mg/L | — | ND<0.0032 | |
| | | 酚 | 1.0 mg/L | — | 0.0067 | |
| | | 鉻 | 2.0 mg/L | — | ND<0.015 | |
| | | 氰化物 | 1.0 mg/L | — | ND<0.0027 | |
| | | 鎳 | 1.0 mg/L | — | <0.05 | |
| | | 1,1-二氯乙烯 | — | — | ND<0.00028 | |
| | | 二氯甲烷 | — | — | ND<0.00026 | |
| | | 三氯甲烷(氣仿) | — | — | ND<0.00027 | |
| | | 1,1,1-三氯乙烷 | — | — | ND<0.00026 | |
| | | 四氯化碳 | — | — | ND<0.00029 | |
| | | 1,2-二氯乙烷 | — | — | ND<0.00030 | |
| | | 三氯乙烯 | — | — | ND<0.00031 | |
| | | 一溴二氯甲烷 (溴二氯甲烷) | — | — | ND<0.00028 | |
| | | 甲苯 | — | — | ND<0.00025 | |
| | | 1,1,2-三氯乙烷 | — | — | ND<0.00030 | |
| | | 四氯乙烯 | — | — | ND<0.00029 | |
| | | 1,3-二氯苯 | — | — | ND<0.00027 | |
| | | 對-二氯苯 (1,4-二氯苯) | — | — | ND<0.00026 | |
| | | 1,2-二氯苯 | — | — | ND<0.00029 | |
| | | 1,2,4-三氯苯 | — | — | ND<0.00025 | |
| | | 萘 | — | — | ND<0.00022 | |
| | | 乙苯(乙基苯) | — | — | ND<0.00025 | |
| | | 2,4,6-三氯酚 | — | — | ND<0.00068 | |
| | | 2-氯酚 | — | — | ND<0.00084 | |
| 2,4-二氯酚 | — | — | ND<0.00069 | | | |
| 2-硝基酚 | — | — | ND<0.00067 | | | |
| 4-硝基酚 | — | — | ND<0.00037 | | | |
| 蒽 | — | — | ND<0.00072 | | | |

表 3-1 本季監測結果(續 5)

| 監測項目 | | 法規標準 | 環評承諾 | 110年第3季 | 監測結果檢討 | |
|------|------------|------------|-----------|---------|------------|--|
| 水質 | 污水廠排放口(每季) | 1,2-二苯基聯銨 | — | — | ND<0.00070 | 污水處理廠放流水所有測項均符合放流水標準及光電材料及元件製造業放流管制標準。所有測項與歷次數據比較皆在歷次範圍內，將持續觀察其測值變化，並持續維持污水廠之操作穩定度。請參閱污水處理廠放流口放流水質監測結果比較圖。 |
| | | 異佛爾酮 | — | — | ND<0.00067 | |
| | | 五氯酚 | — | — | ND<0.00062 | |
| | | 鄰苯二甲酸二丁酯 | — | — | ND<0.00074 | |
| | | 鄰苯二甲酸丁苯酯 | — | — | ND<0.00061 | |
| | | 鄰苯二甲酸乙己酯 | — | — | <0.00481 | |
| | | 總毒性有機物 | 1.37 mg/L | — | <0.0111 | |
| | | 磷酸鹽 | — | — | 3.90 | |
| | | 生物急毒性(水蚤) | — | — | <1.00 | |
| | | 生物急毒性(羅漢魚) | — | — | <1.00 | |
| | | 以下空白 | | | | |
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| | | | | | | |

註：1.污水處理廠放流口，99年第三季起，每季監測項目為氨氮、總磷、總氮、硒、鎂、錫、銻、鉬、總毒性有機物。
 2.鎂、錫、銻、鉬、總毒性有機物及水樣急毒性，引用光電業放流水標準。
 3.總毒性有機物係依風險管理概念，將水中酚、1,1-二氯乙烯、二氯甲烷、三氯甲烷(氯仿)、1,1,1-三氯乙烷、四氯化碳、1,2-二乙烷、三氯乙烯、一溴二氯甲烷(溴二氯甲烷)、甲苯、1,1,2-三氯乙烷、四氯乙烯、1,3-二氯苯、對-二氯苯(1,4-二氯苯)、1,2-二氯苯、1,2,4-三氯苯、萘、乙苯(乙基苯)、2,4,6-三氯酚、2-氯酚、2,4-二氯酚、2-硝基酚、4-硝基酚、蒽、1,2-二苯基聯銨、異佛爾酮、五氯酚、鄰苯二甲酸二丁酯及鄰苯二甲酸丁苯酯，計30種化合物之濃度總和。





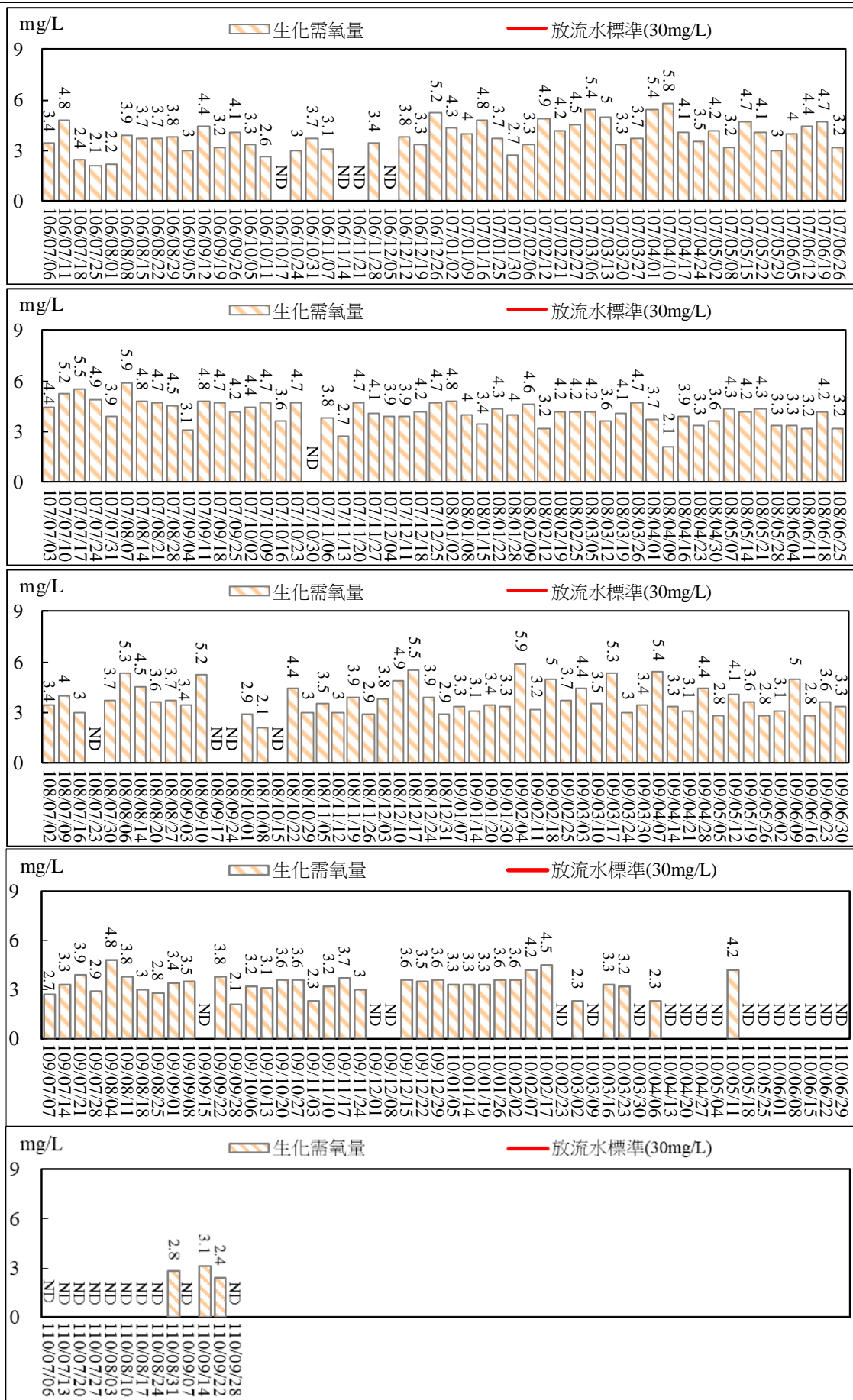
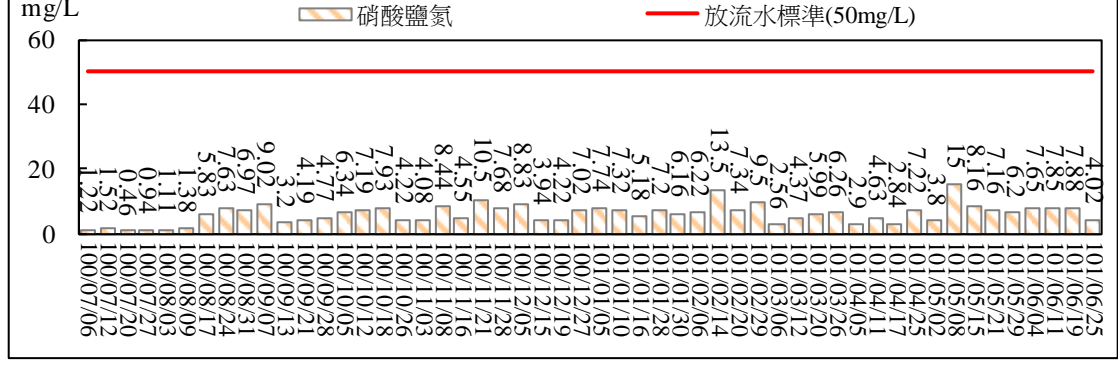
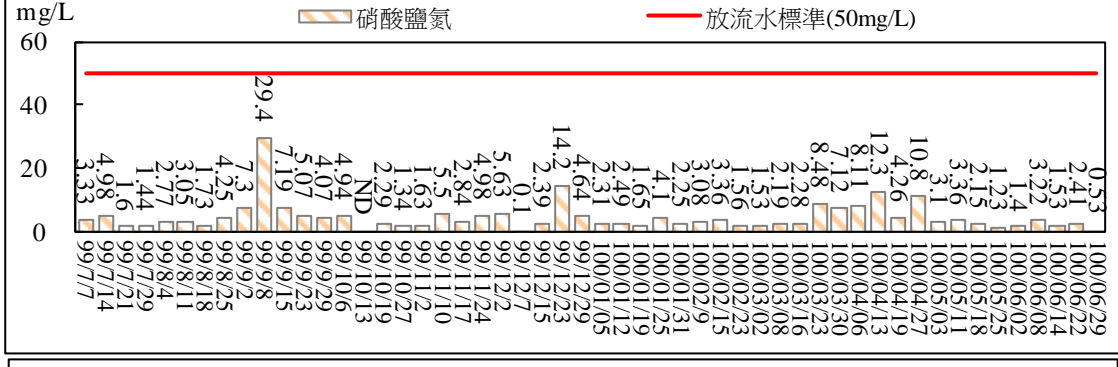
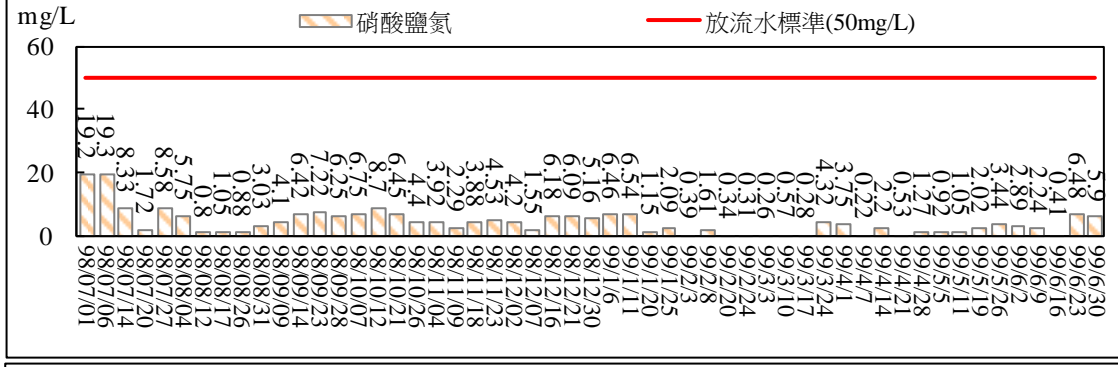
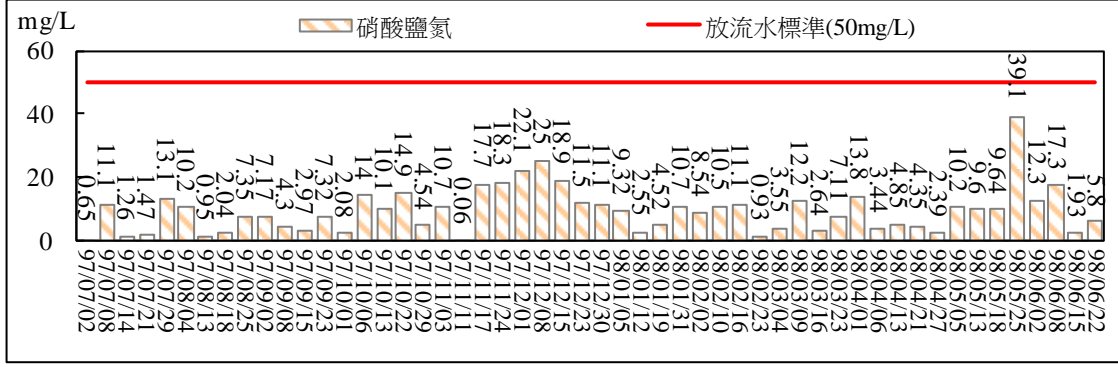
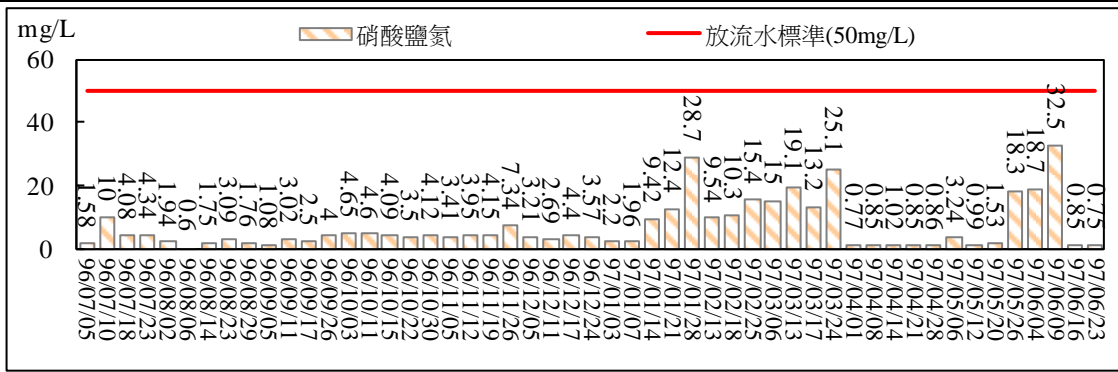
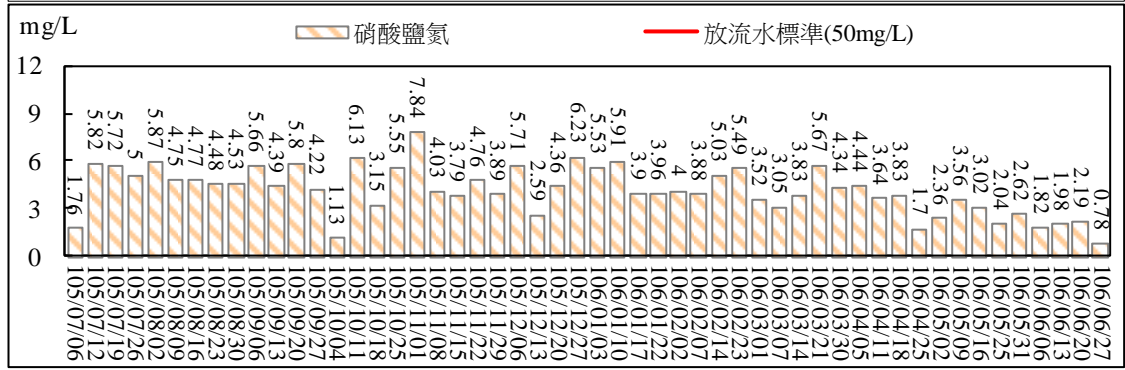
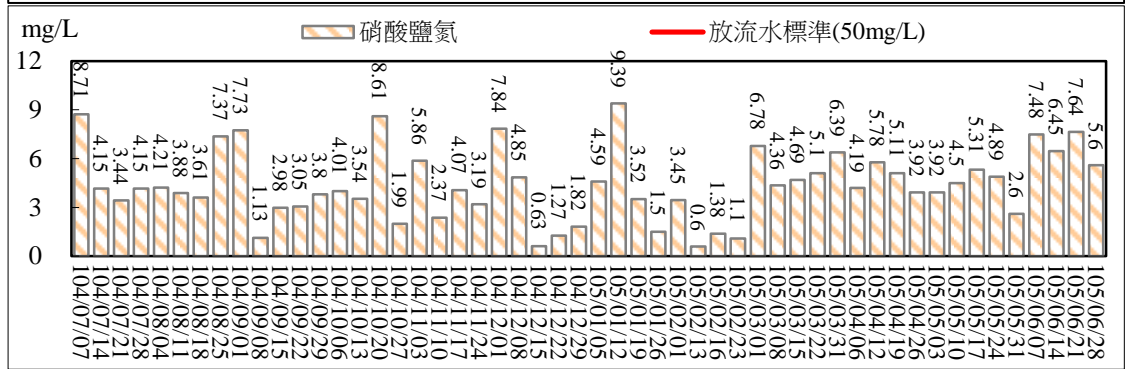
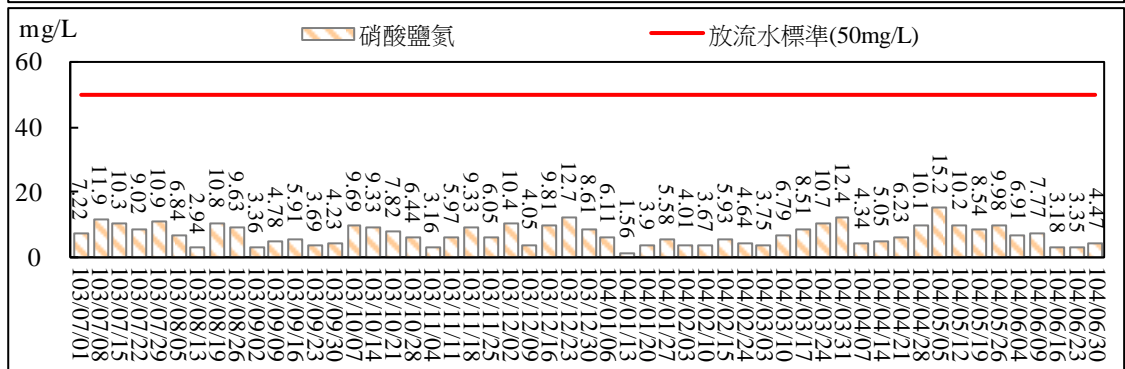
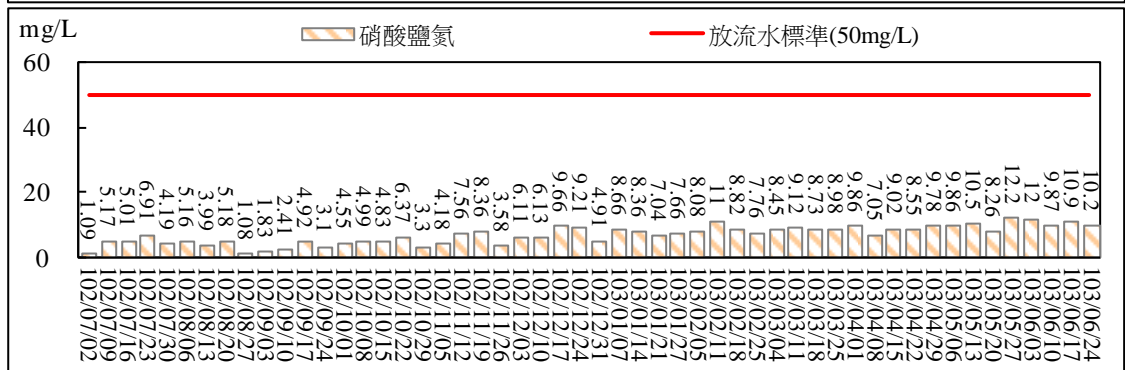
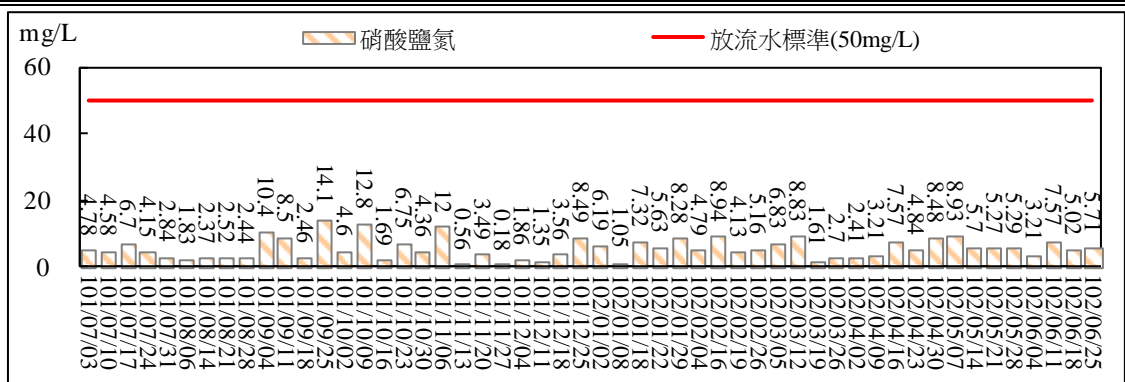


圖 2.25 污水處理廠放流口放流水質監測結果比較圖(生化需氧量)





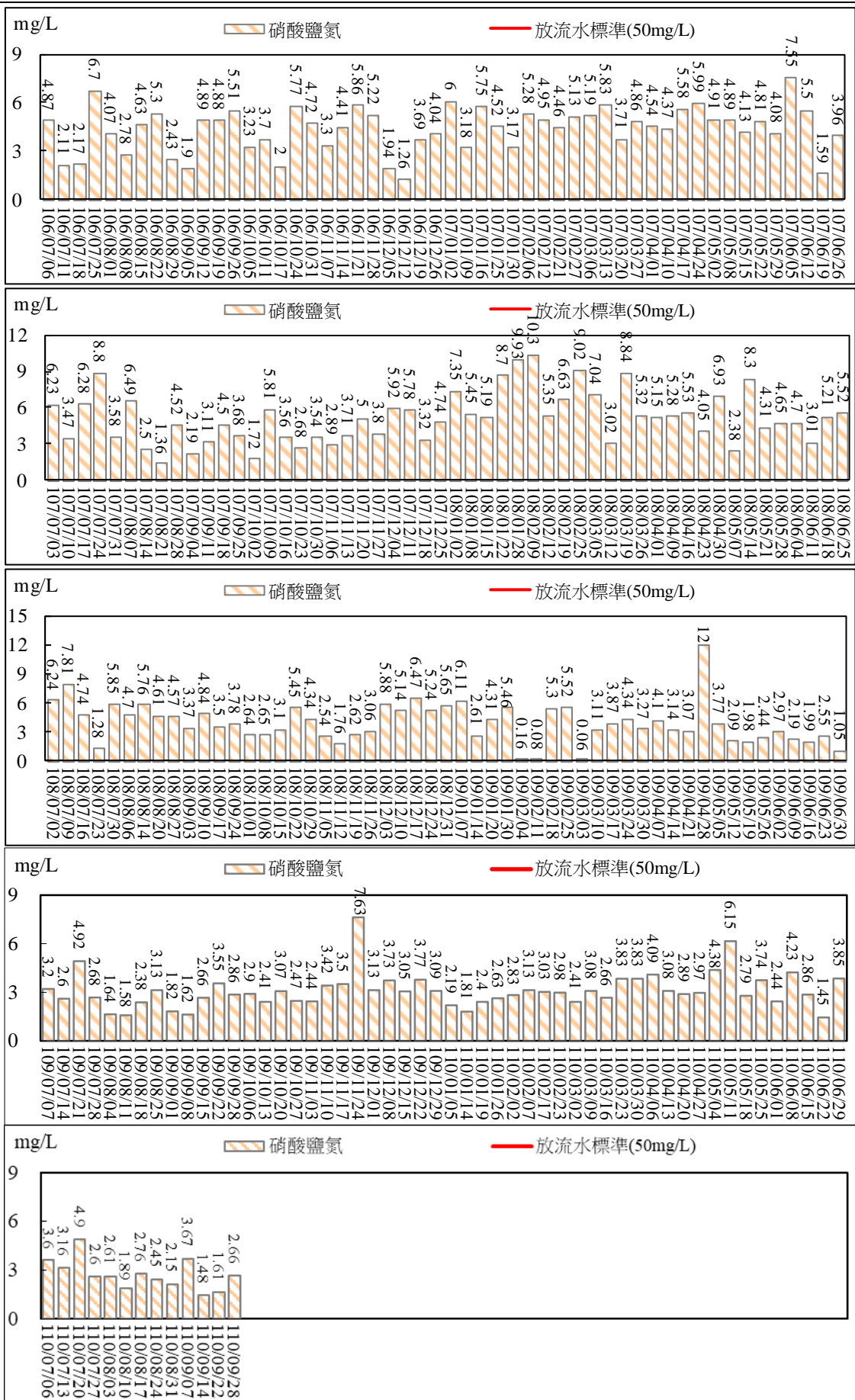
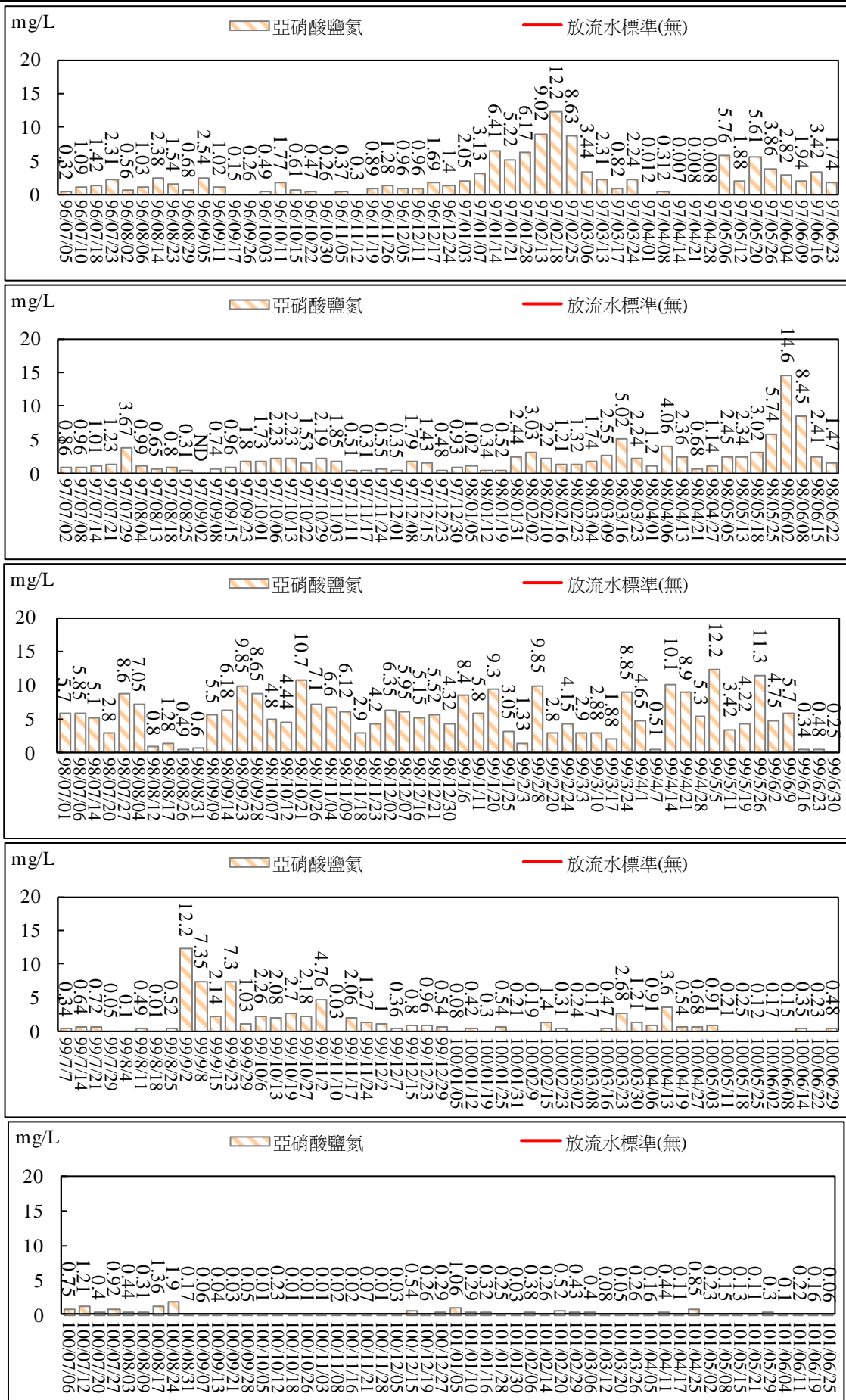
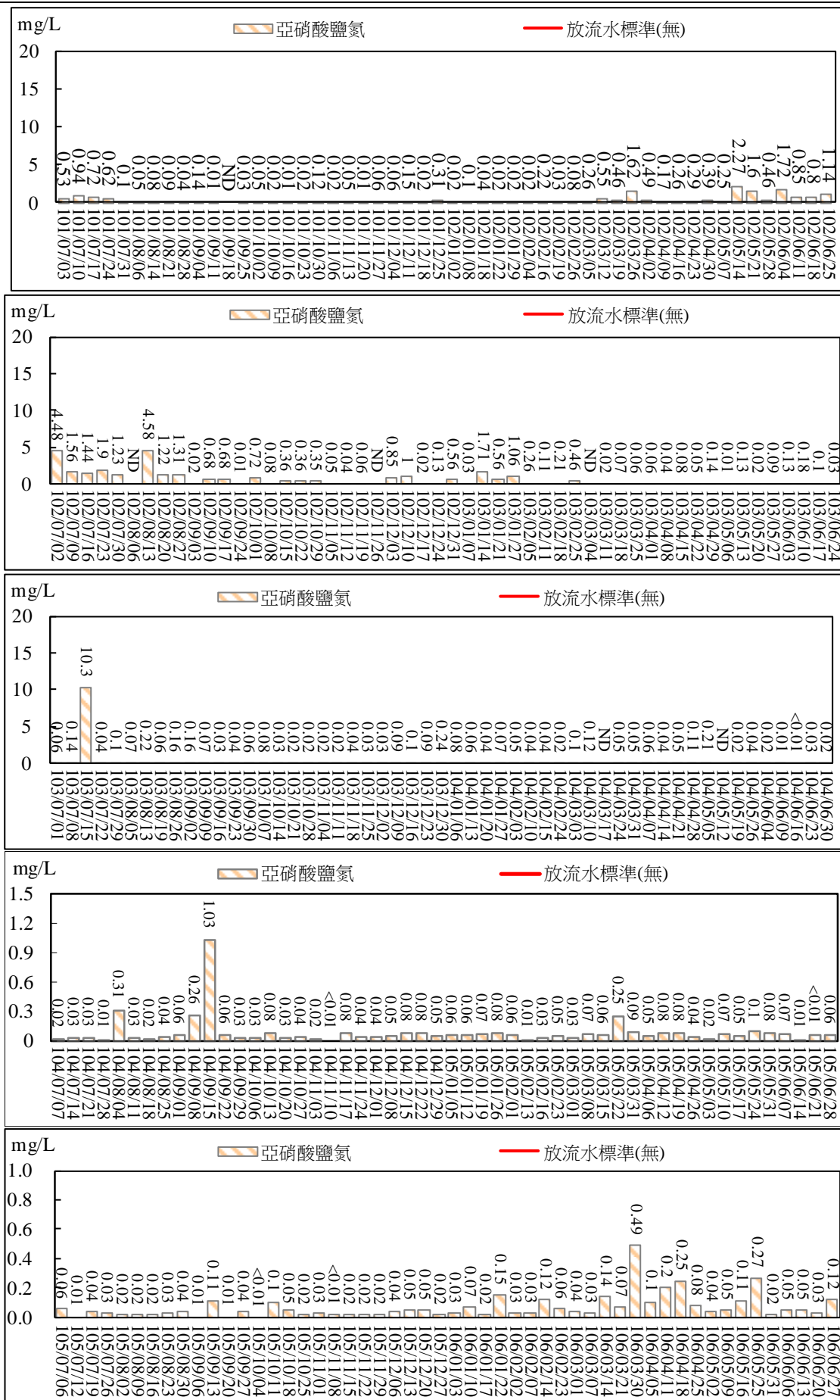


圖 2.26 污水處理廠放流口放流水質監測結果比較圖(硝酸鹽氮)





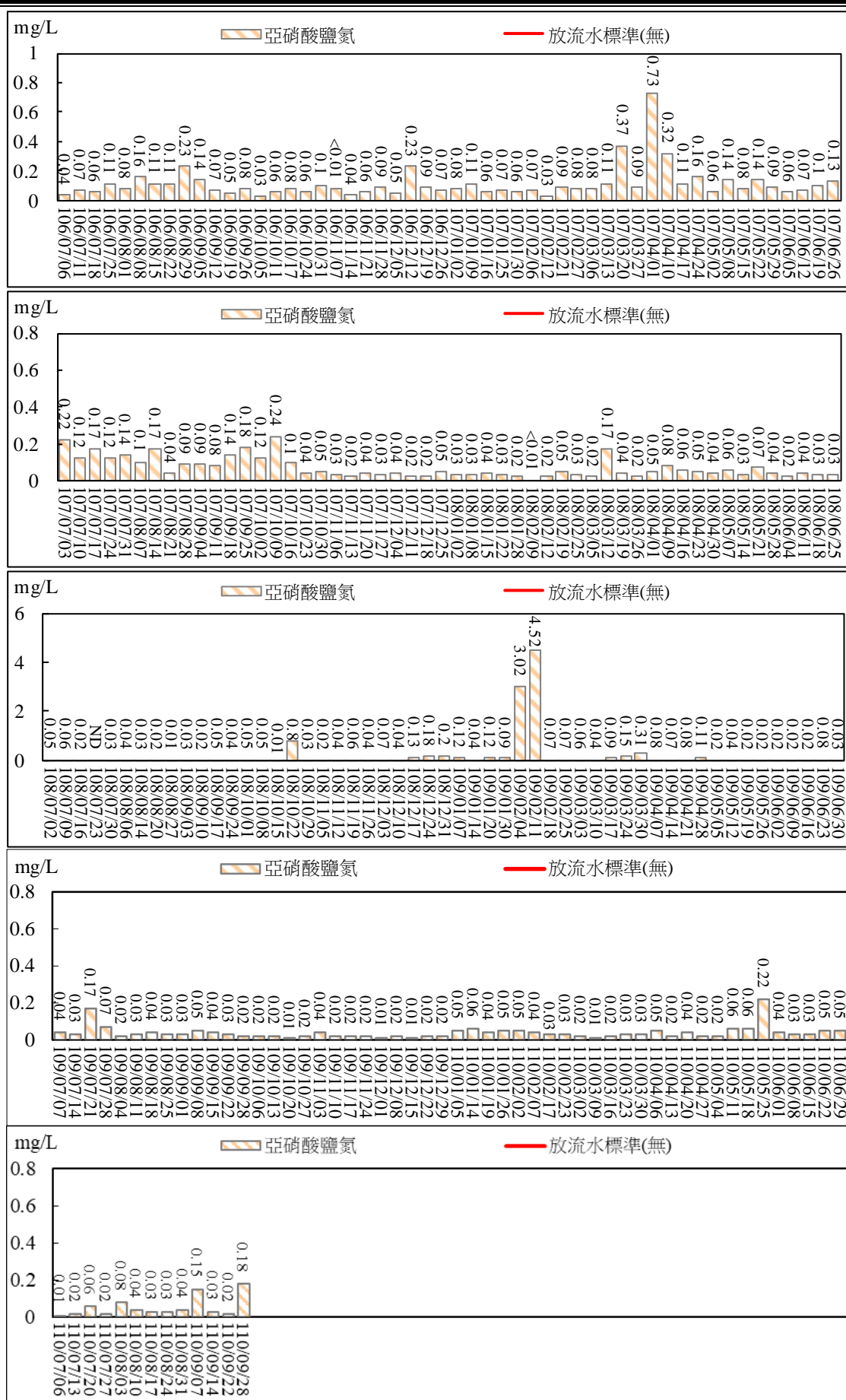
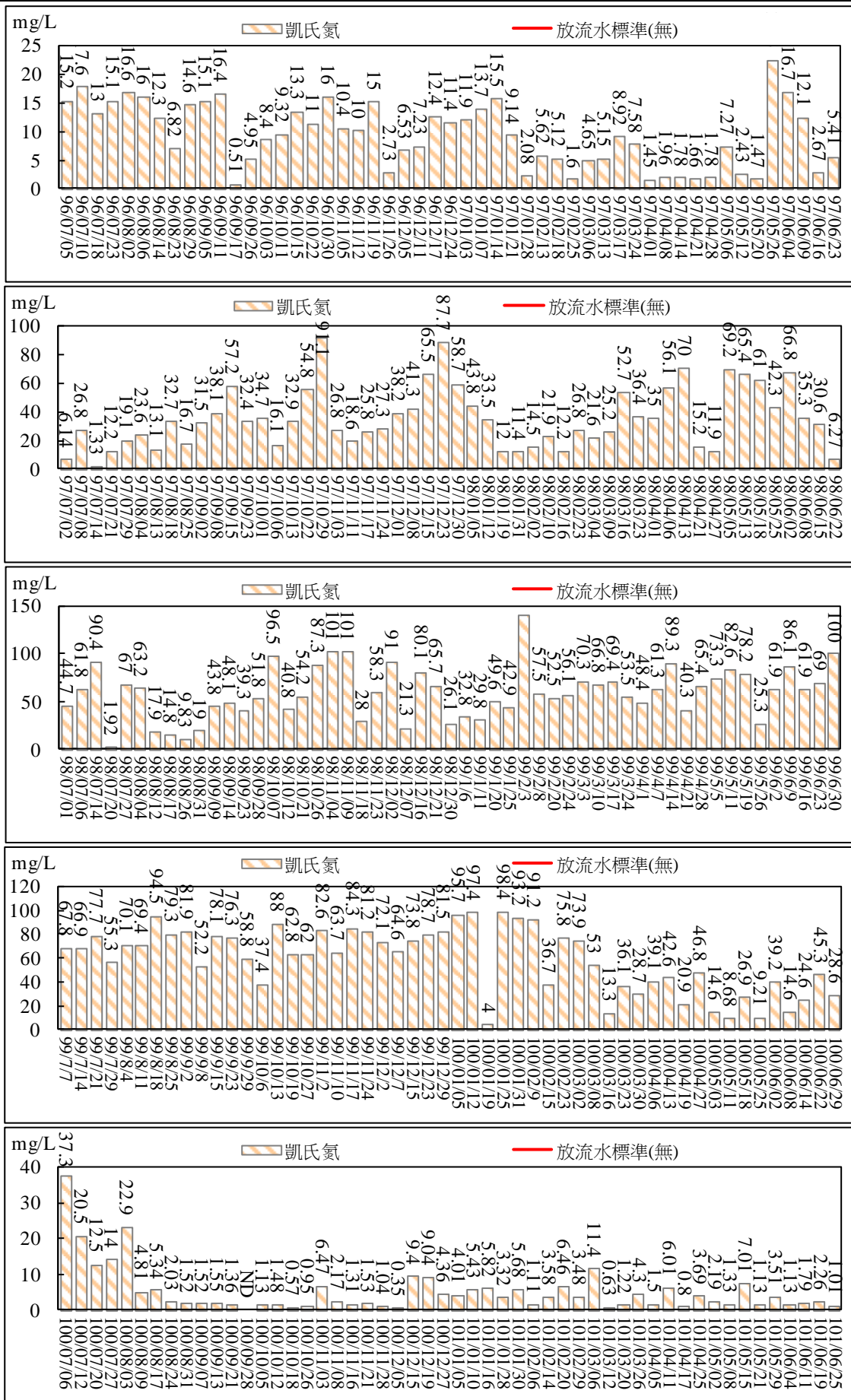
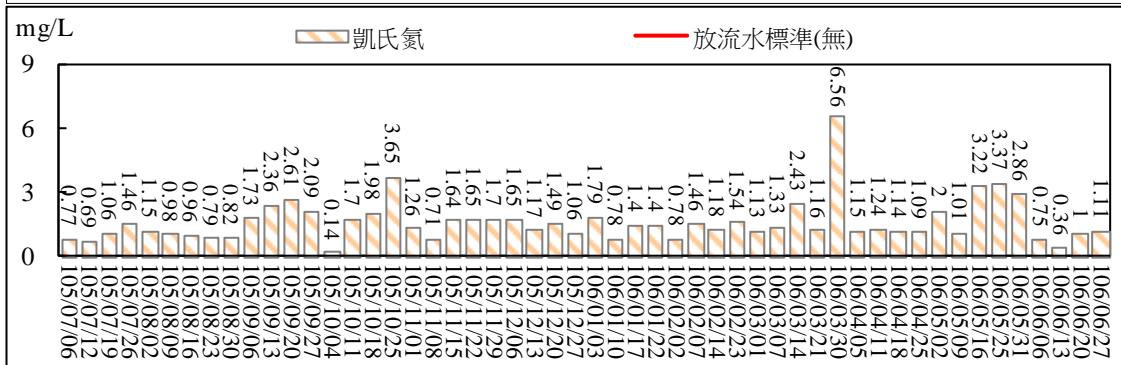
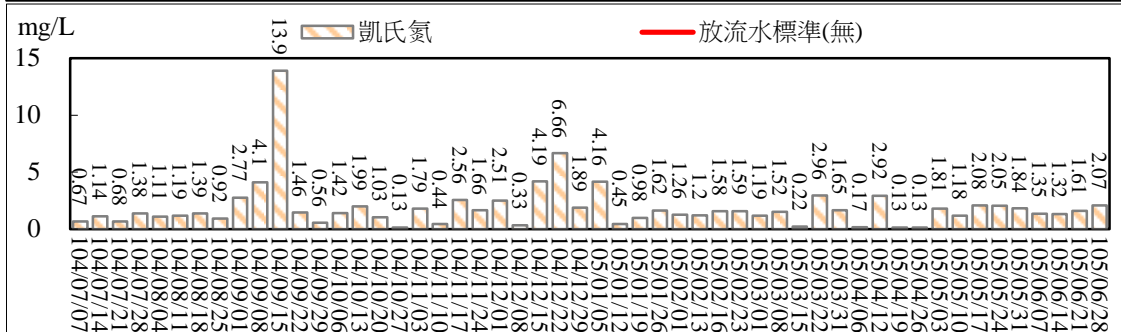
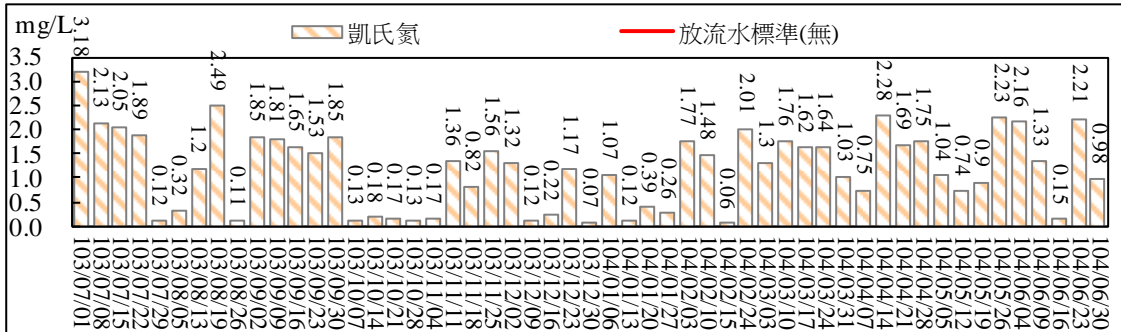
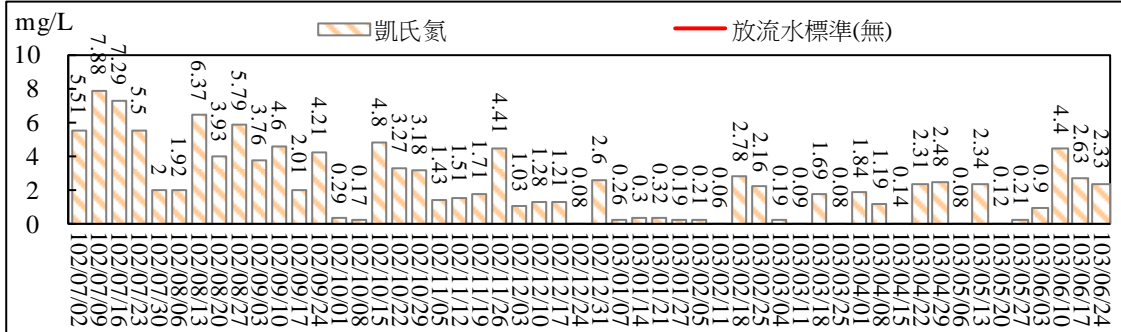
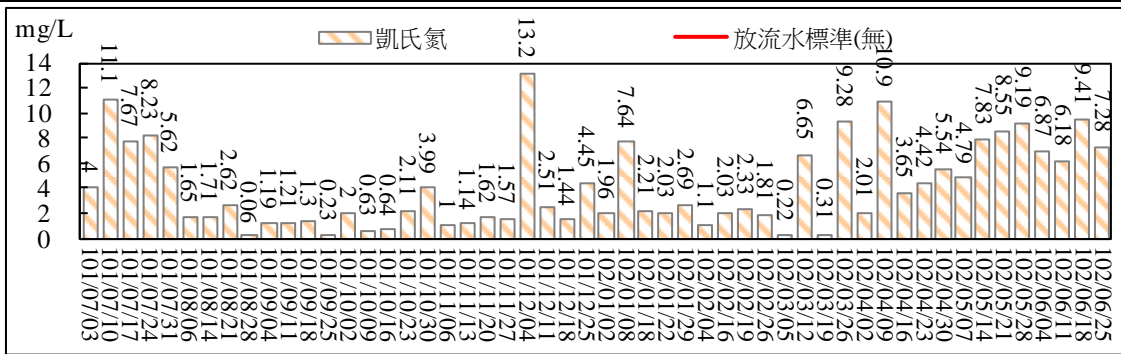


圖 2.27 污水處理廠放流口放流水質監測結果比較圖(亞硝酸鹽氮)





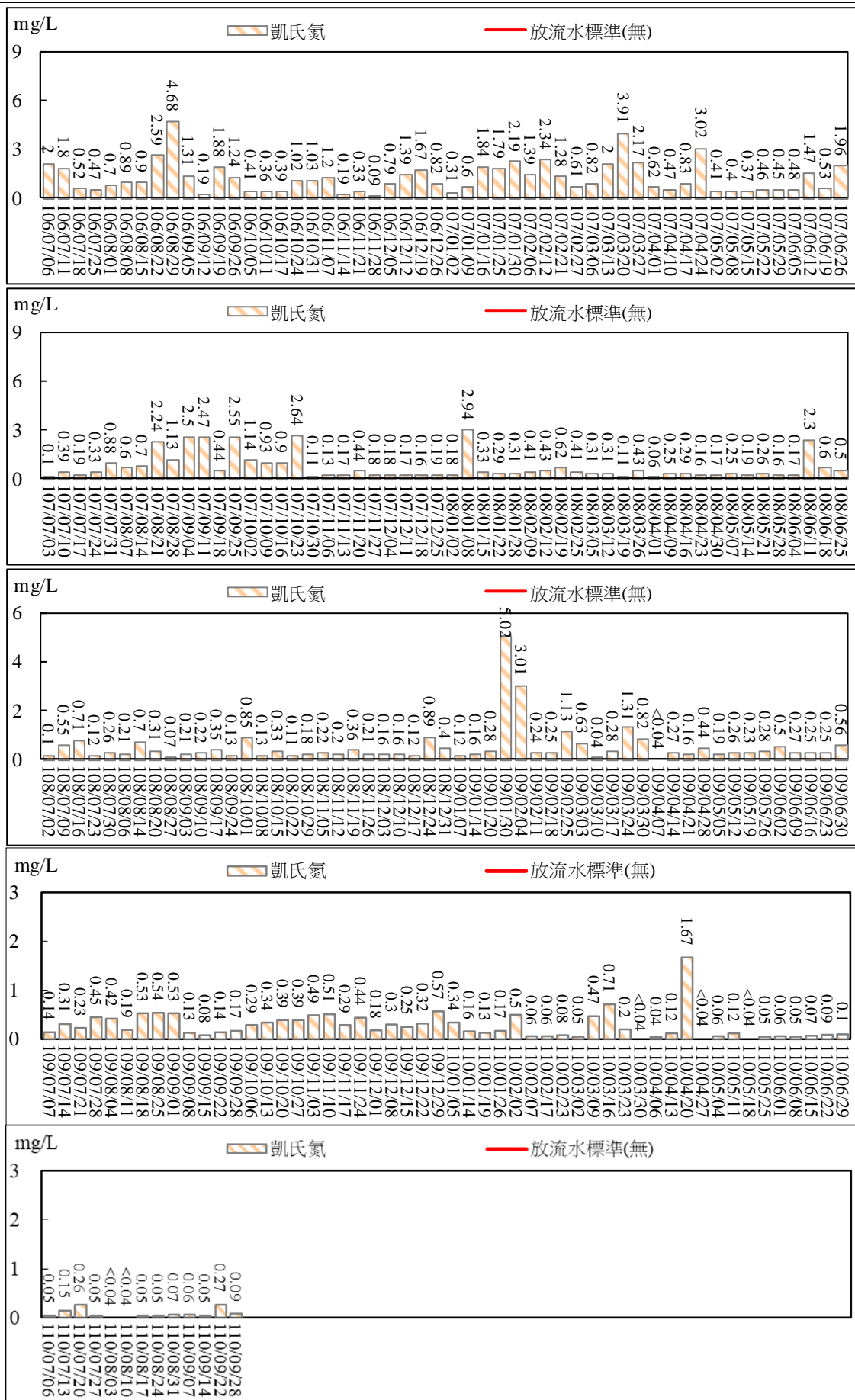
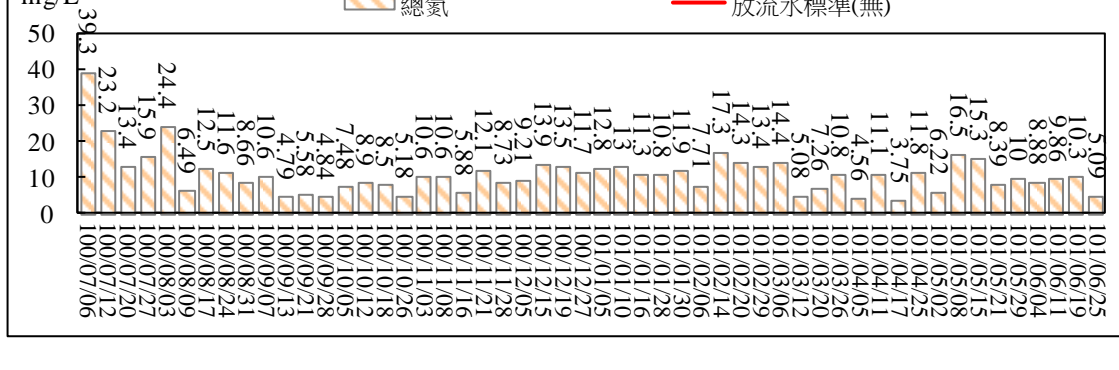
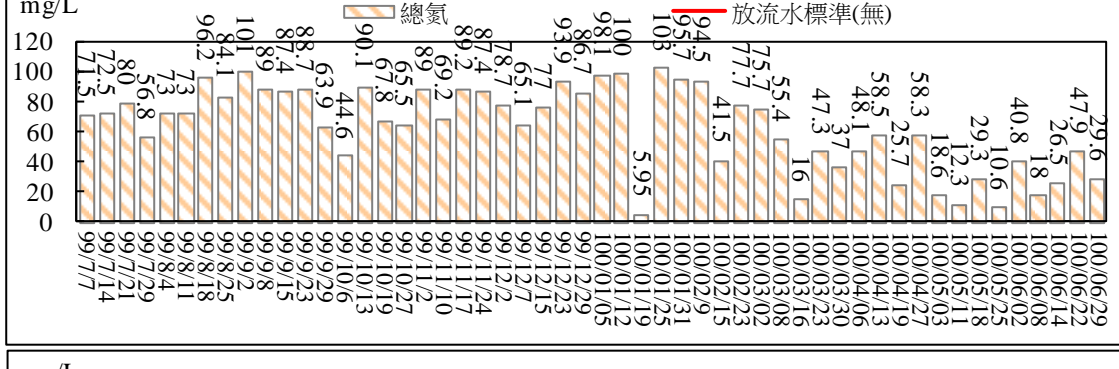
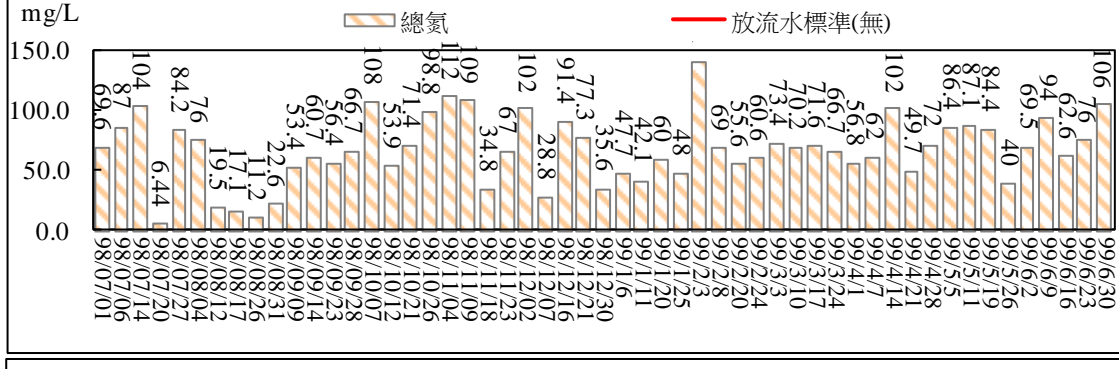
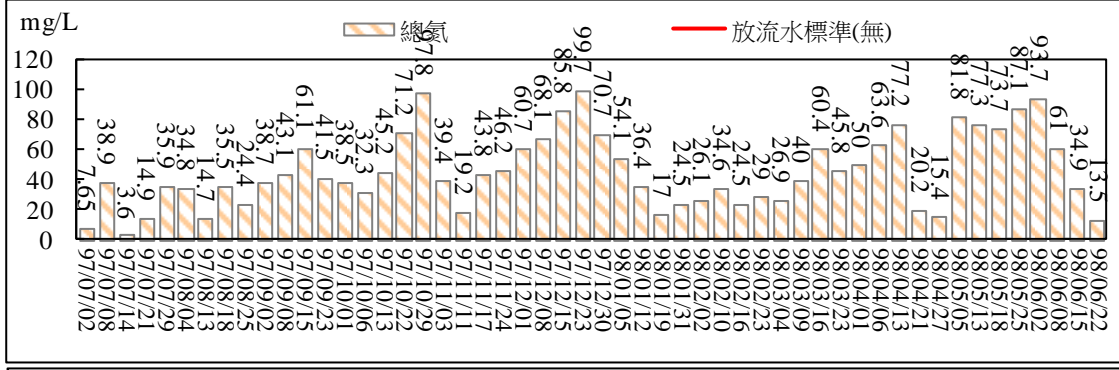
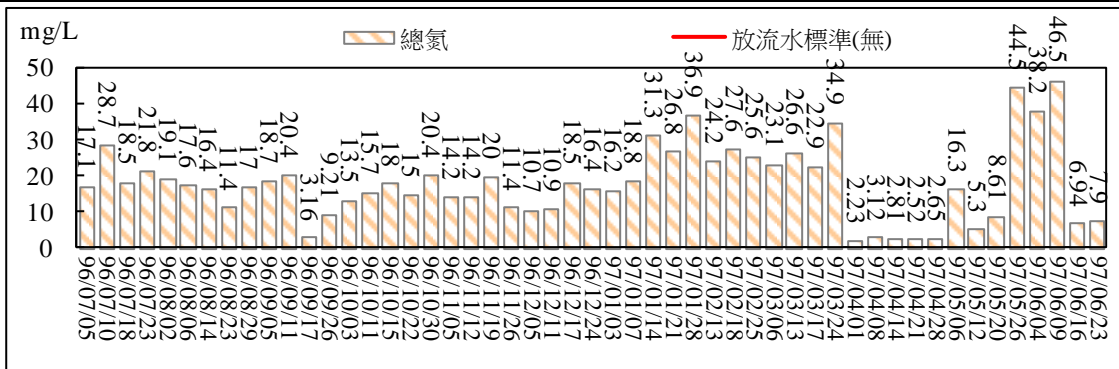
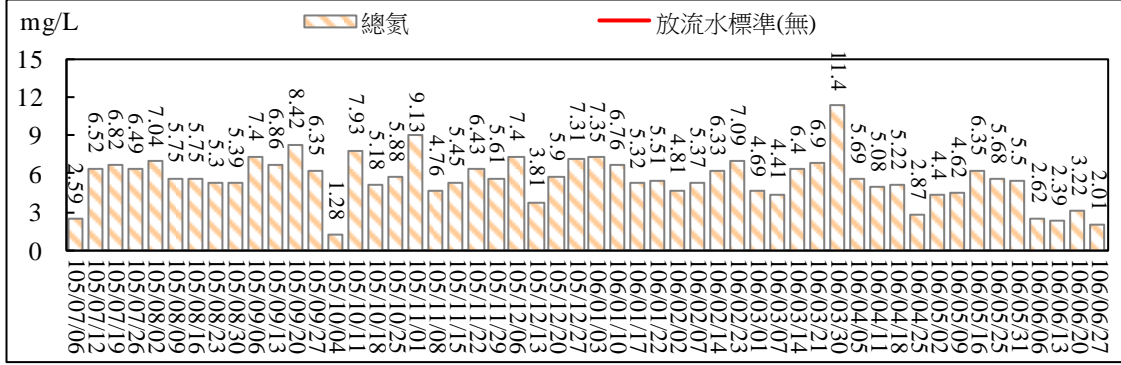
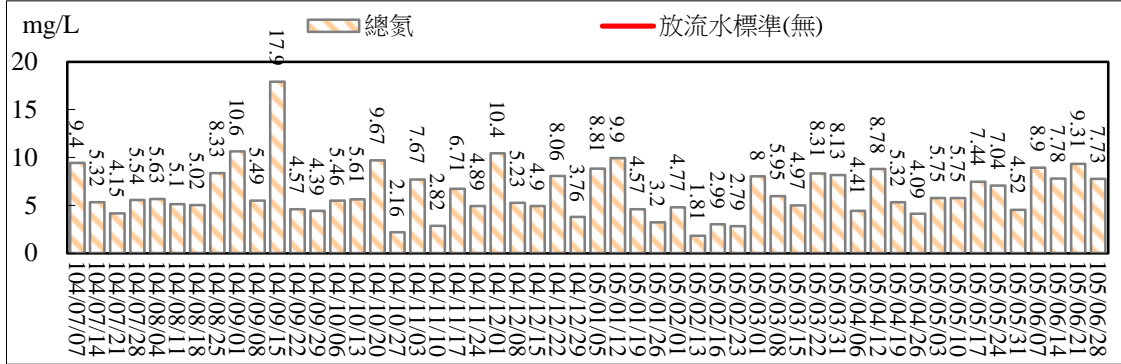
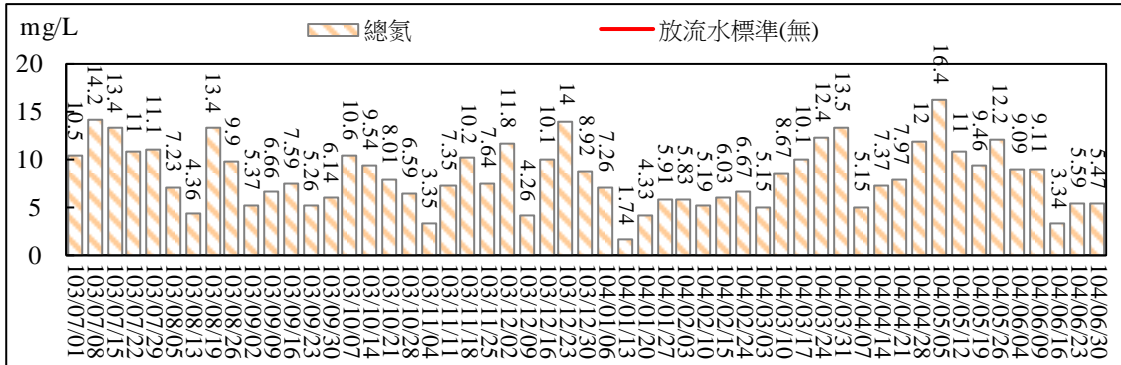
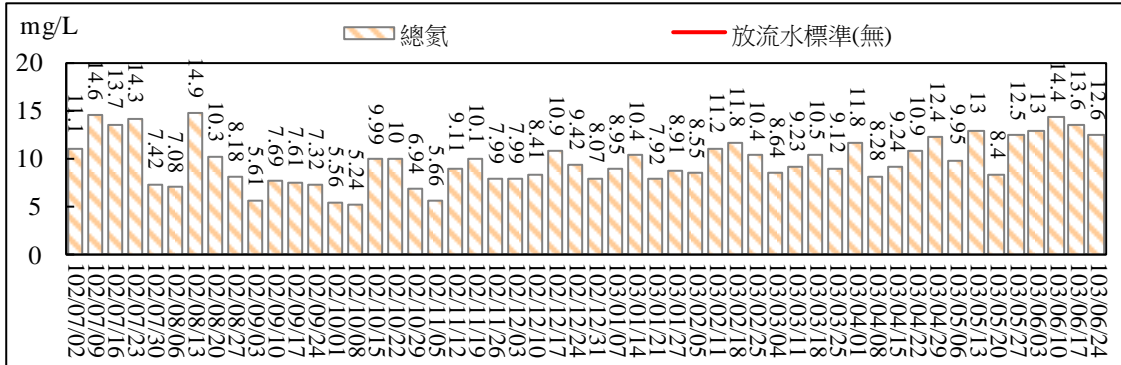
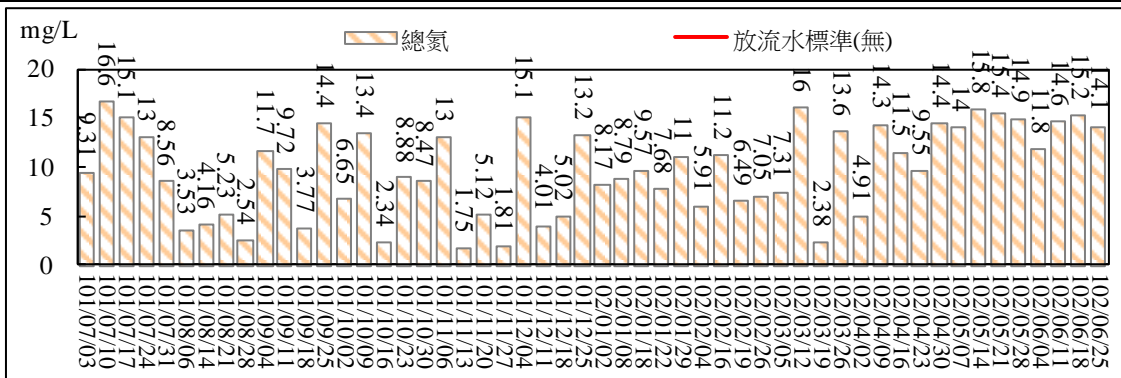


圖 2.28 污水處理廠放流口放流水質監測結果比較圖(凱氏氮)





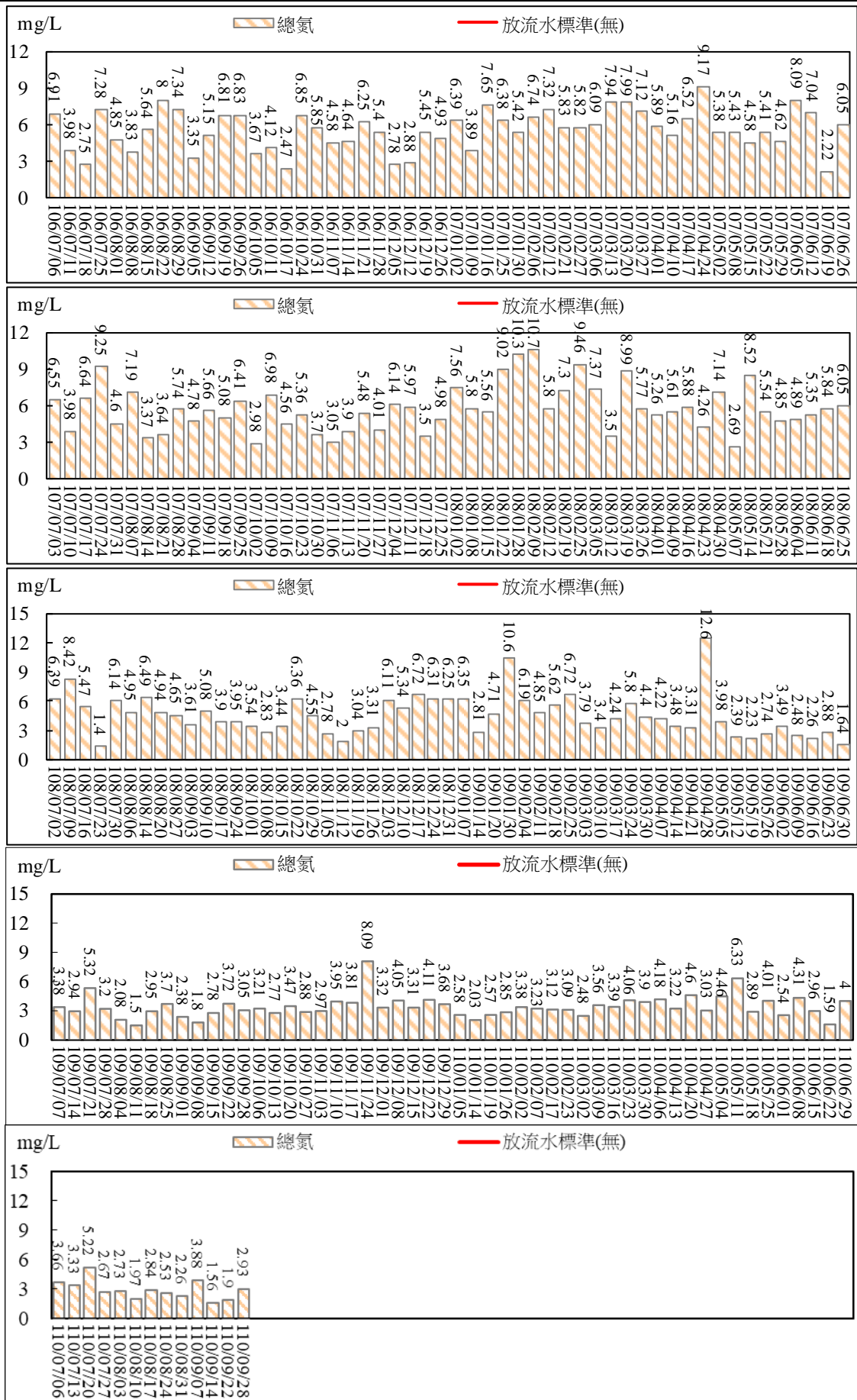
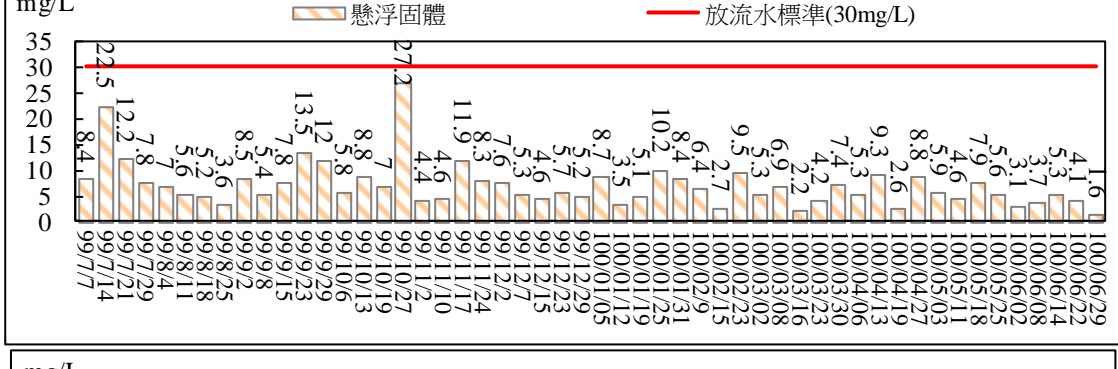
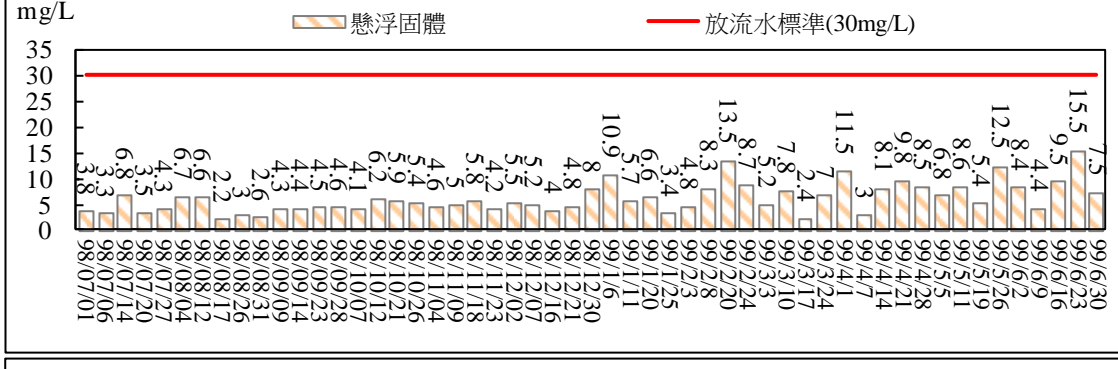
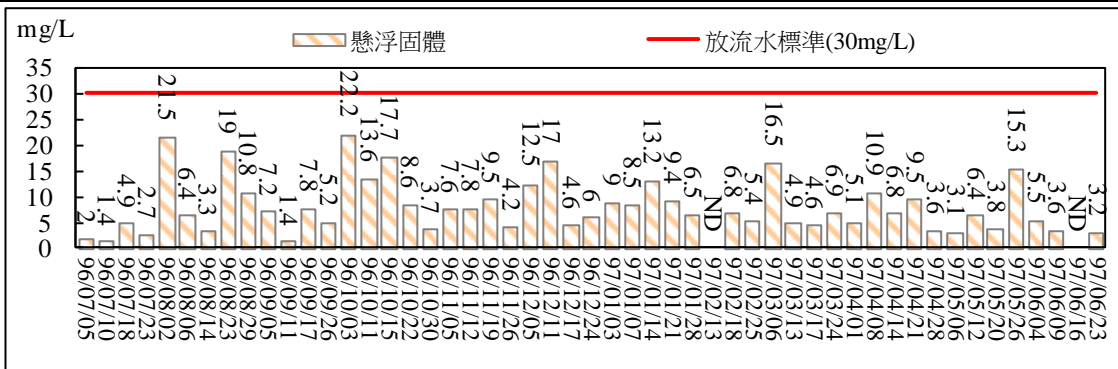
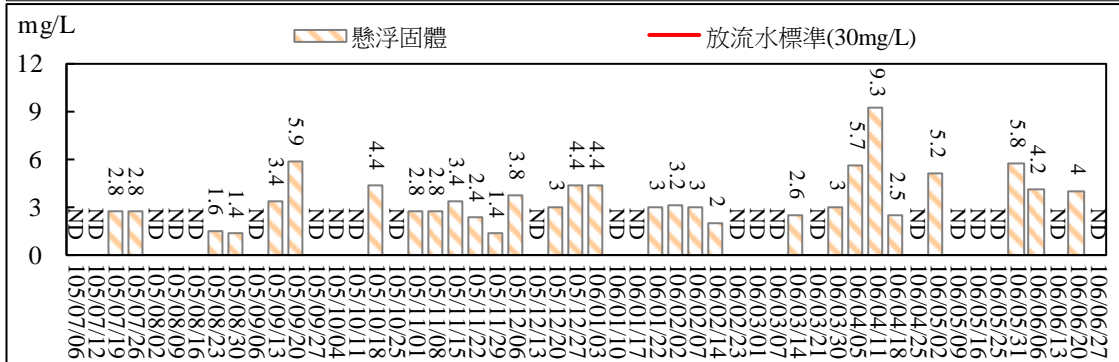
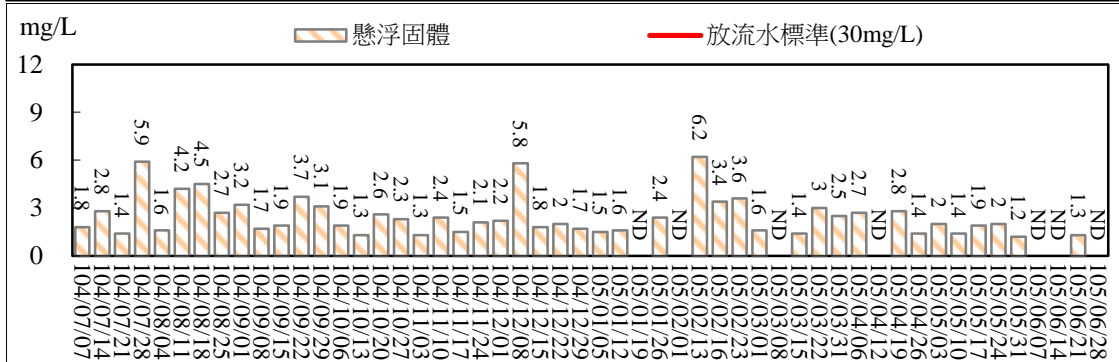
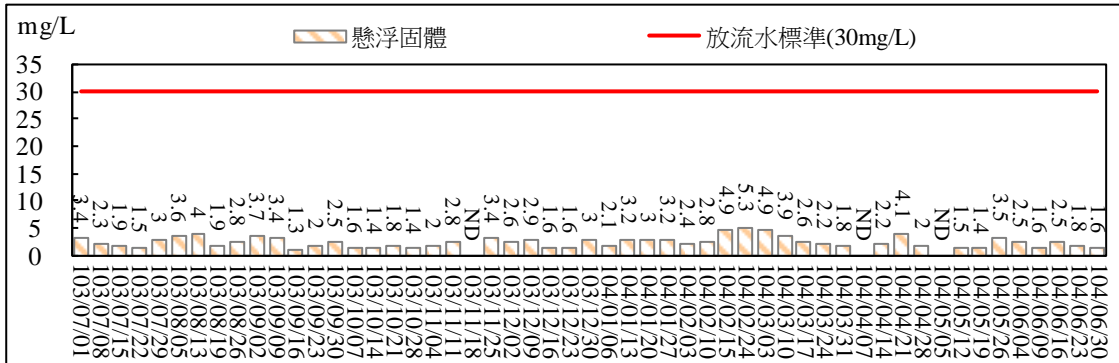
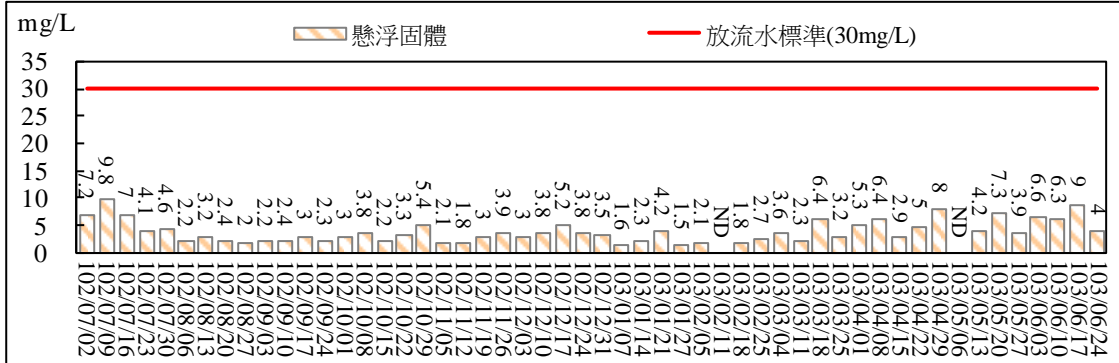
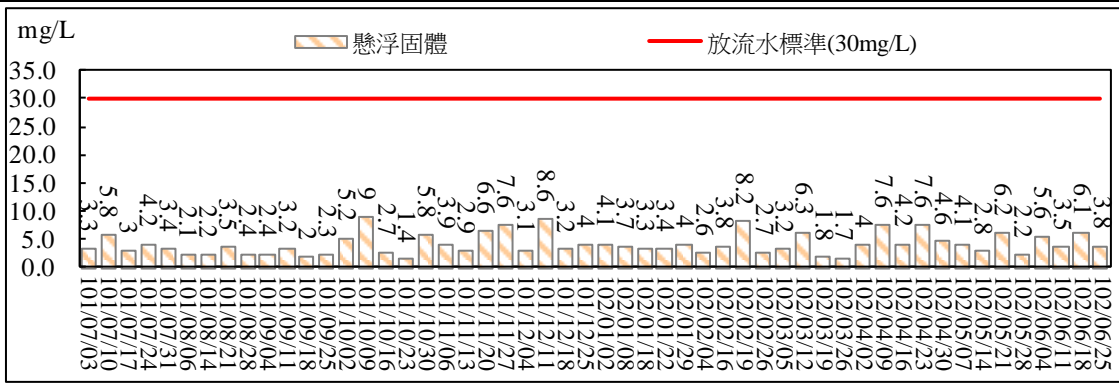


圖 2.29 污水處理廠放流口放流水質監測結果比較圖(總氮)





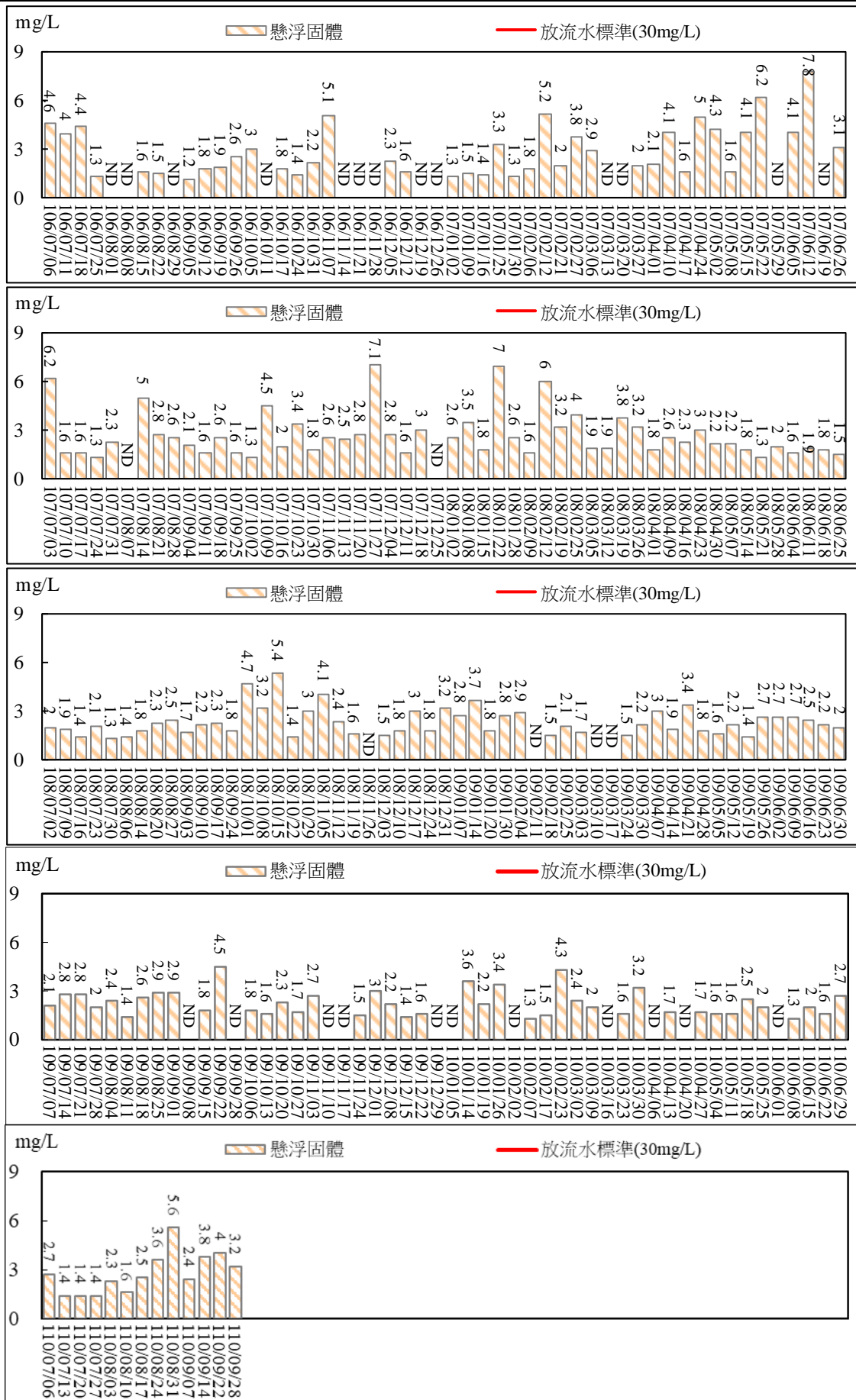
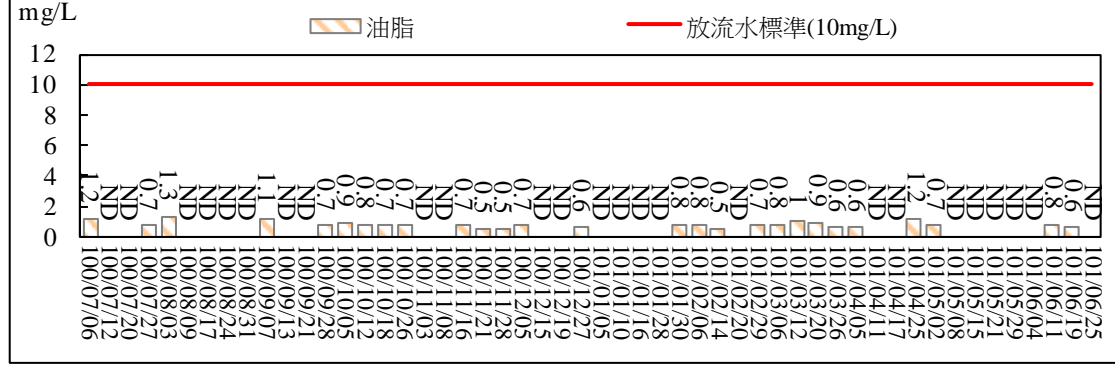
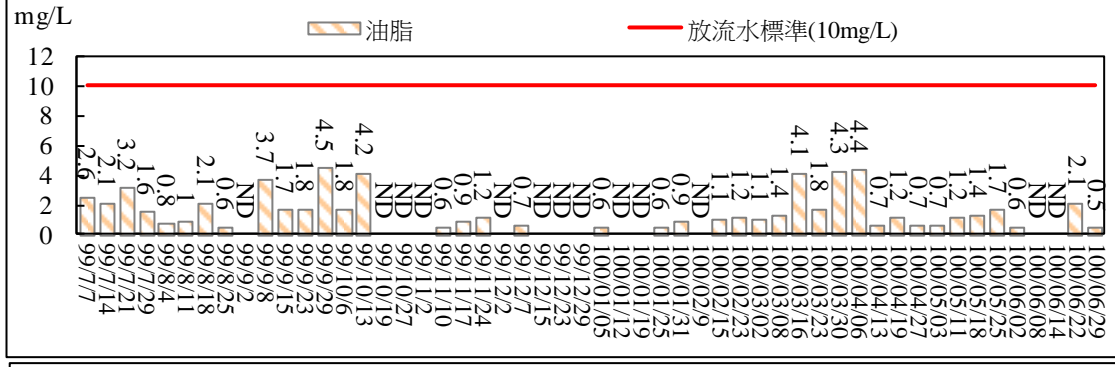
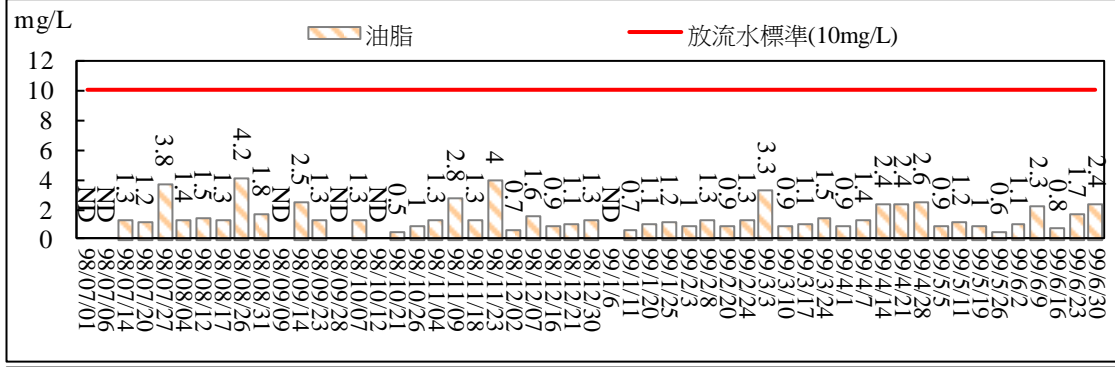
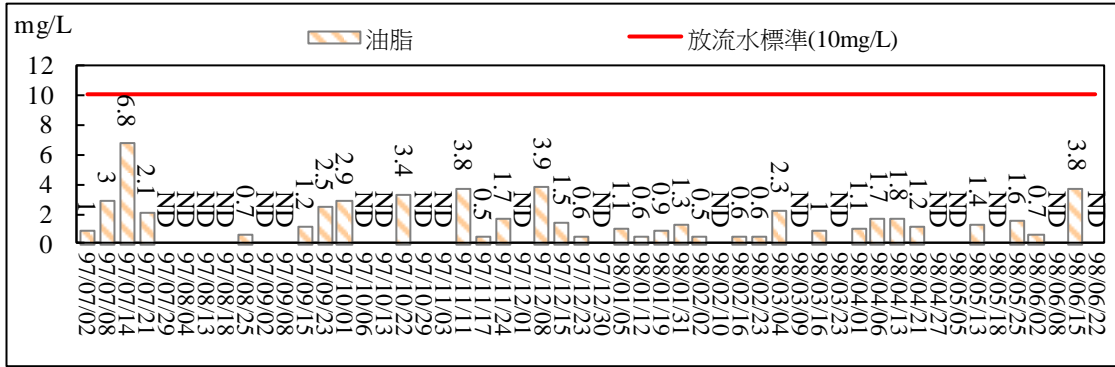
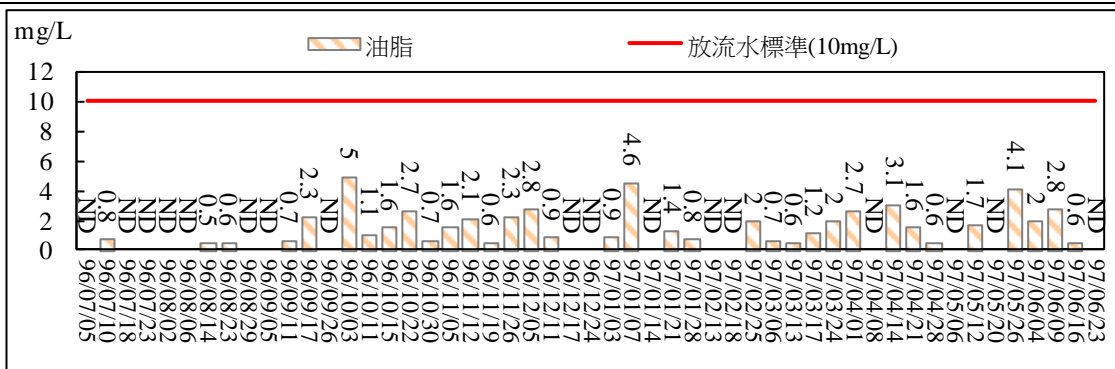
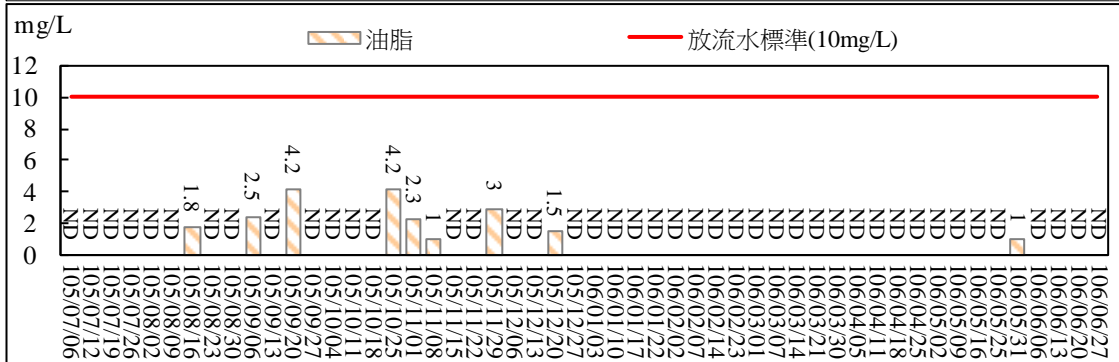
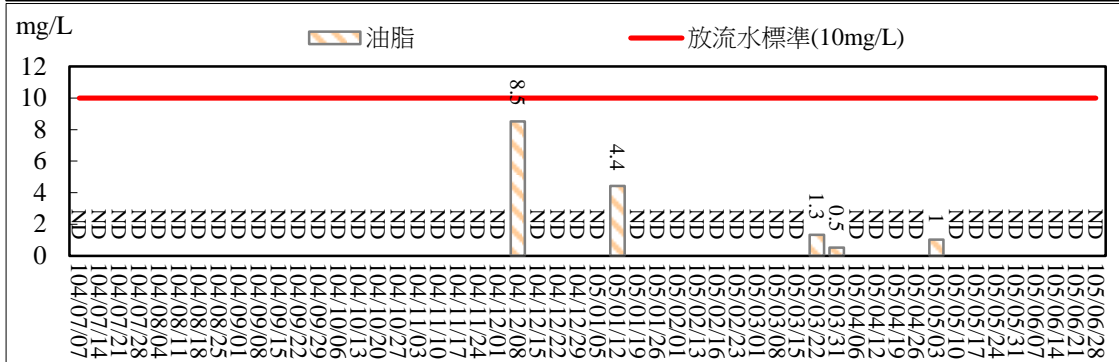
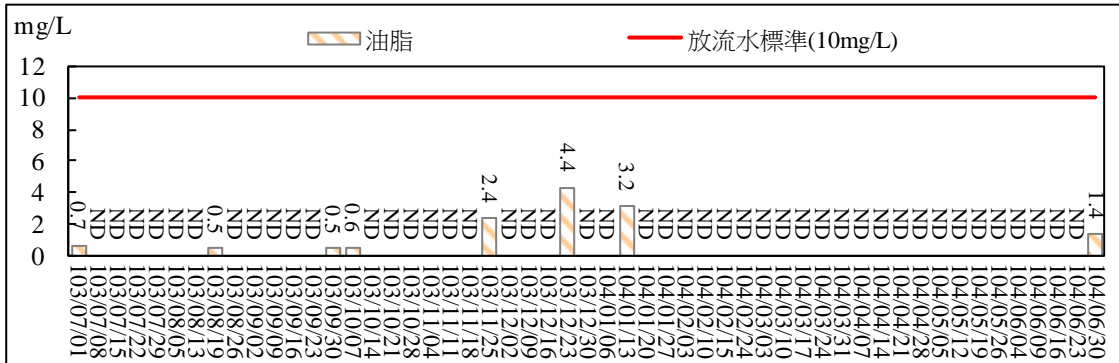
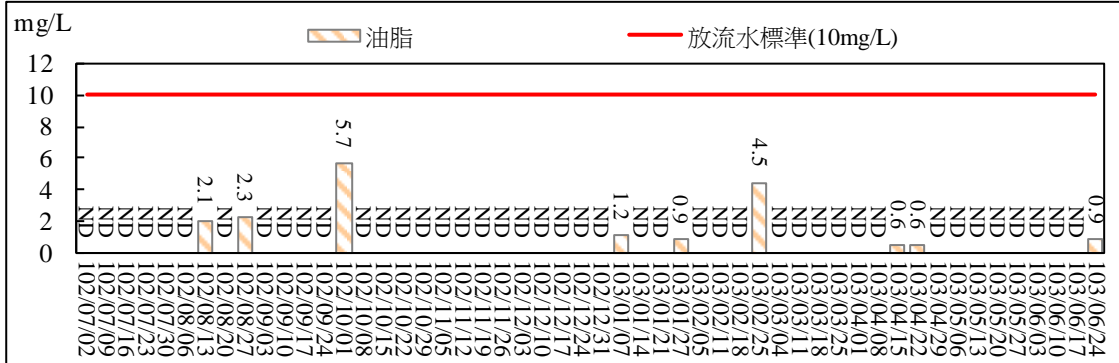
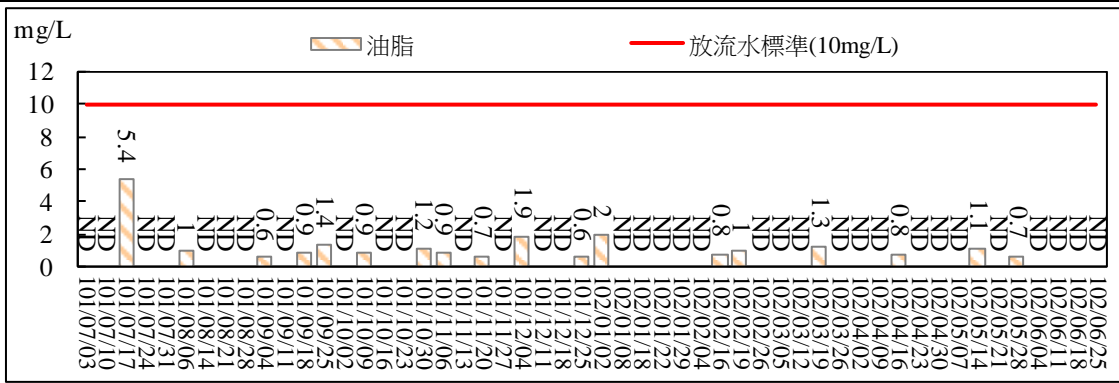


圖 2.30 污水處理廠放流口放流水質監測結果比較圖(懸浮固體)





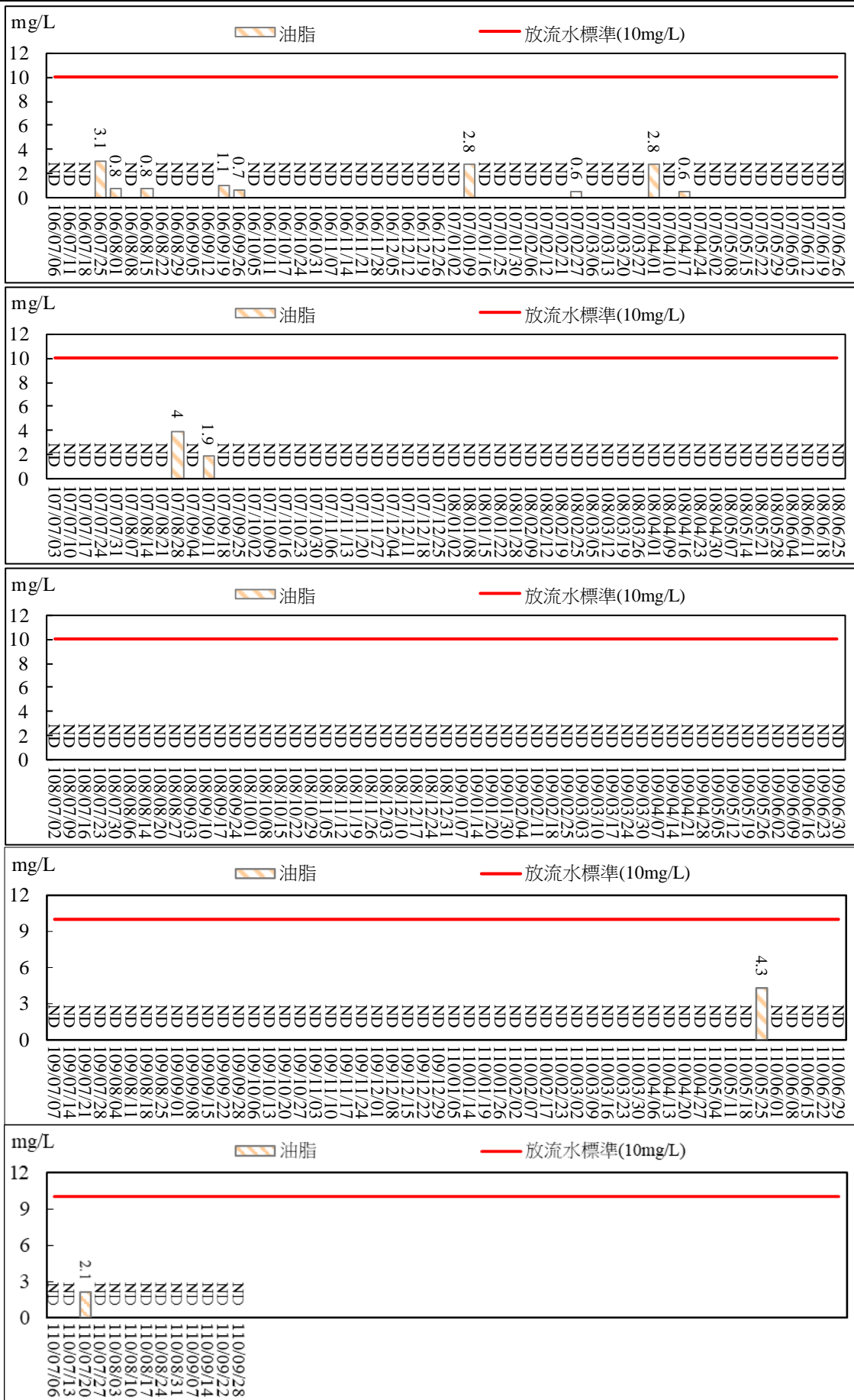
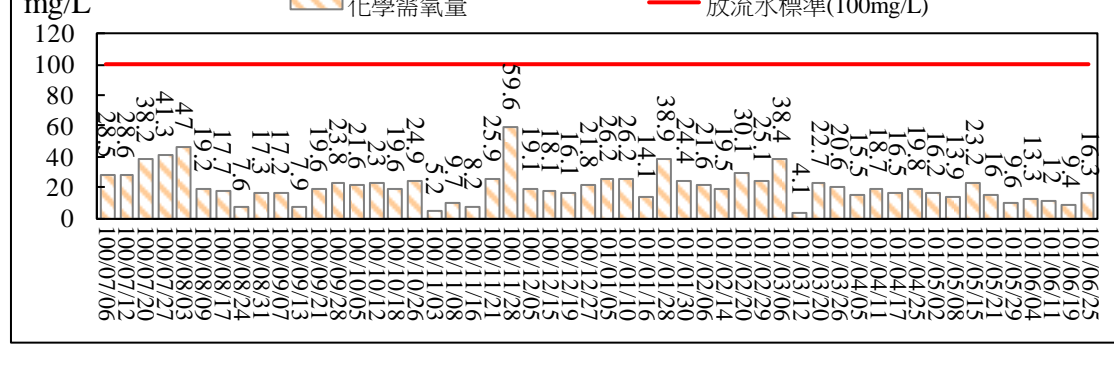
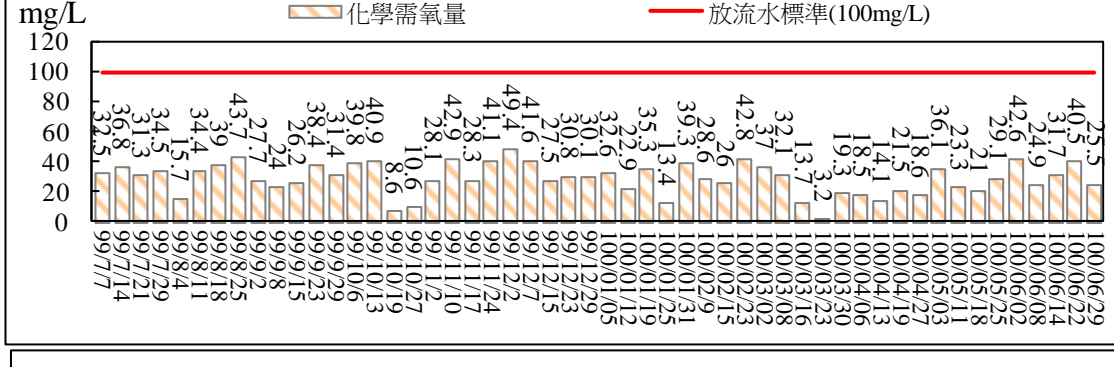
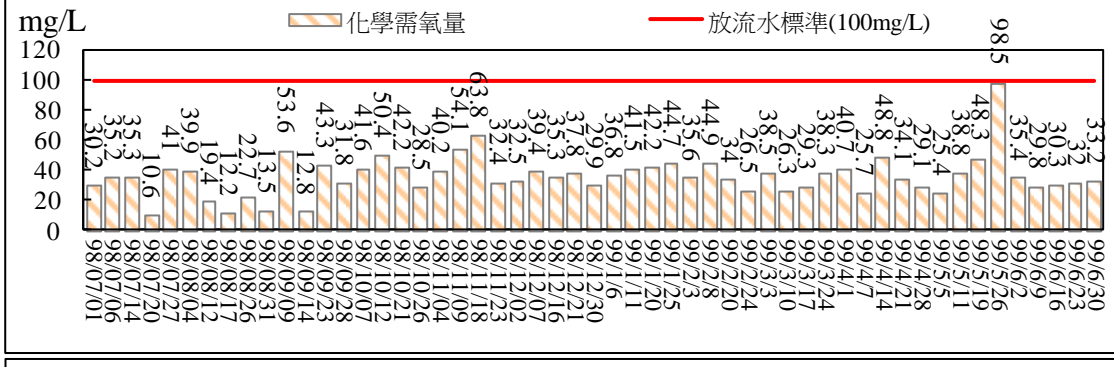
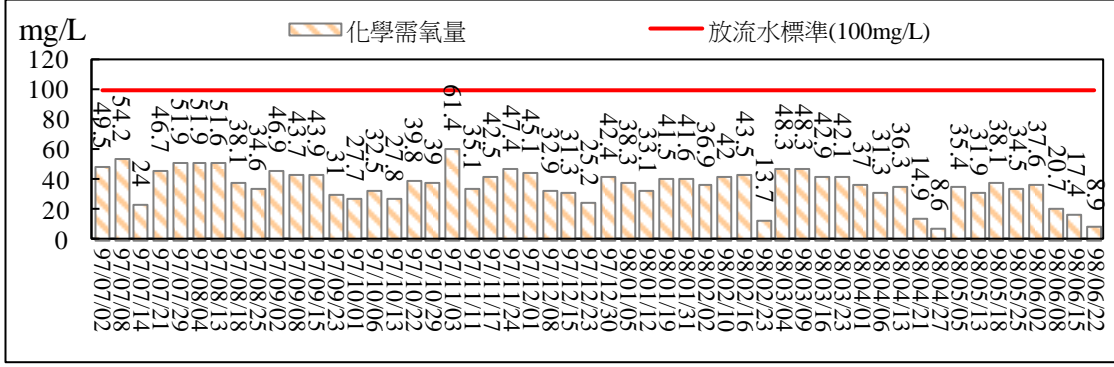
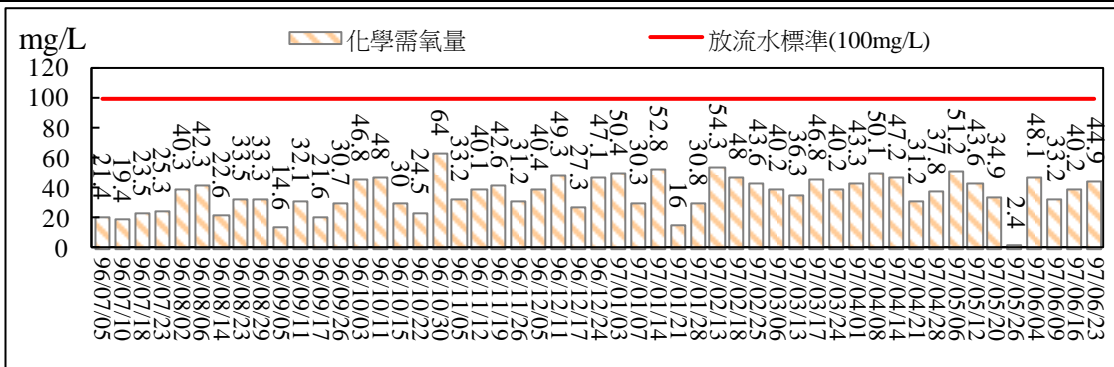
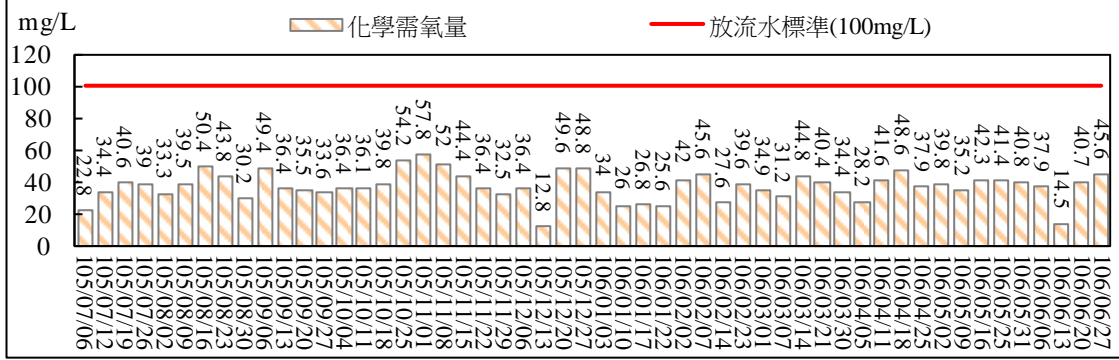
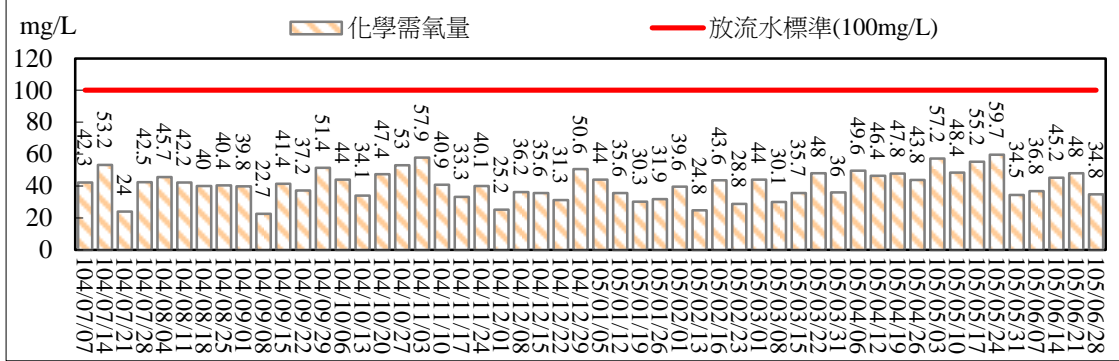
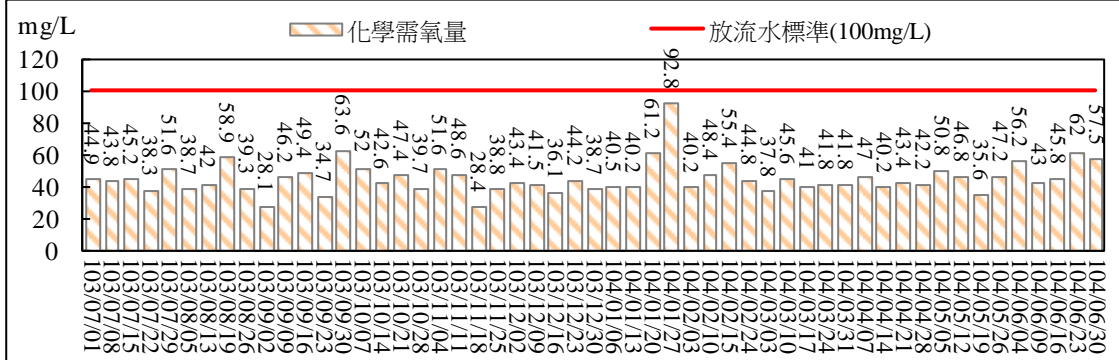
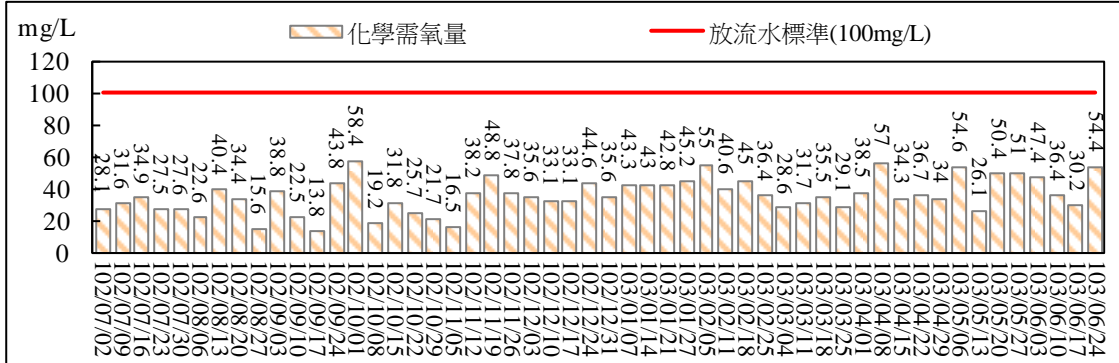
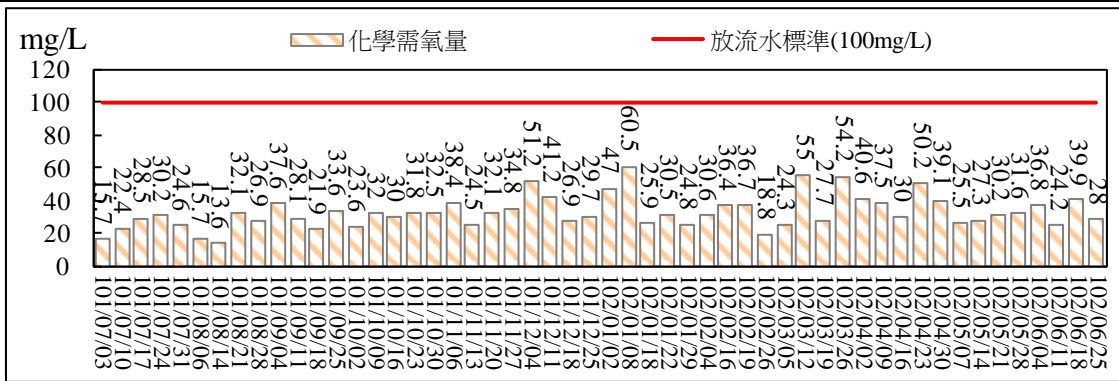


圖 2.31 污水處理廠放流口放流水質監測結果比較圖(油脂)





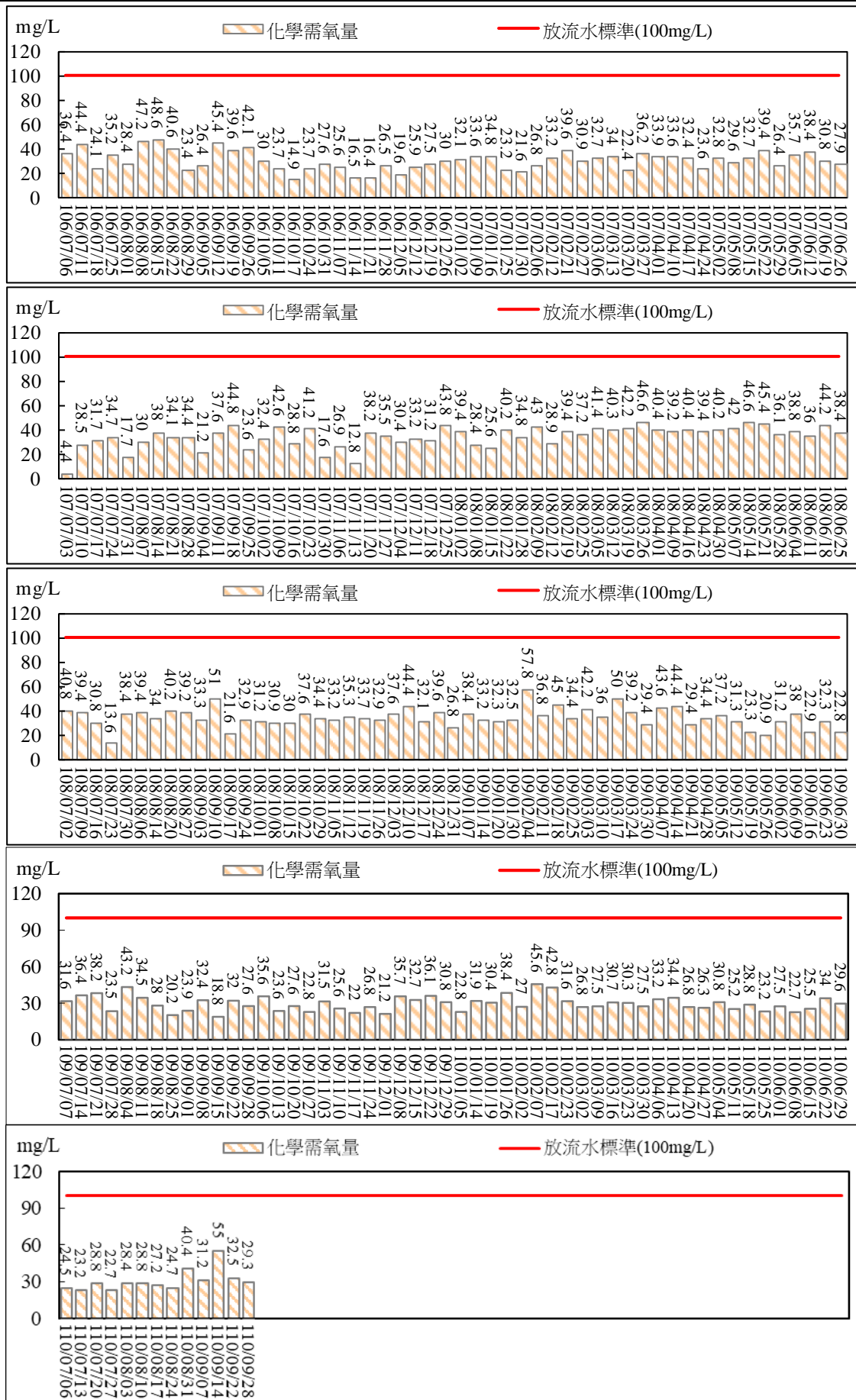
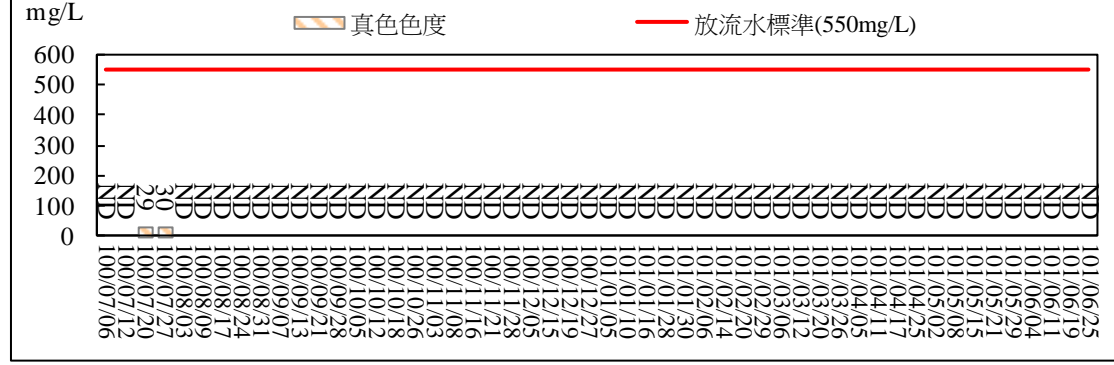
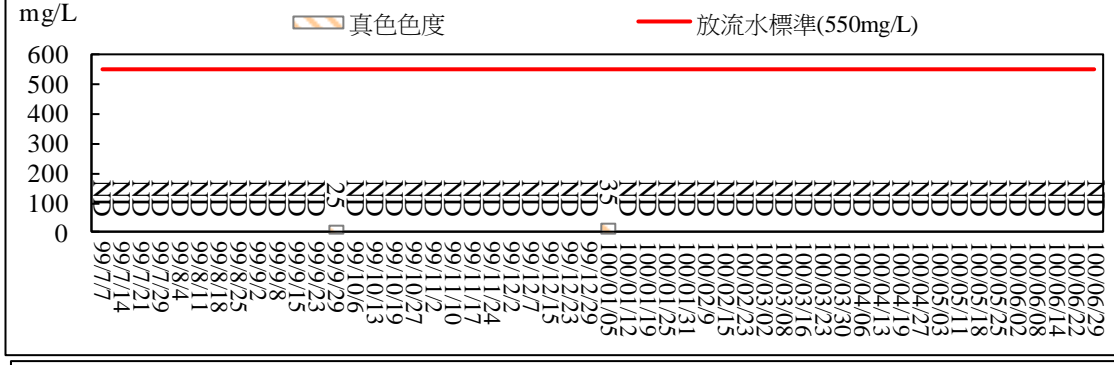
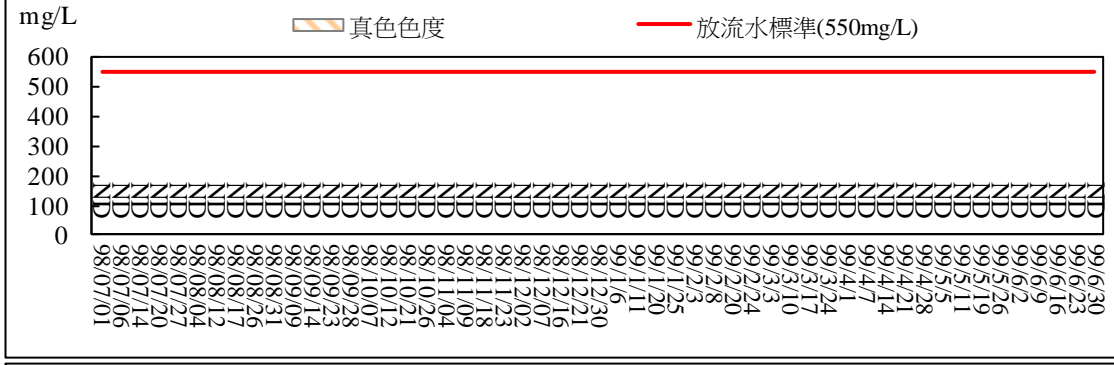
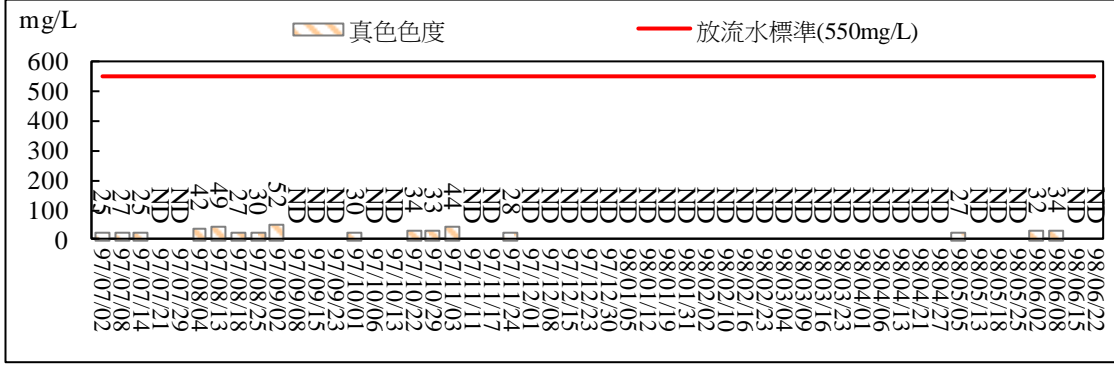
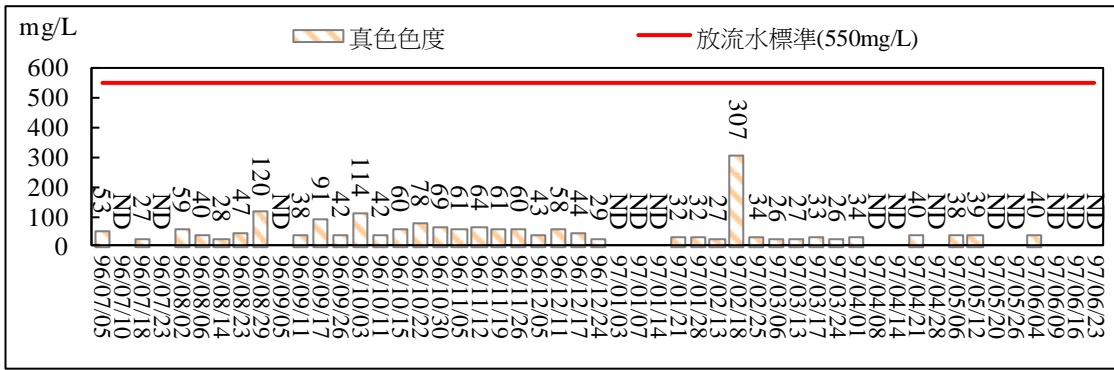
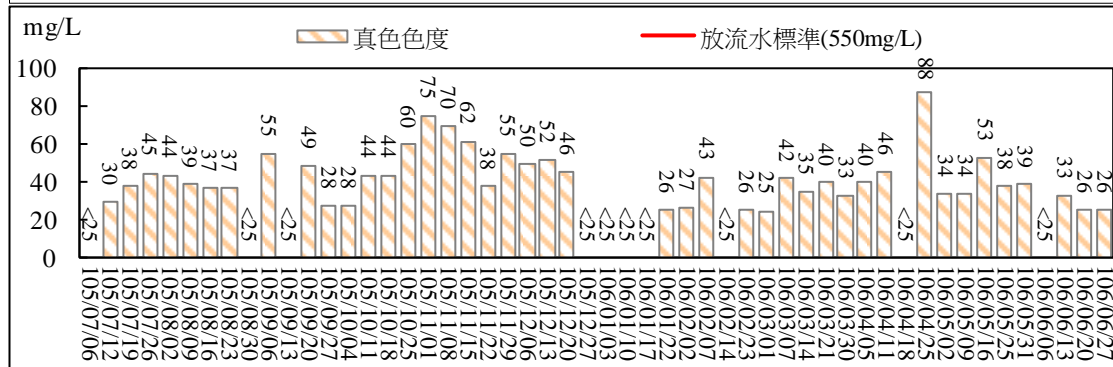
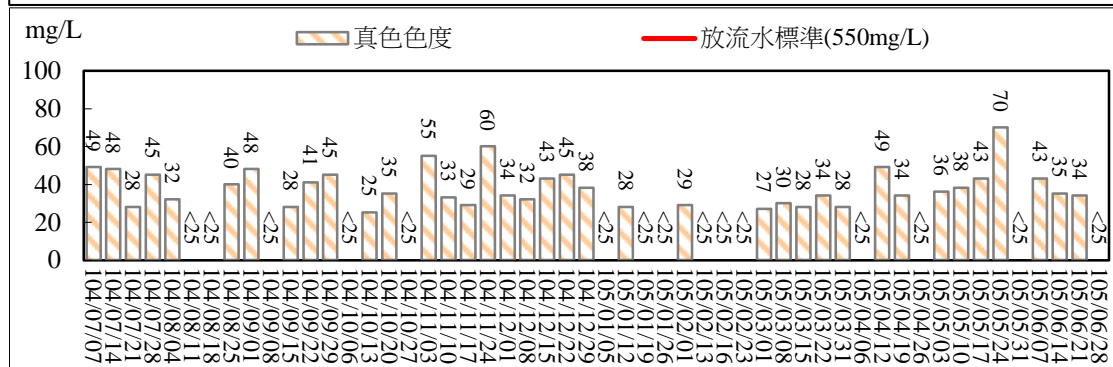
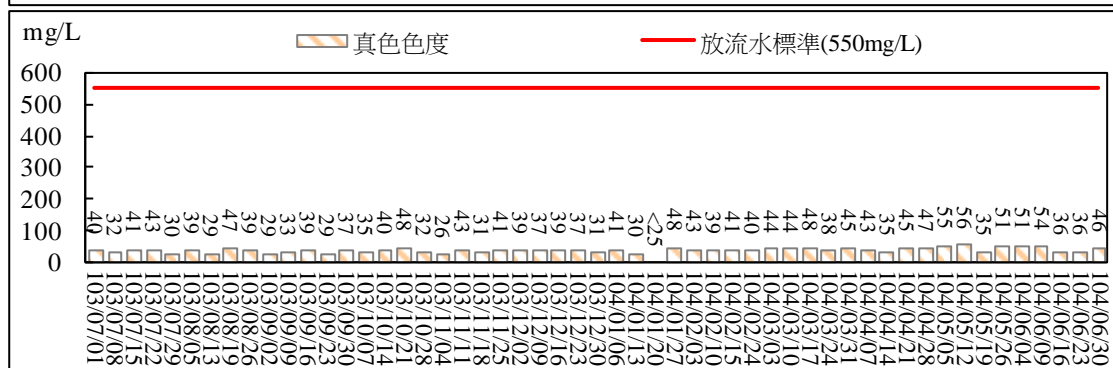
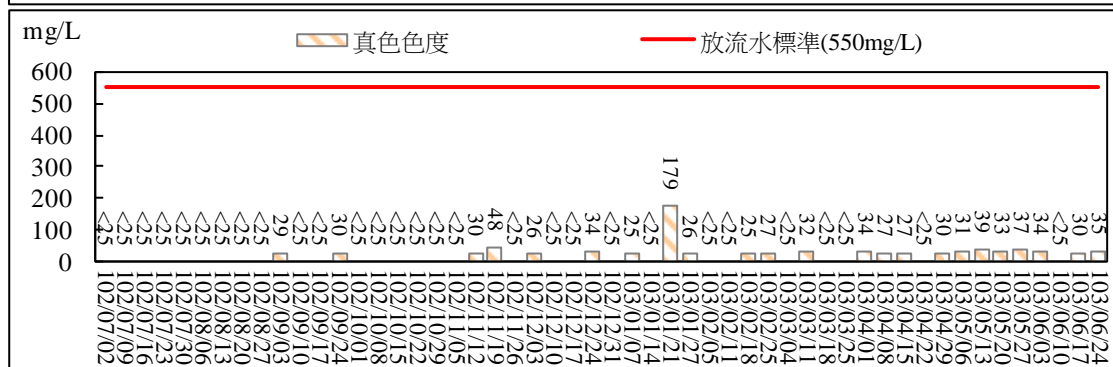
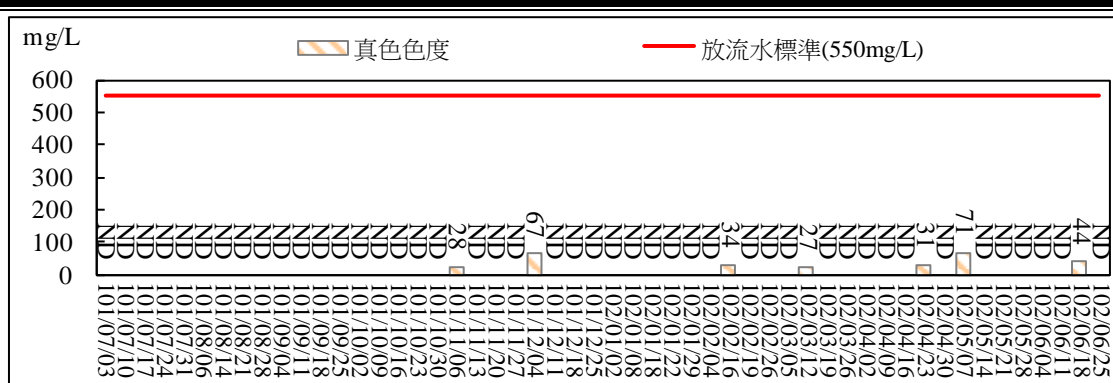


圖 2.32 污水處理廠放流口放流水質監測結果比較圖(化學需氧量)





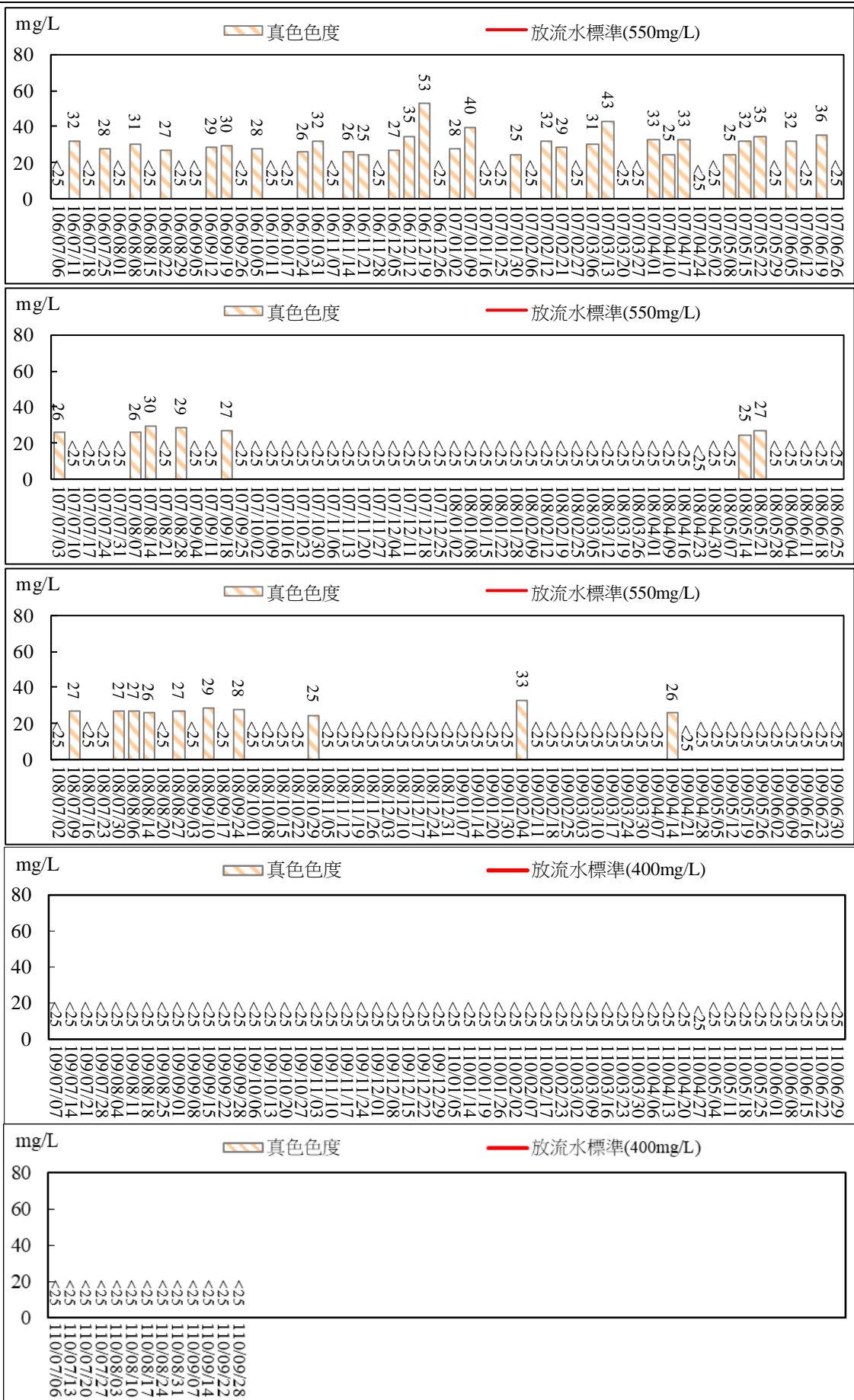
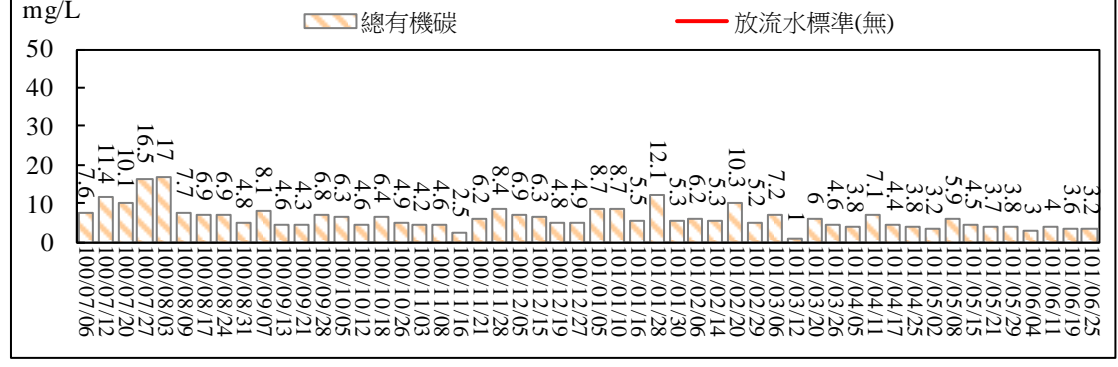
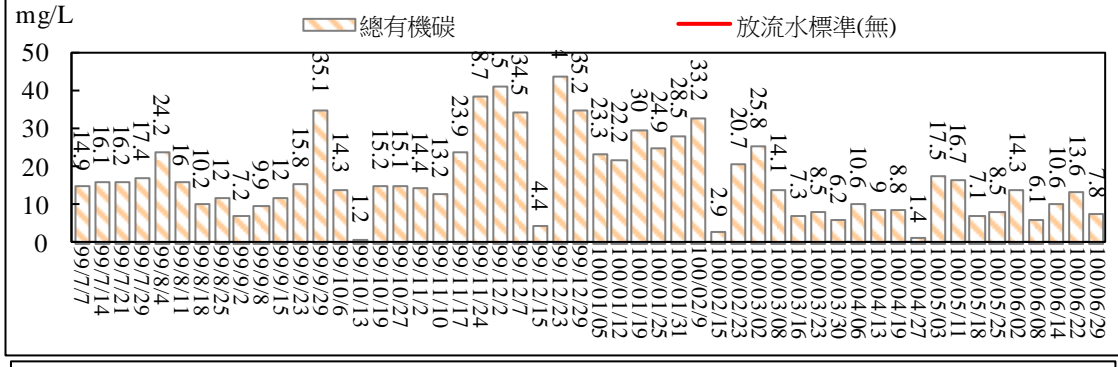
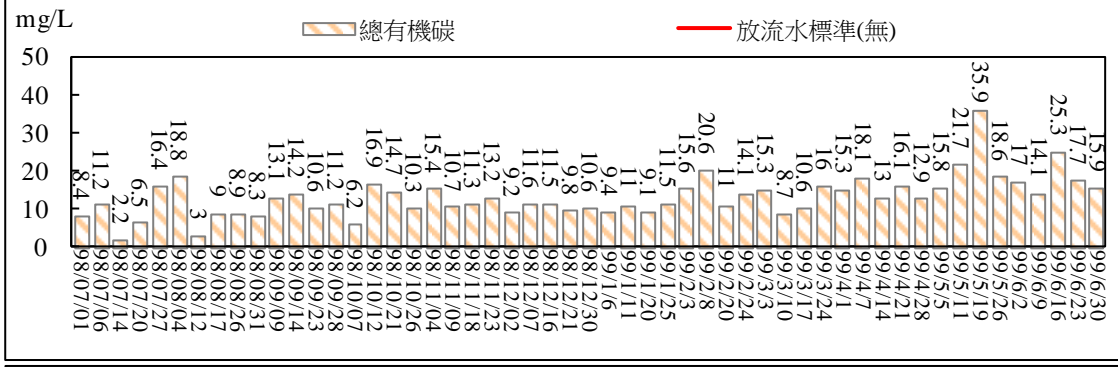
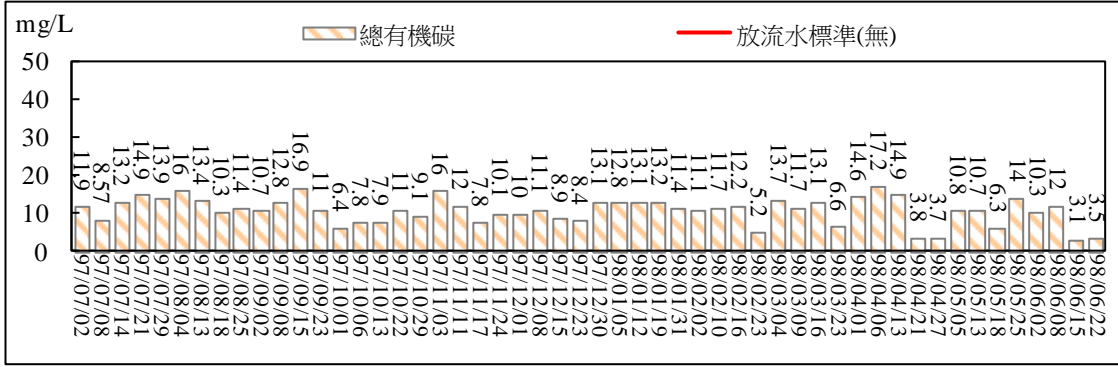
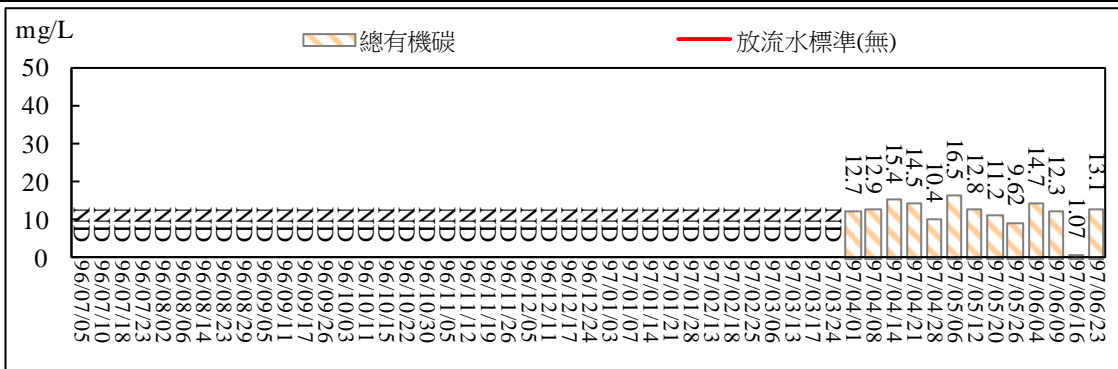
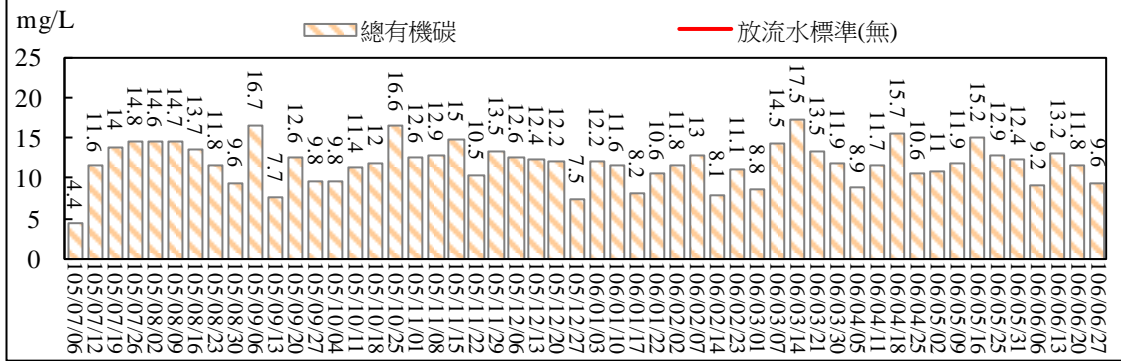
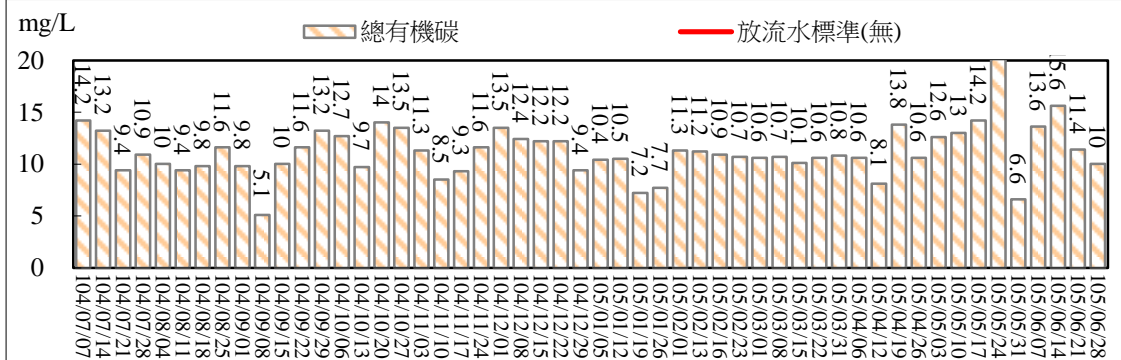
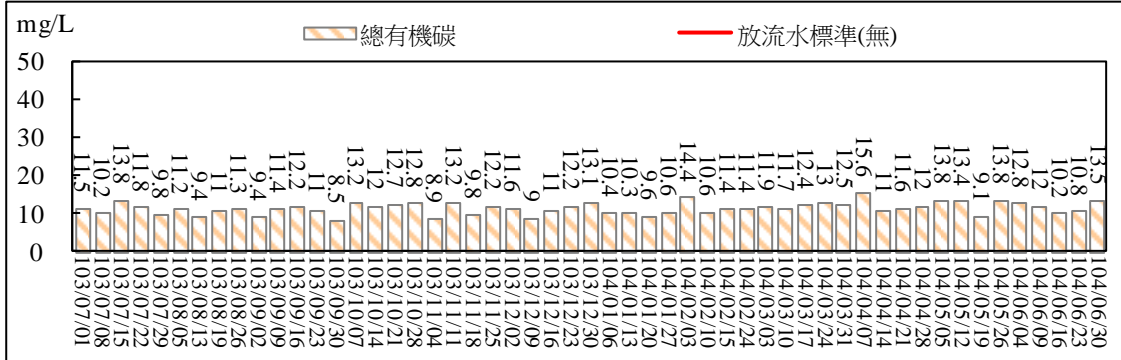
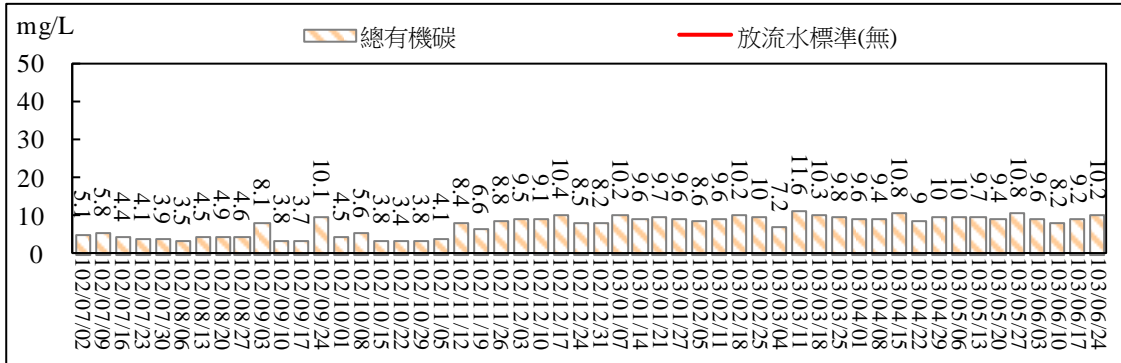
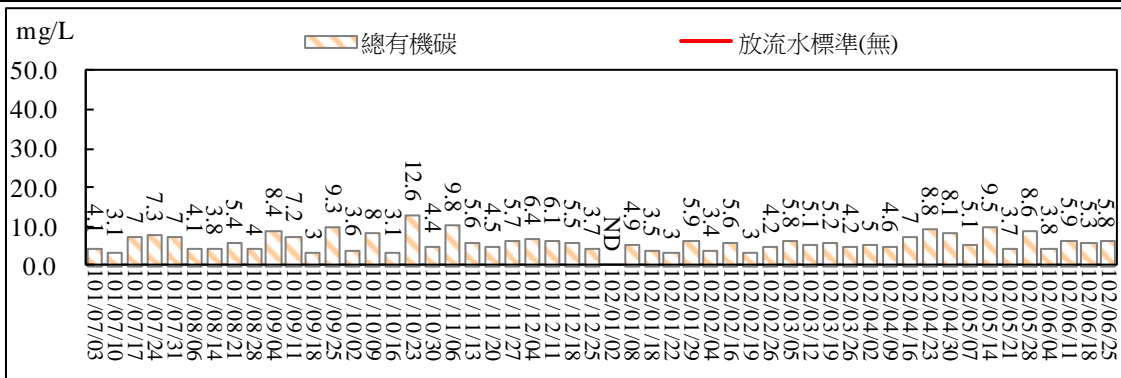


圖 2.33 污水處理廠放流口放流水質監測結果比較圖(真色色度)





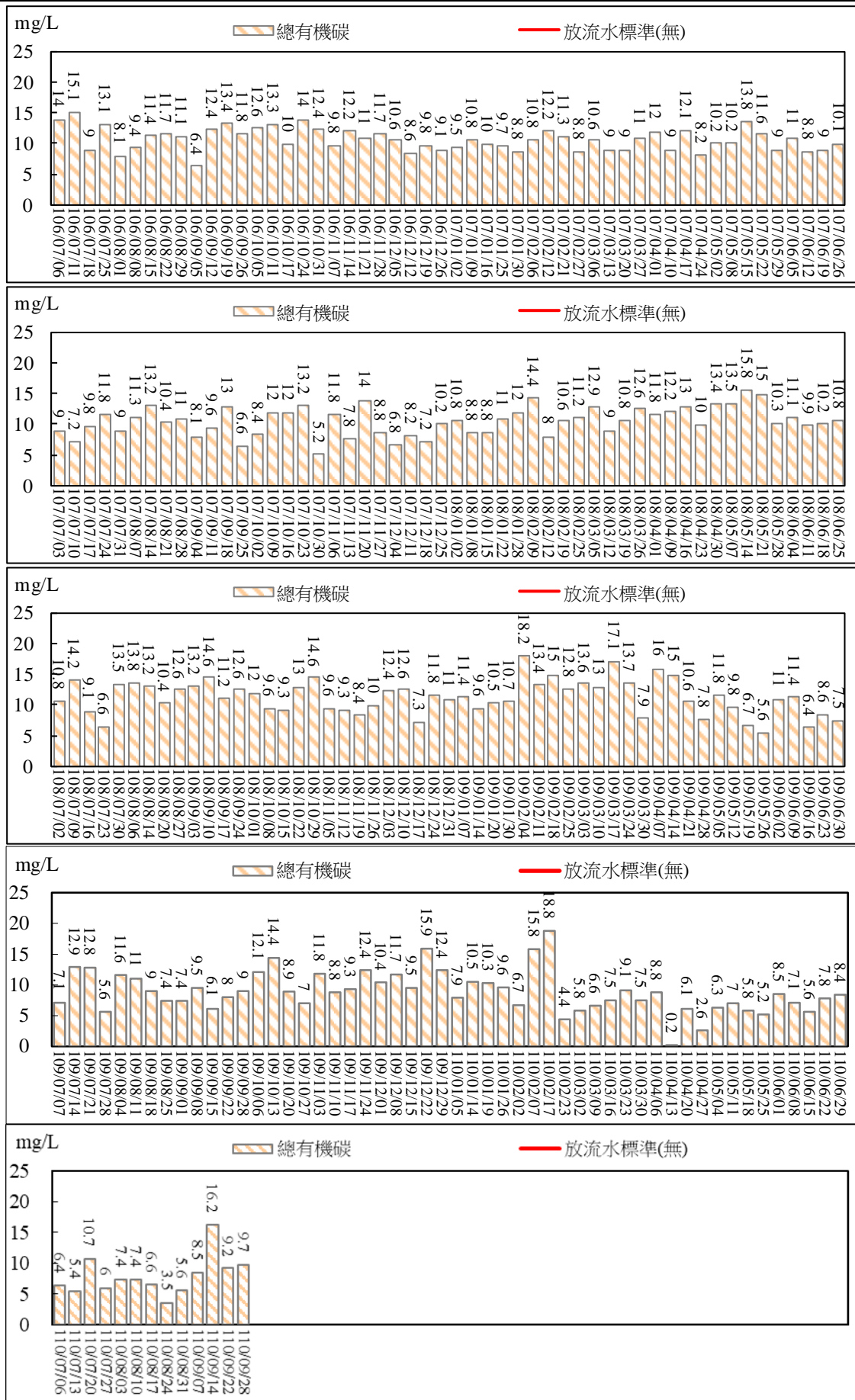
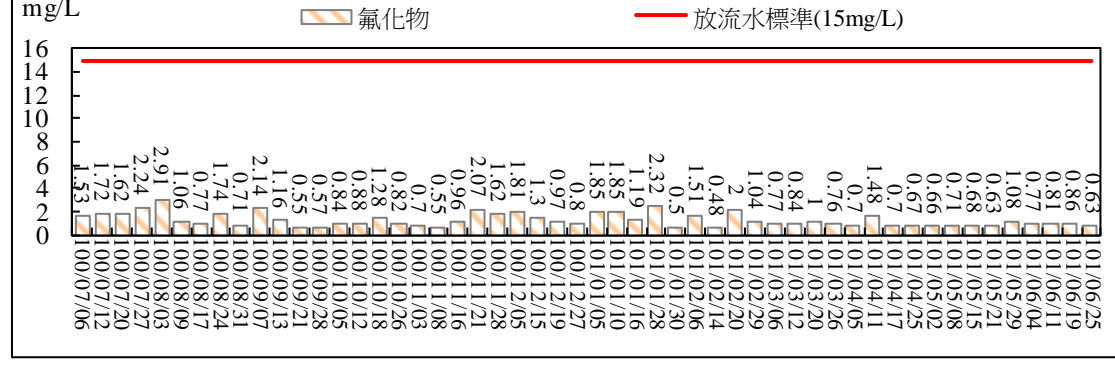
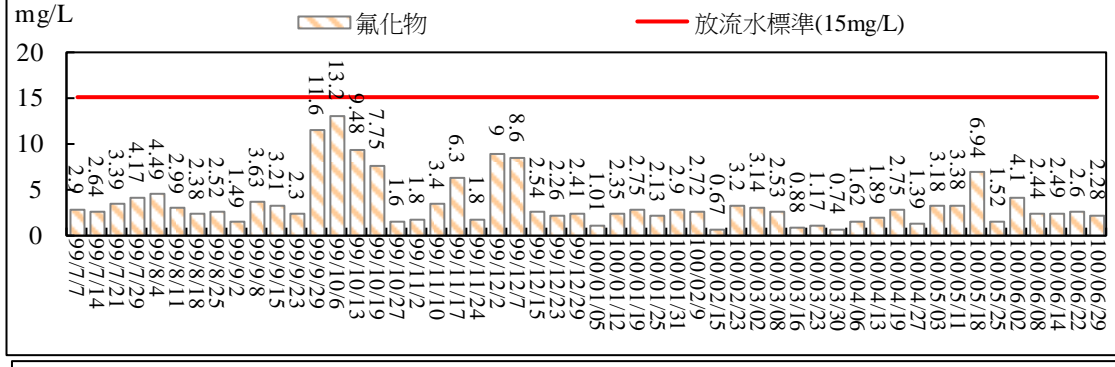
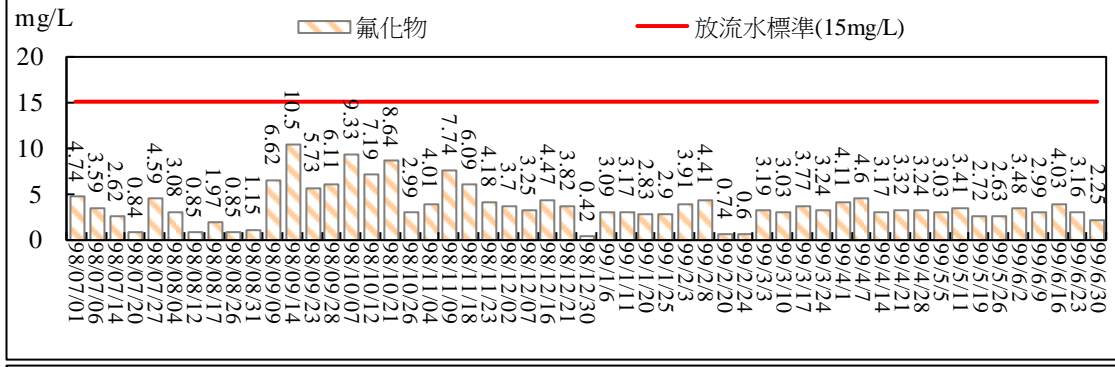
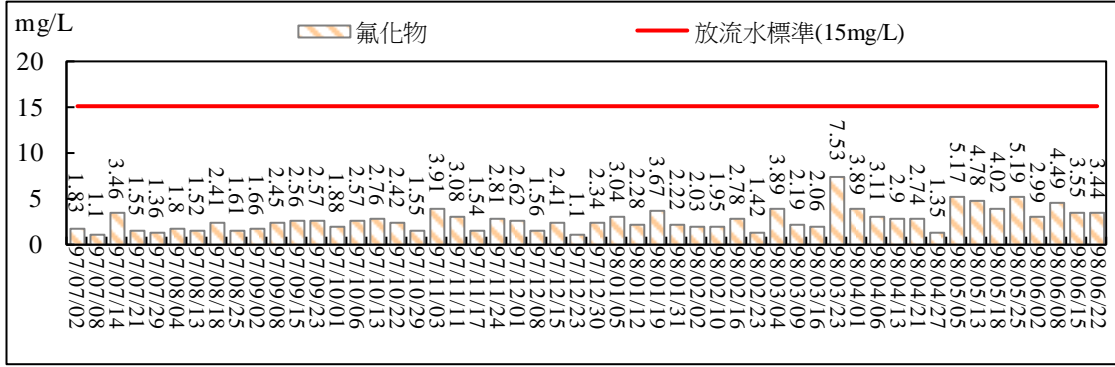
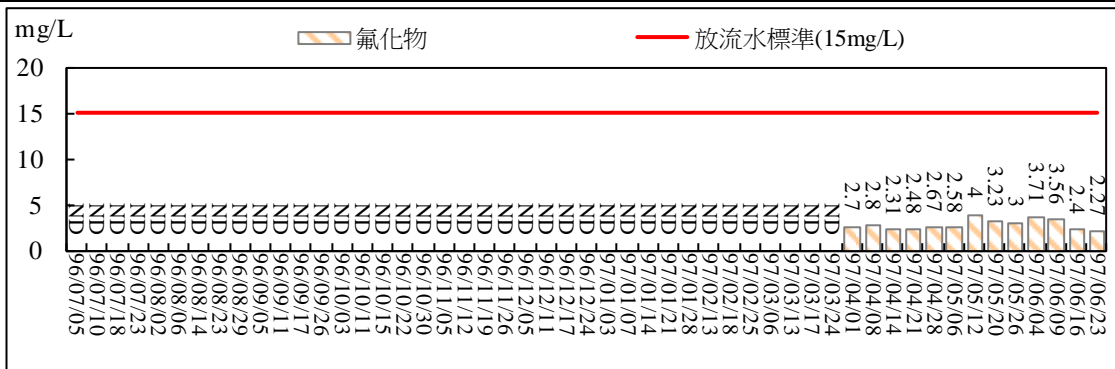
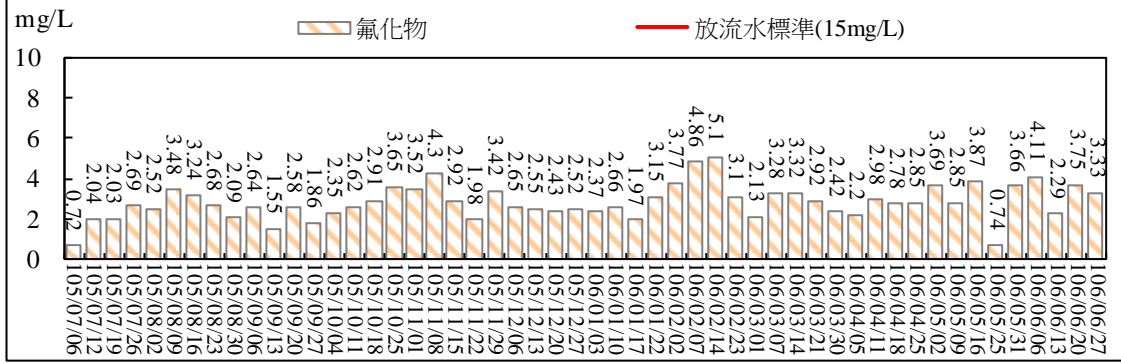
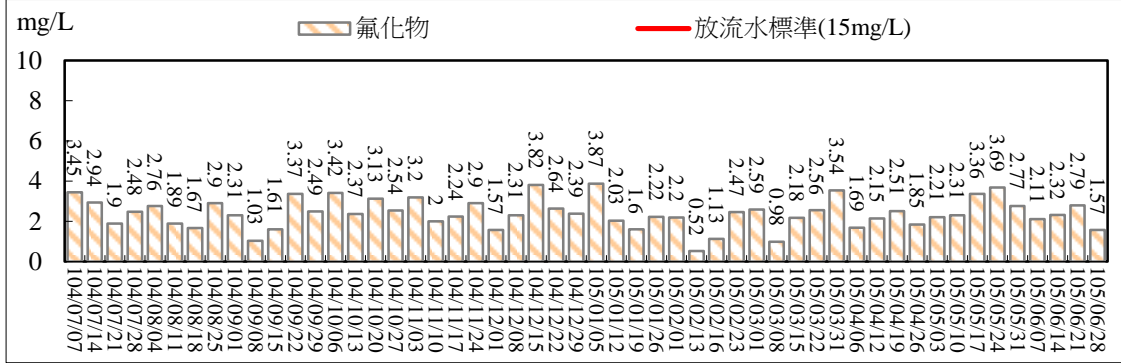
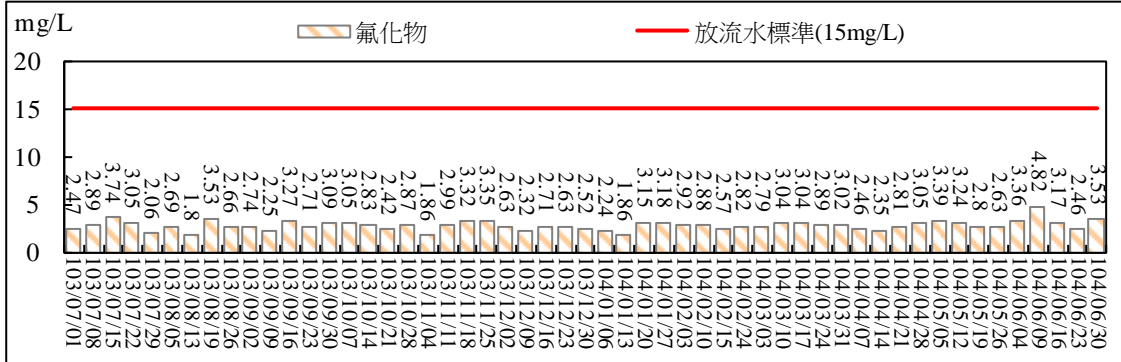
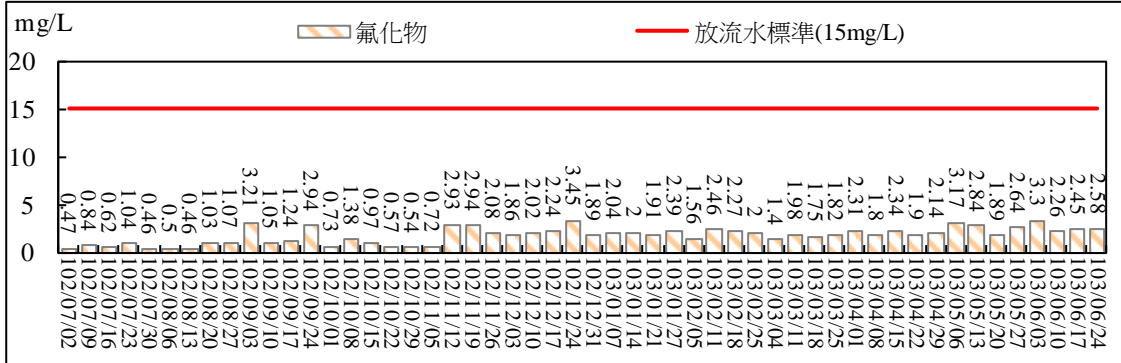
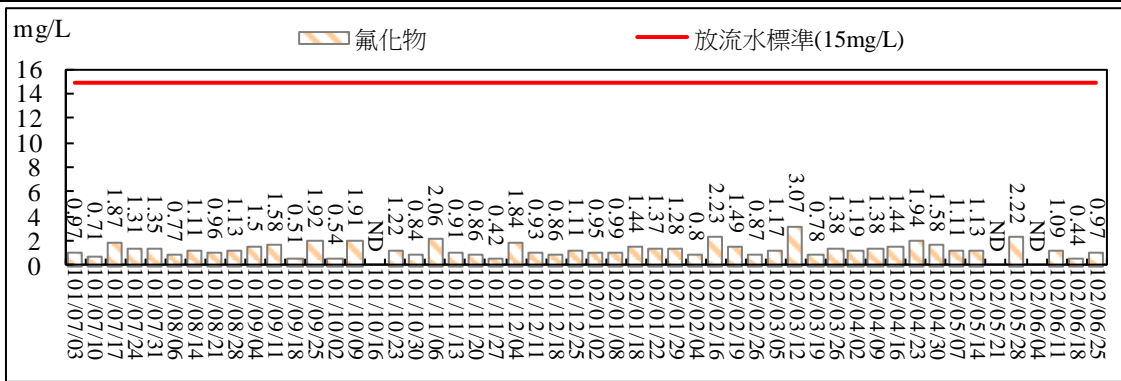


圖 2.34 污水處理廠放流口放流水質監測結果比較圖(總有機碳)





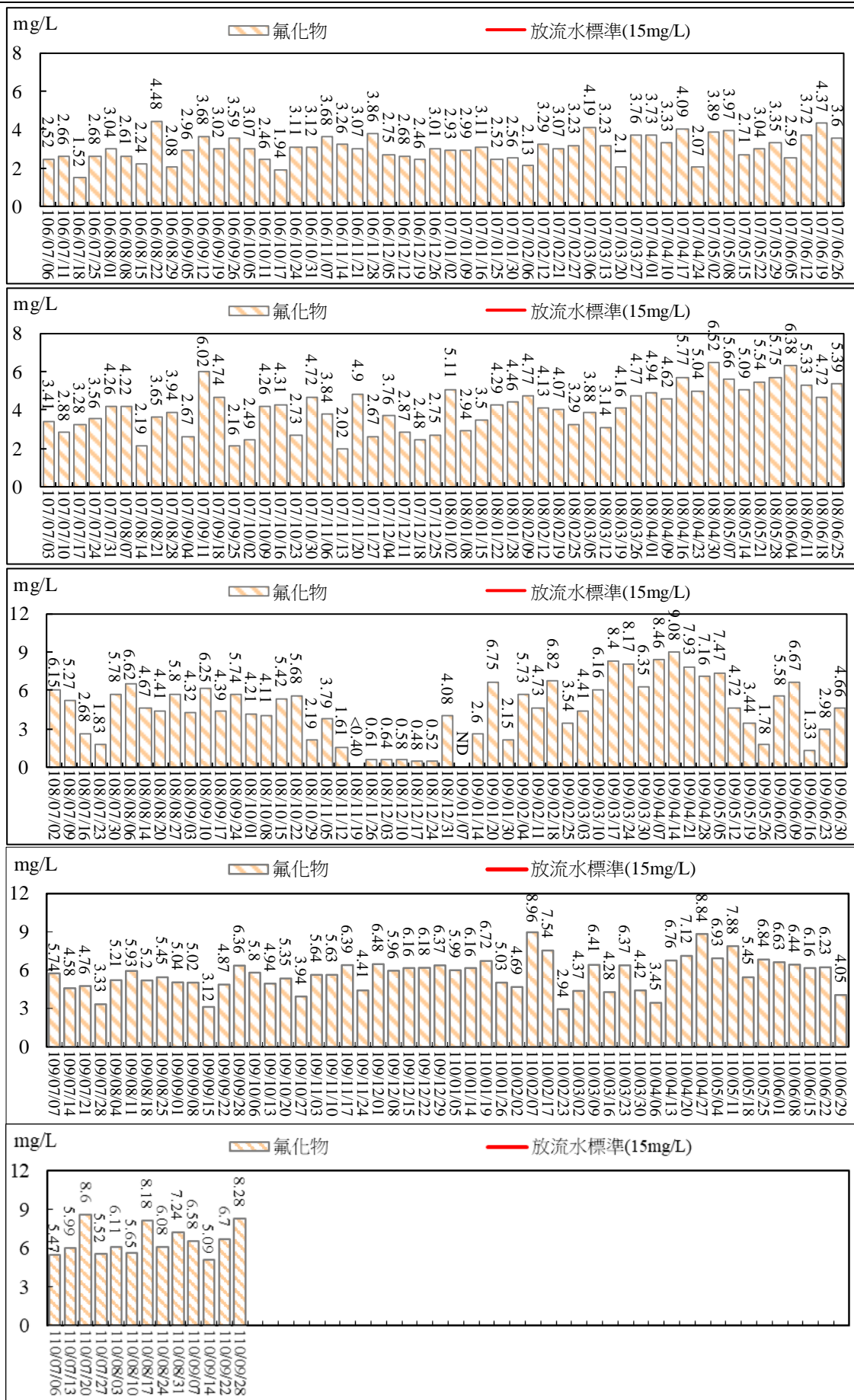
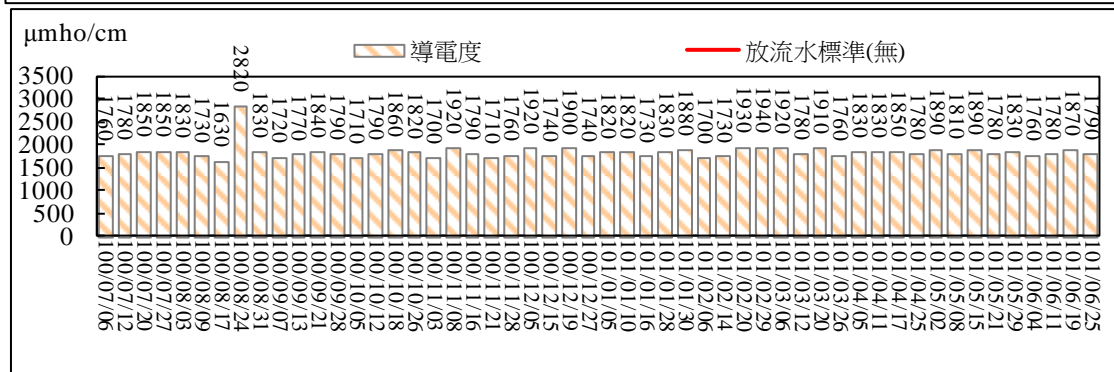
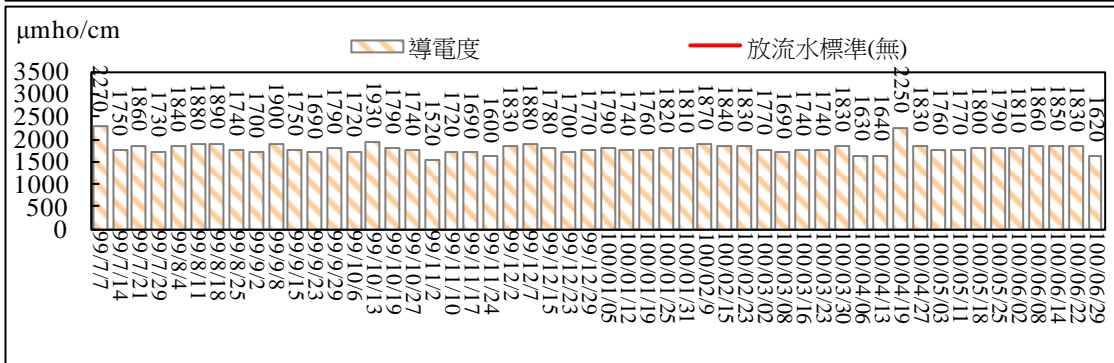
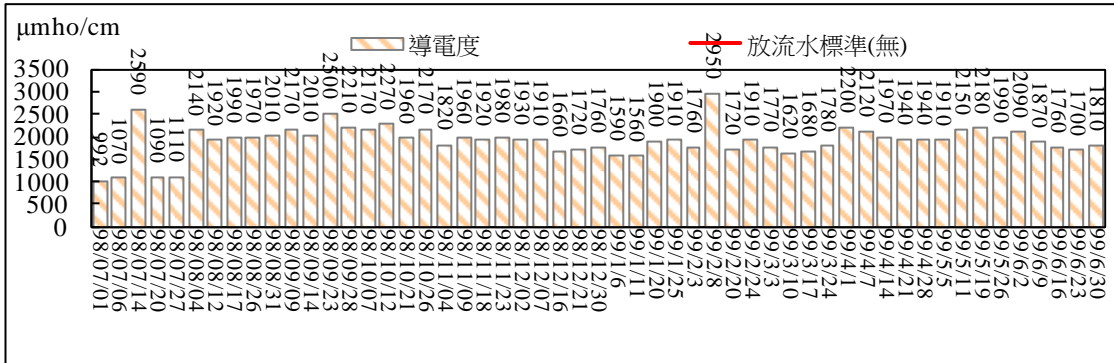
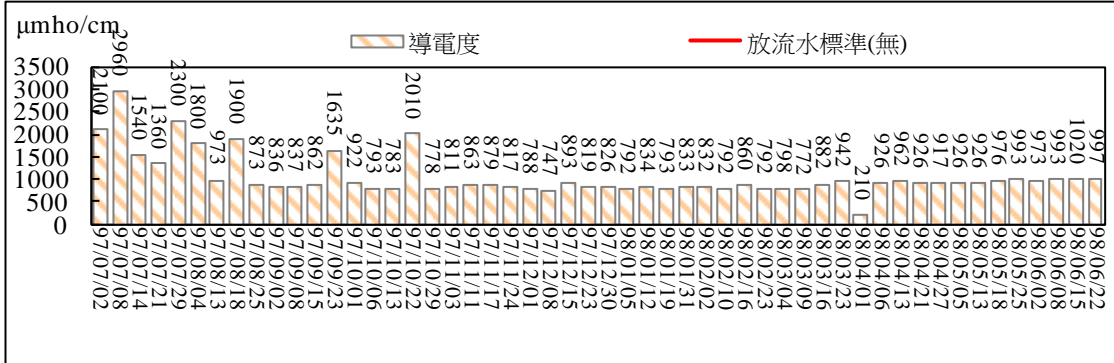
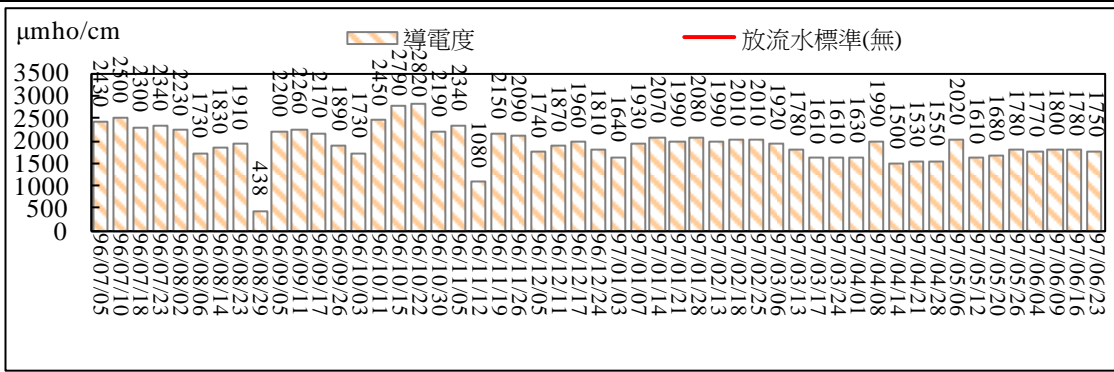
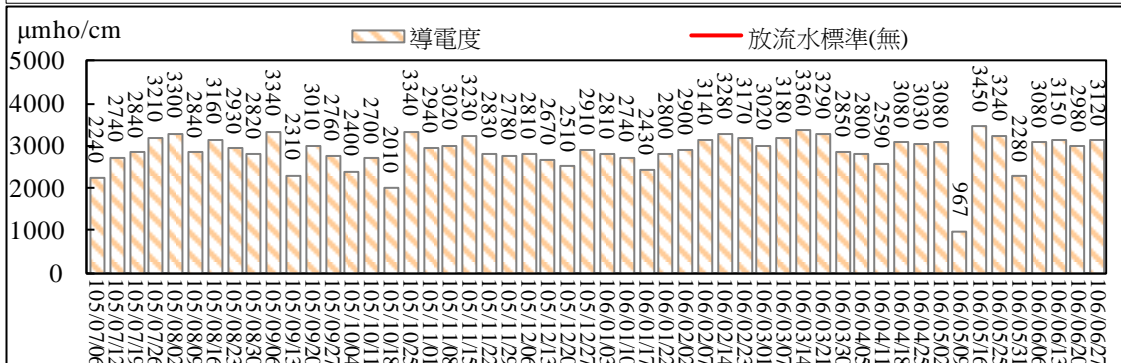
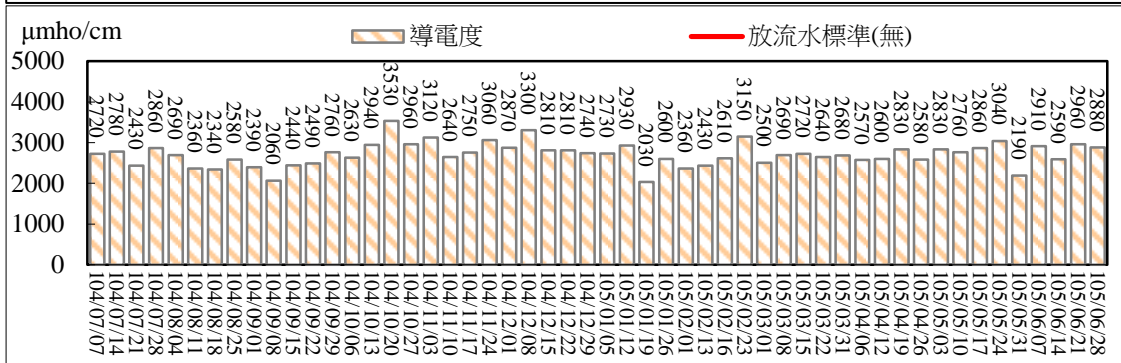
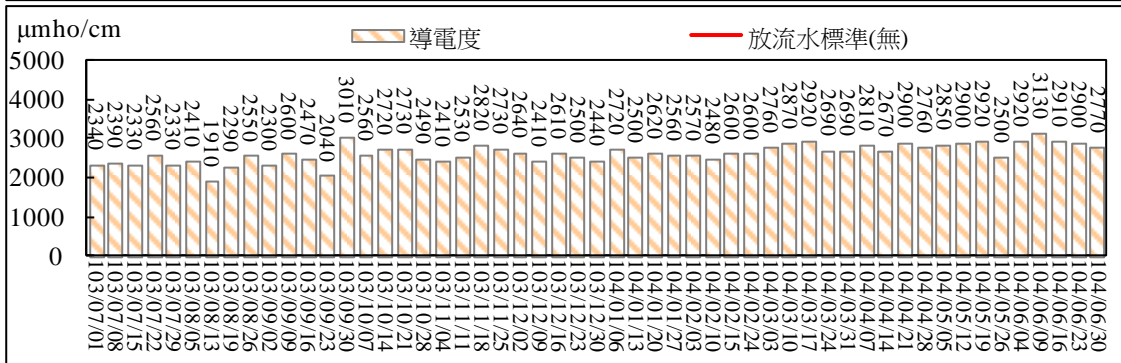
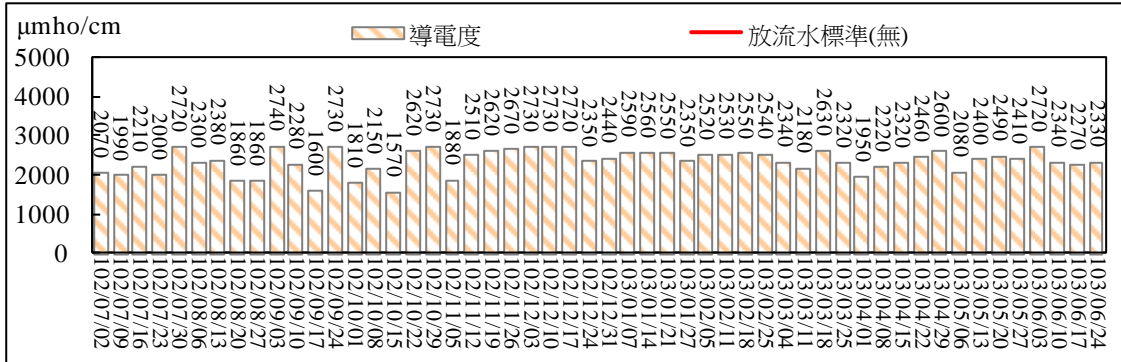
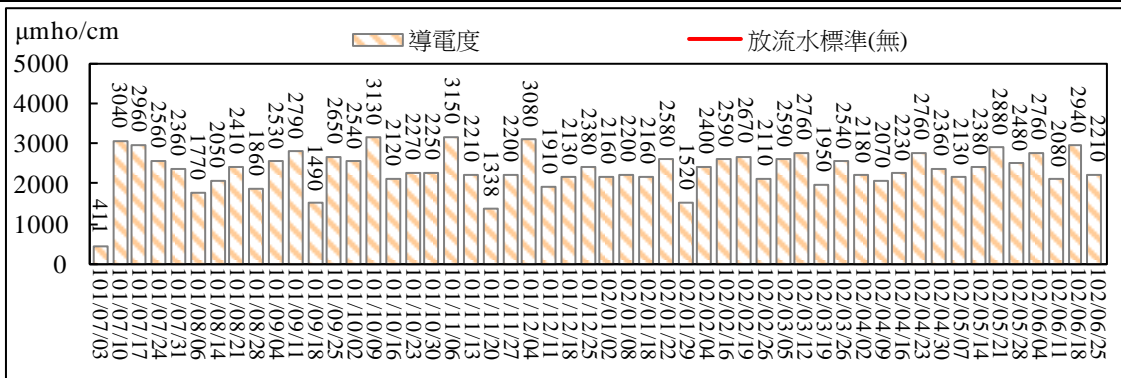


圖 2.35 污水處理廠放流口放流水質監測結果比較圖(氟化物)





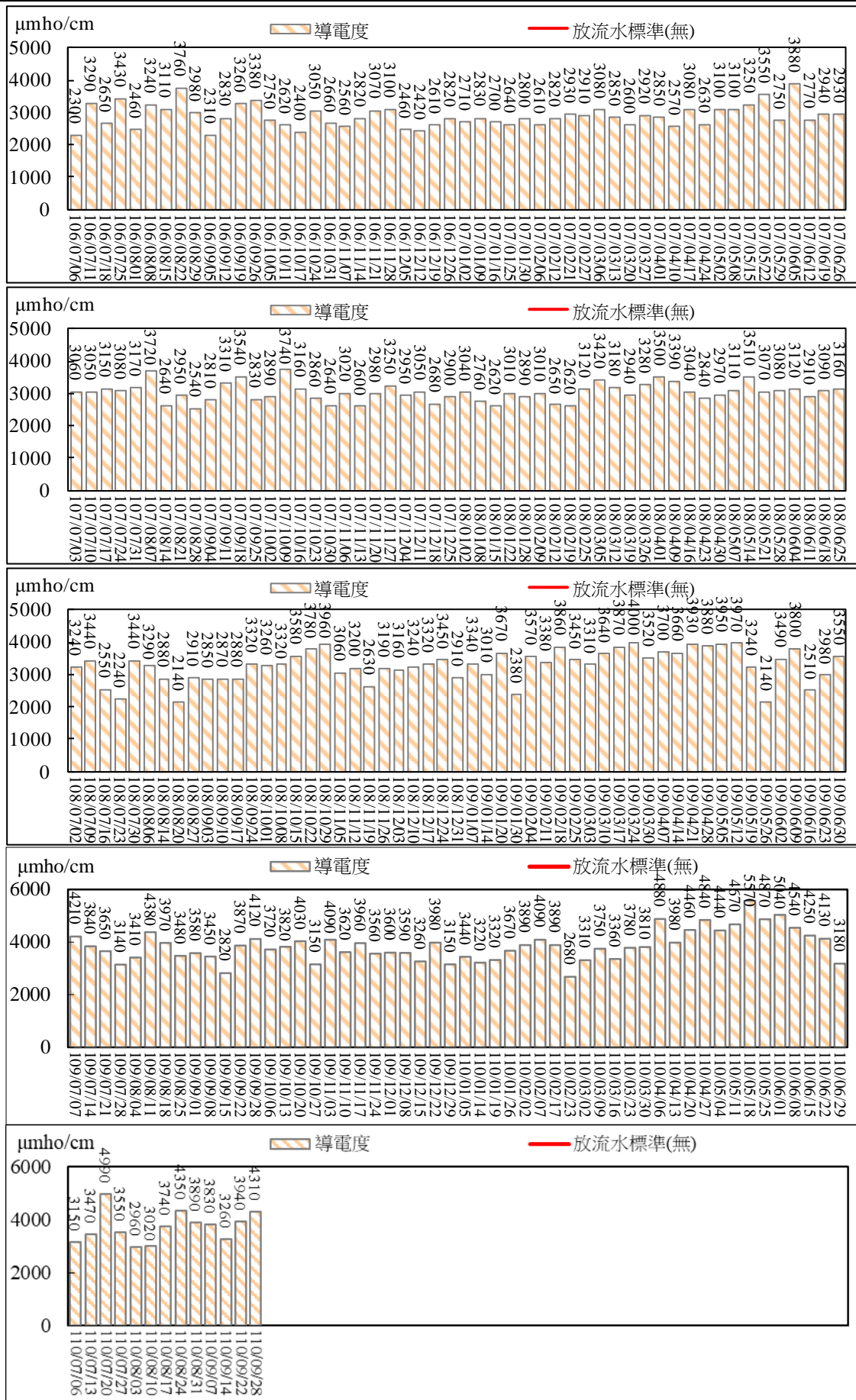
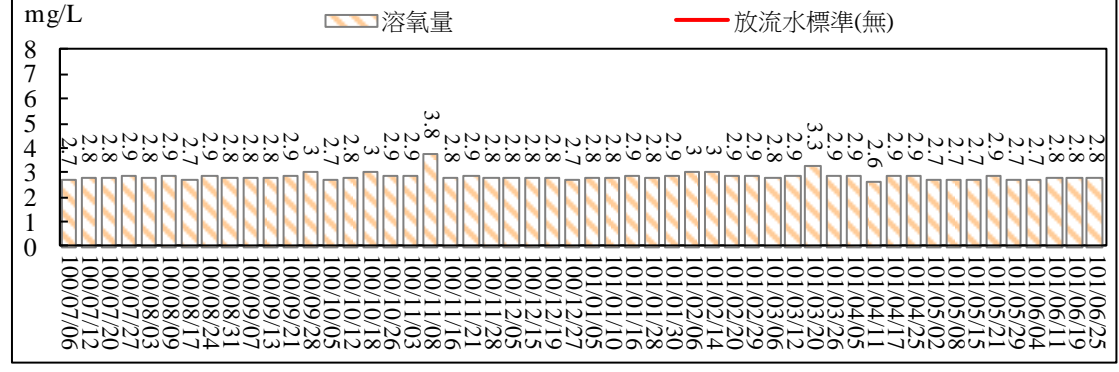
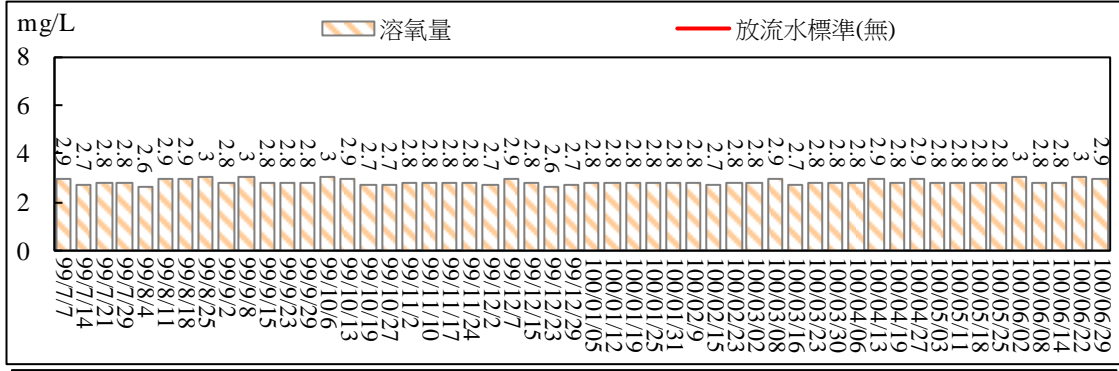
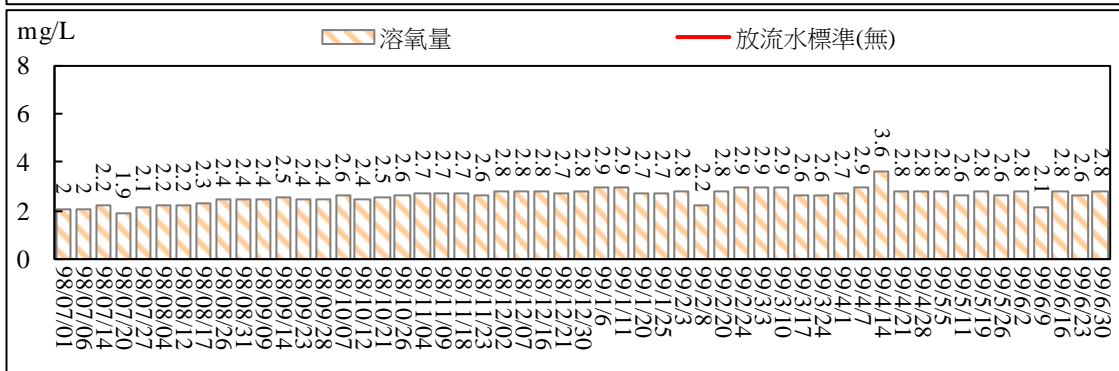
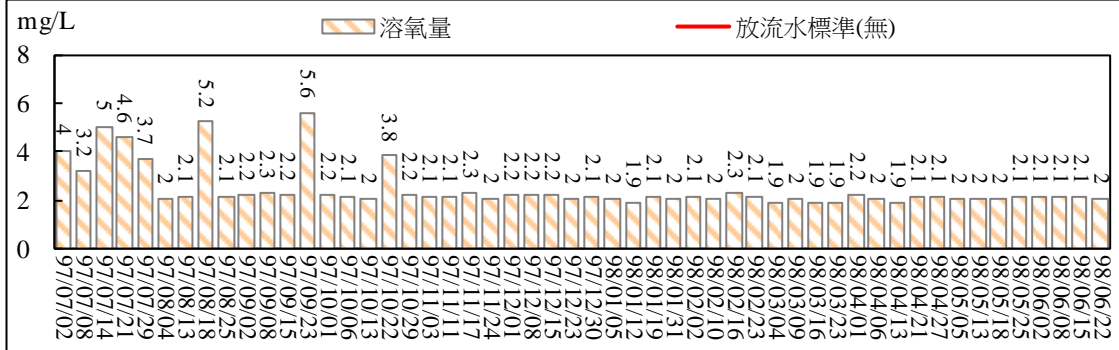
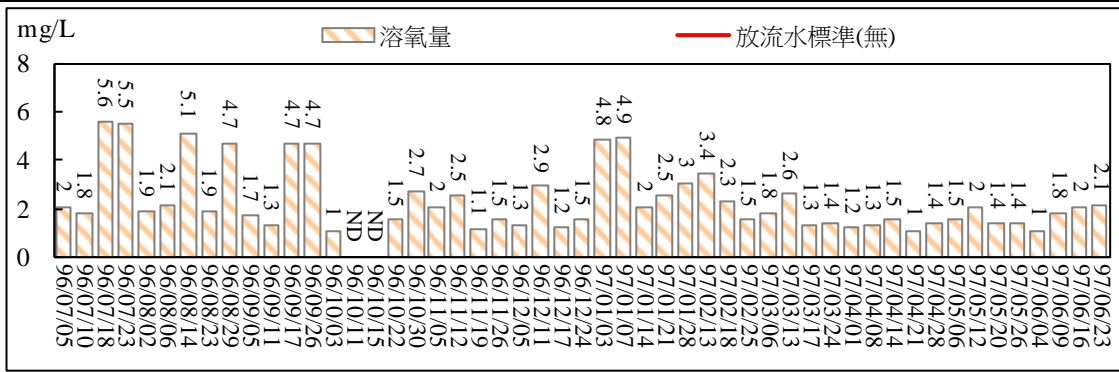
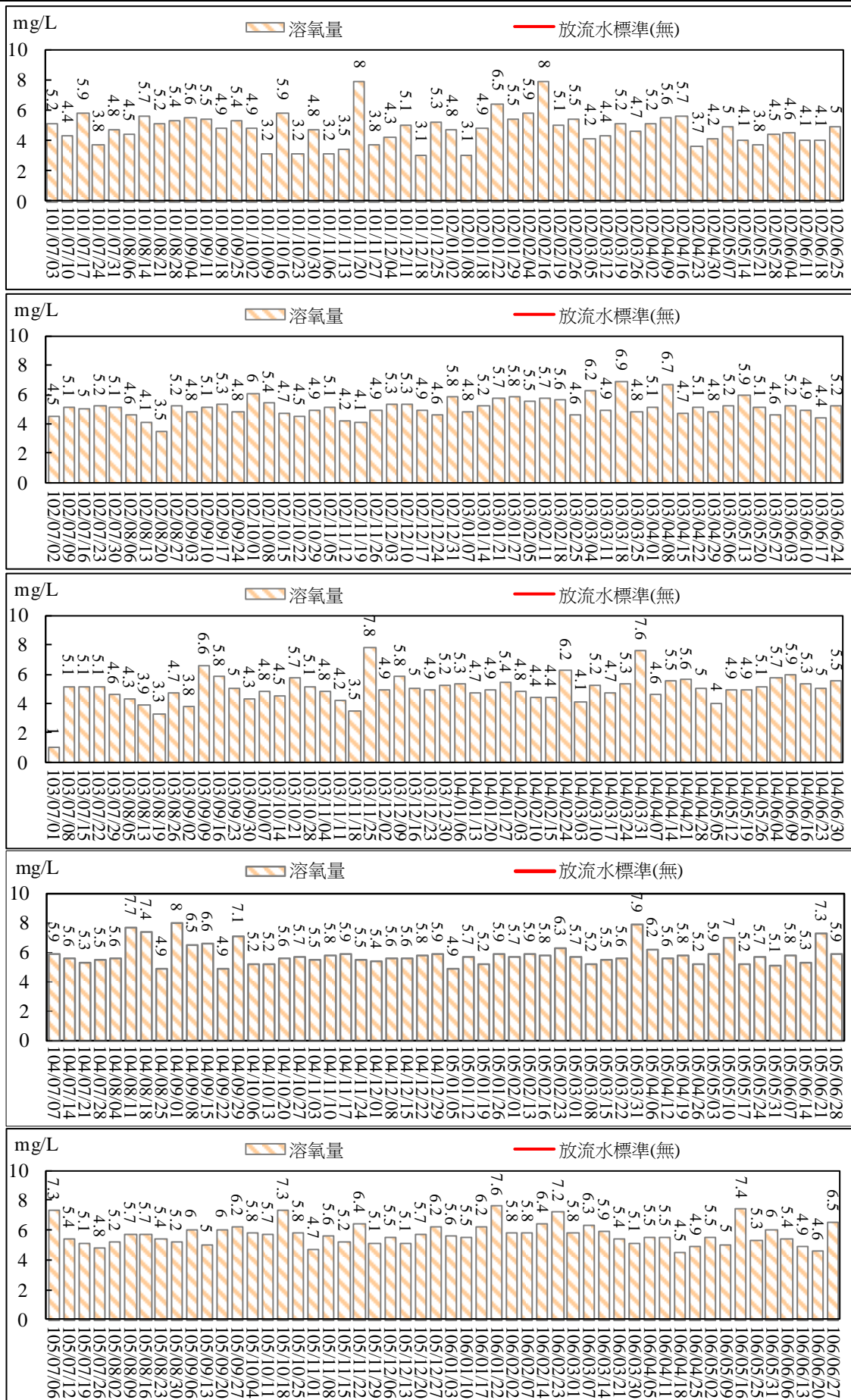


圖 2.36 污水處理廠放流口放流水質監測結果比較圖(導電度)





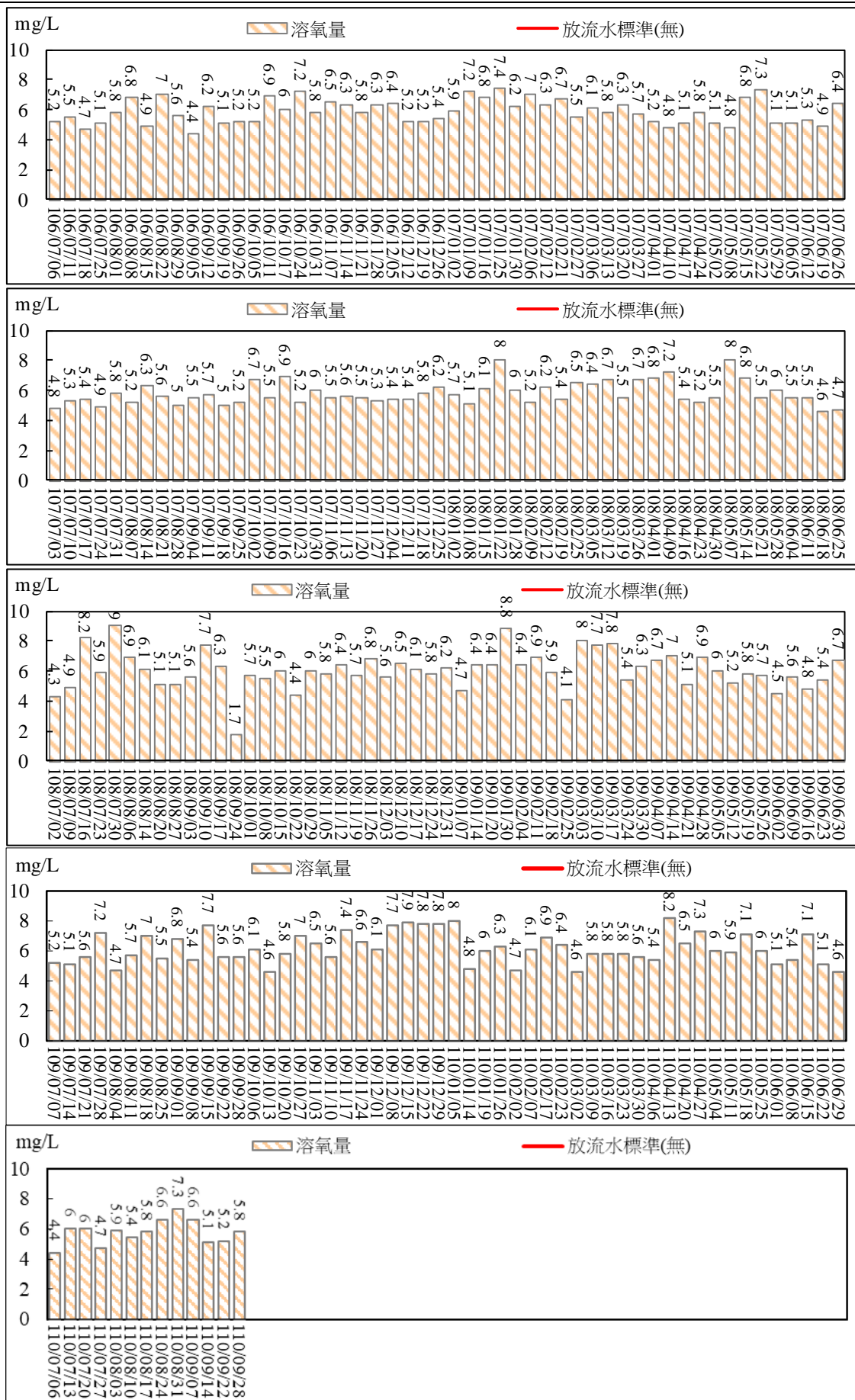
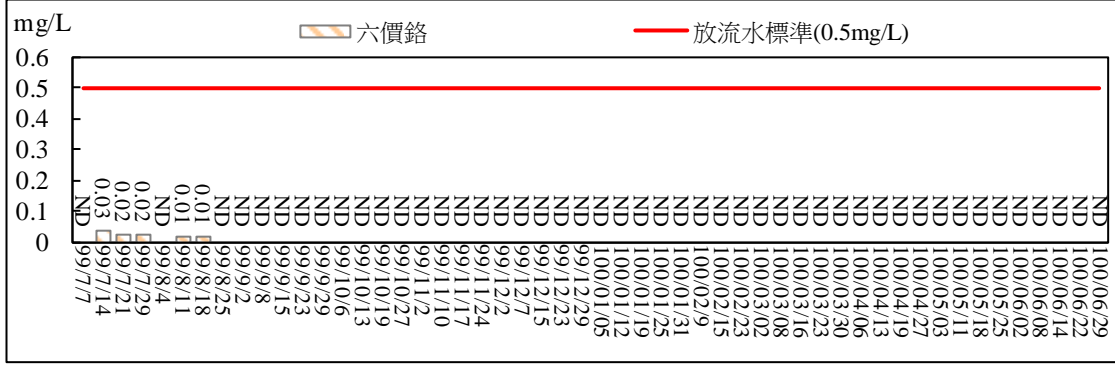
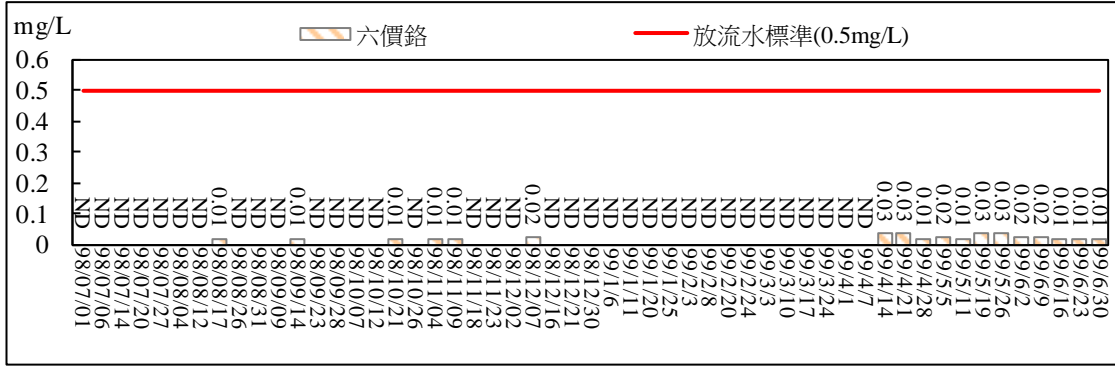
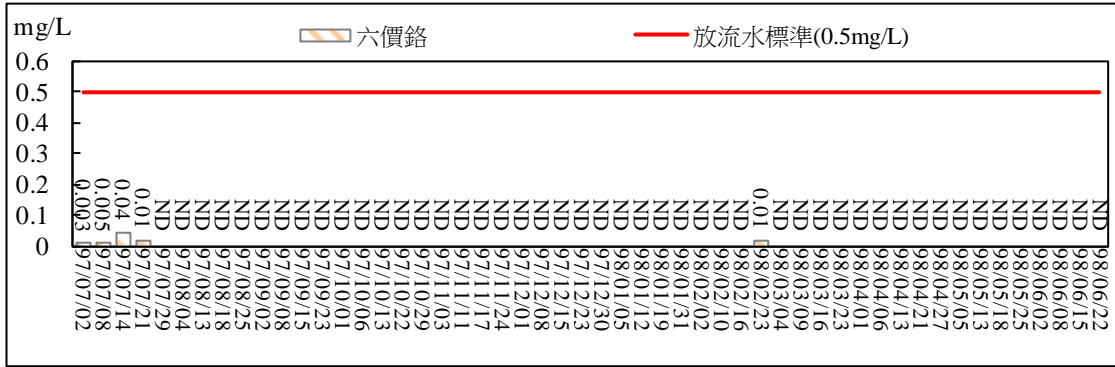
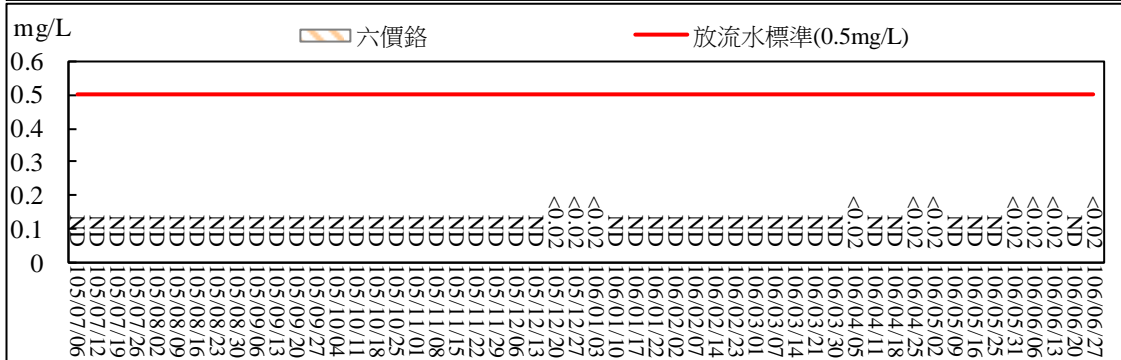
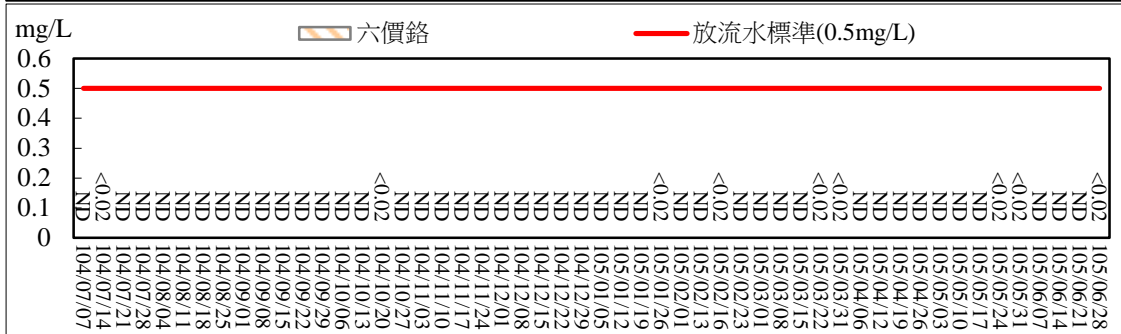
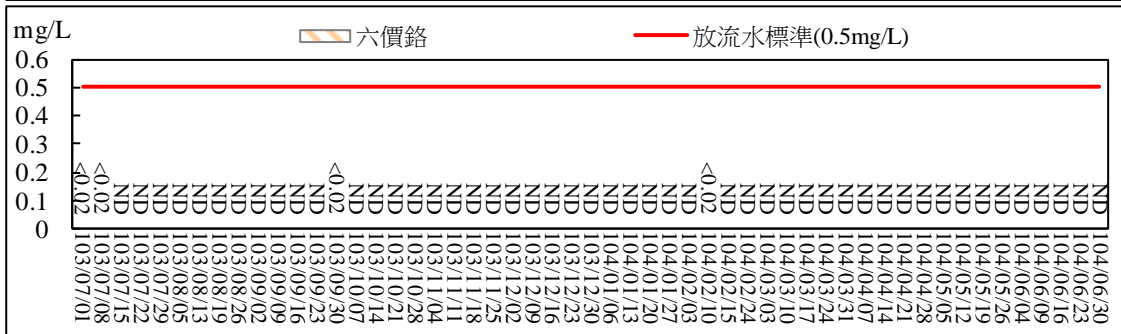
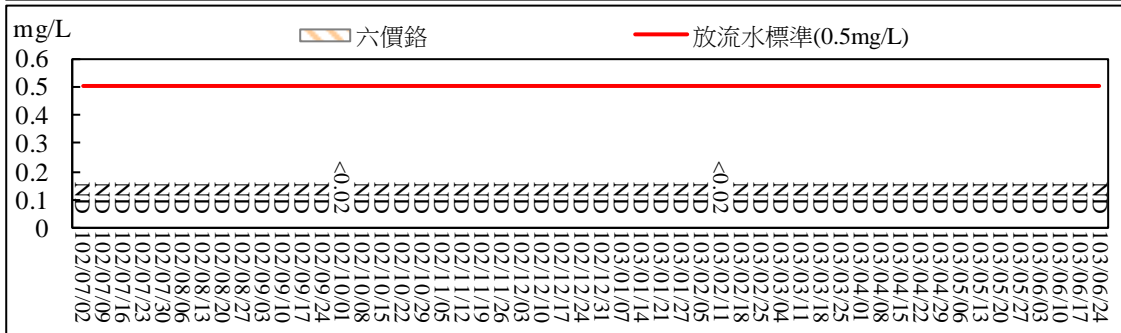
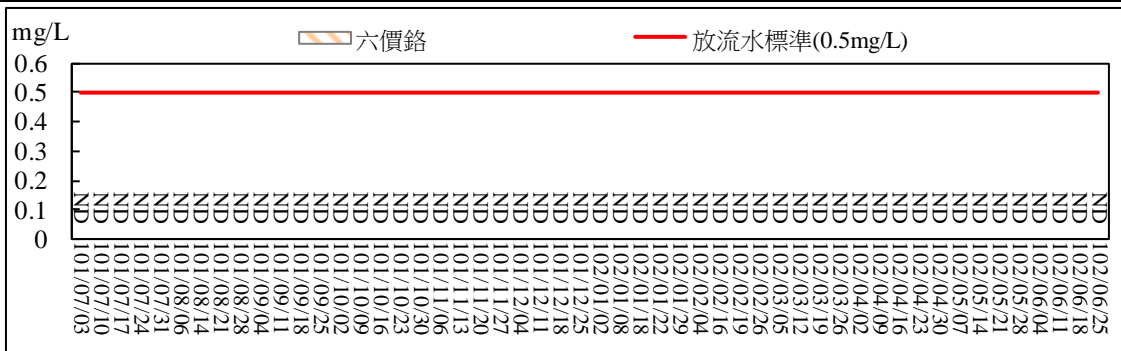


圖 2.37 污水處理廠放流口放流水質監測結果比較圖(溶氧量)





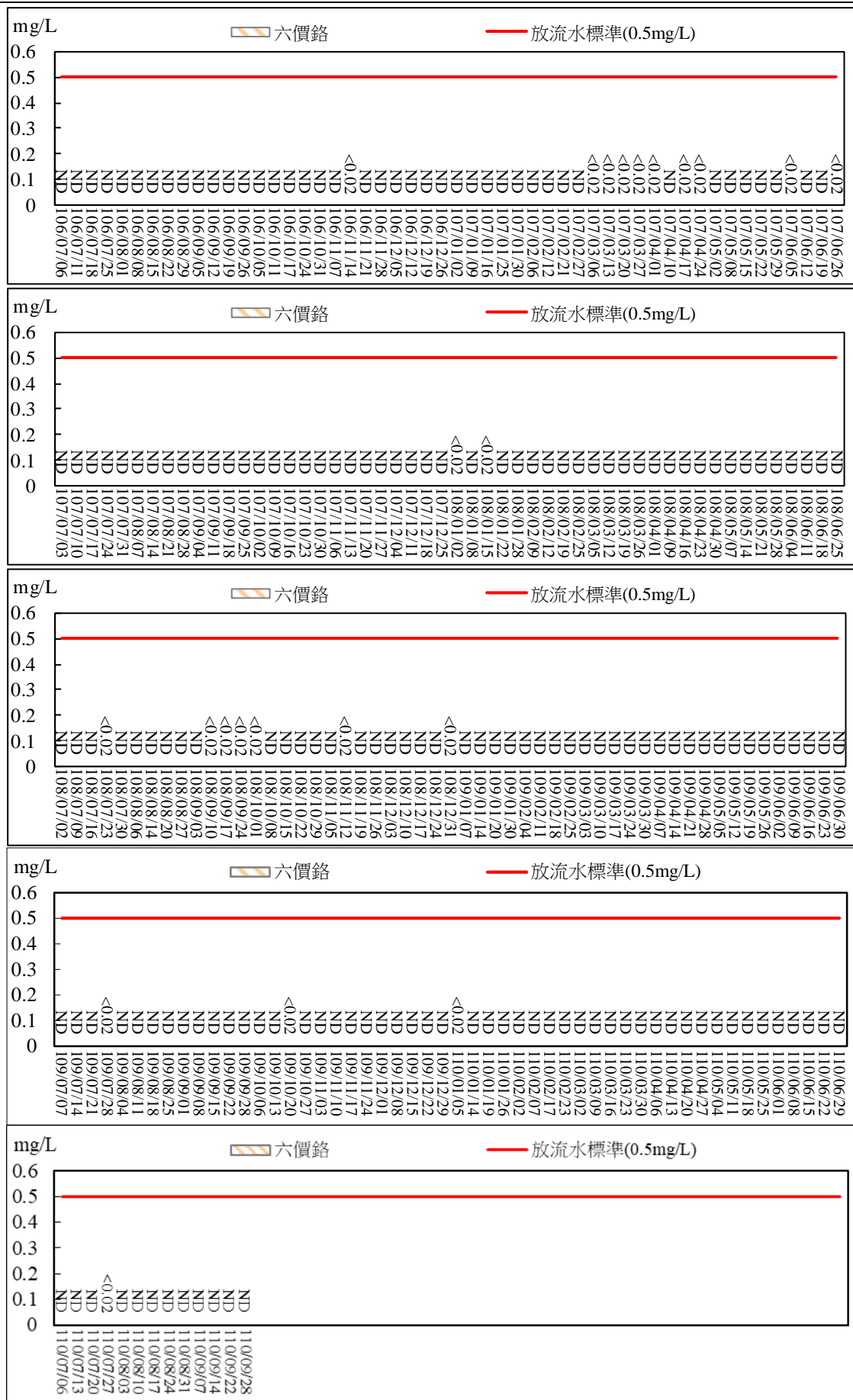
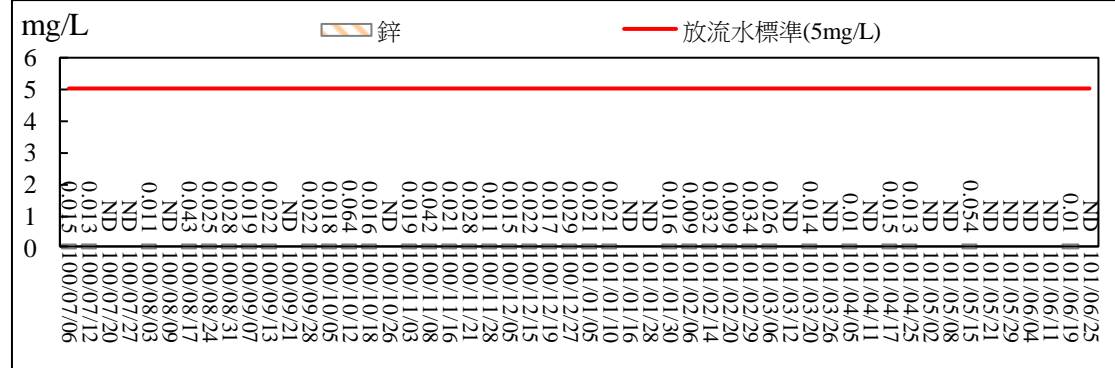
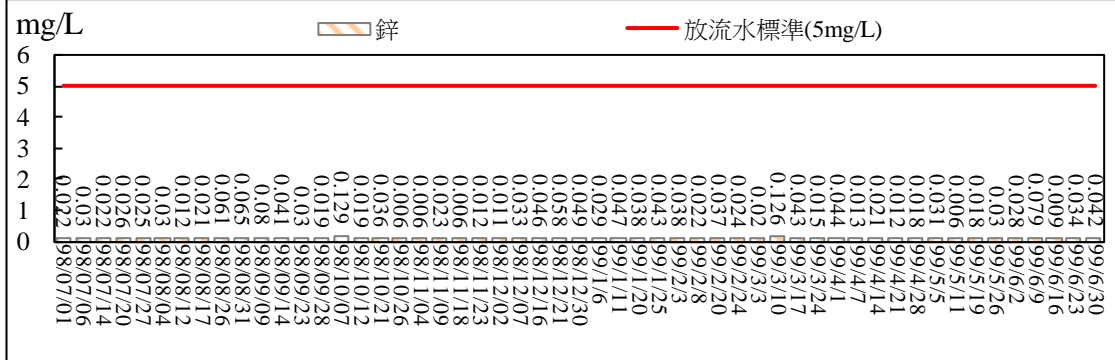
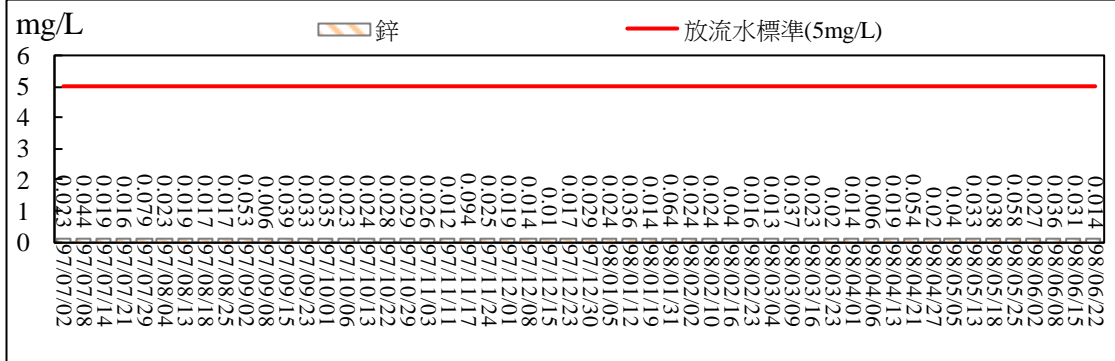
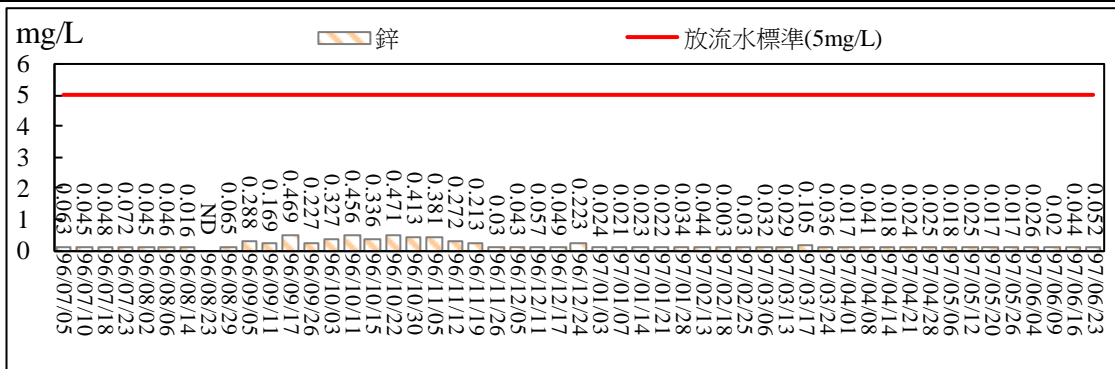
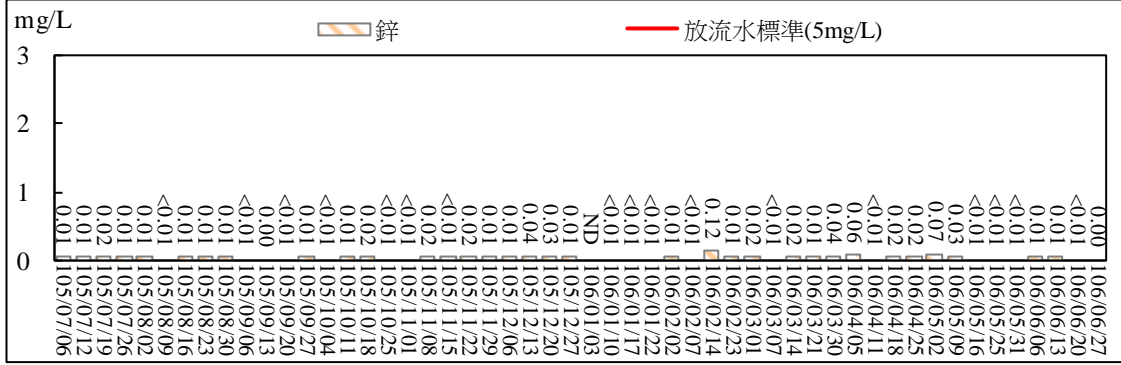
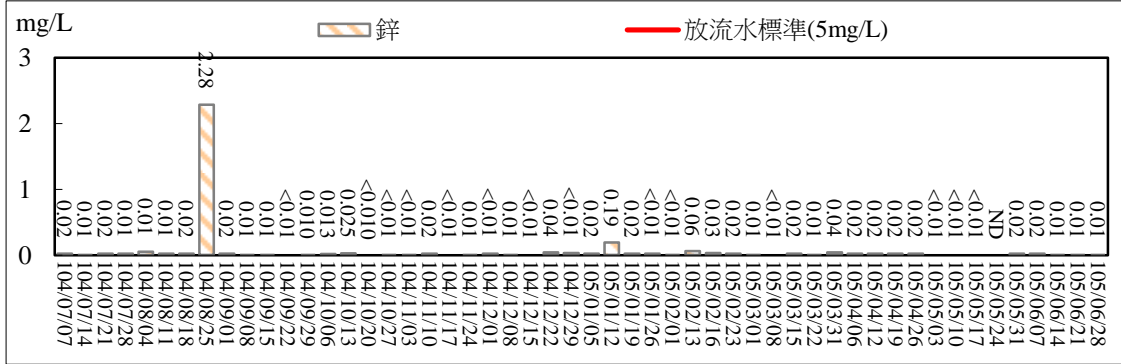
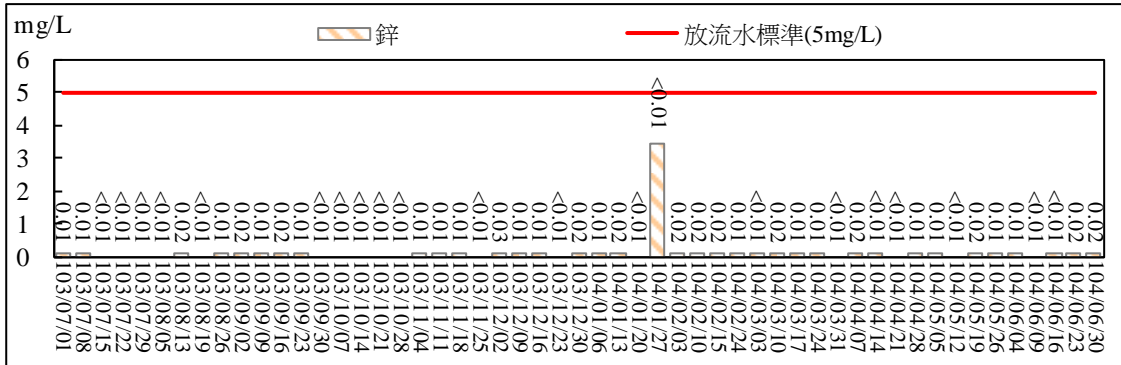
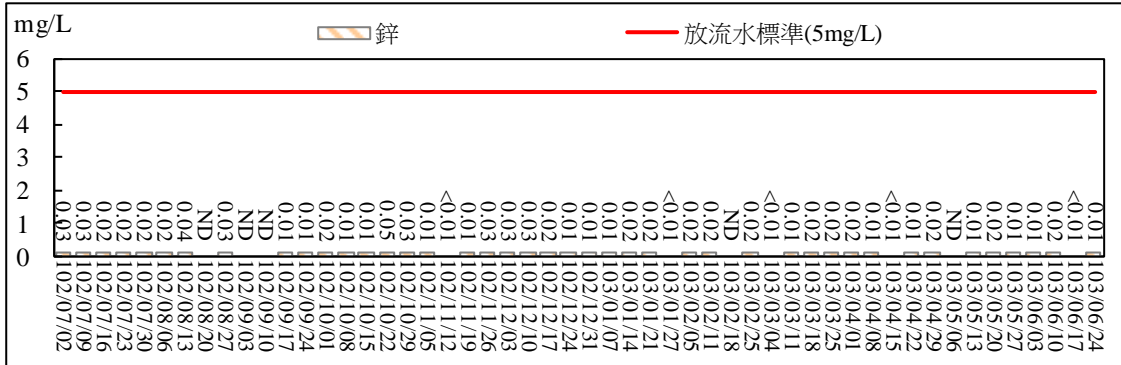
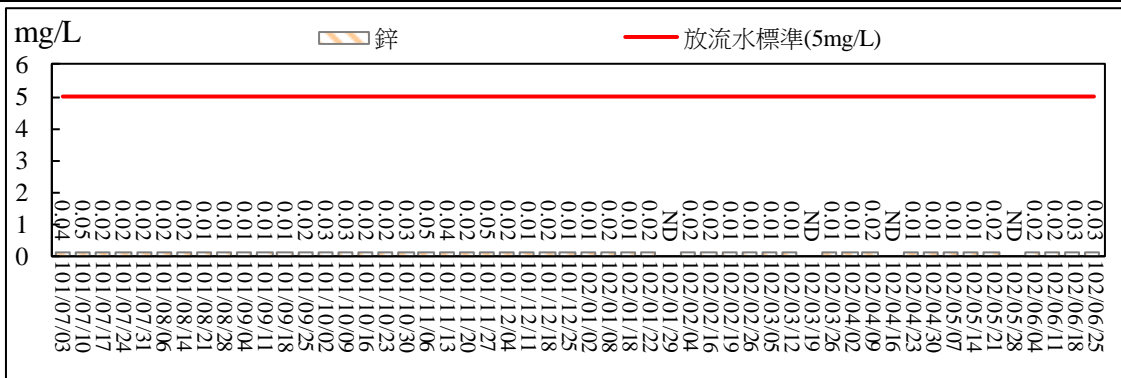


圖 2.38 污水處理廠放流口放流水質監測結果比較圖(六價鉻)





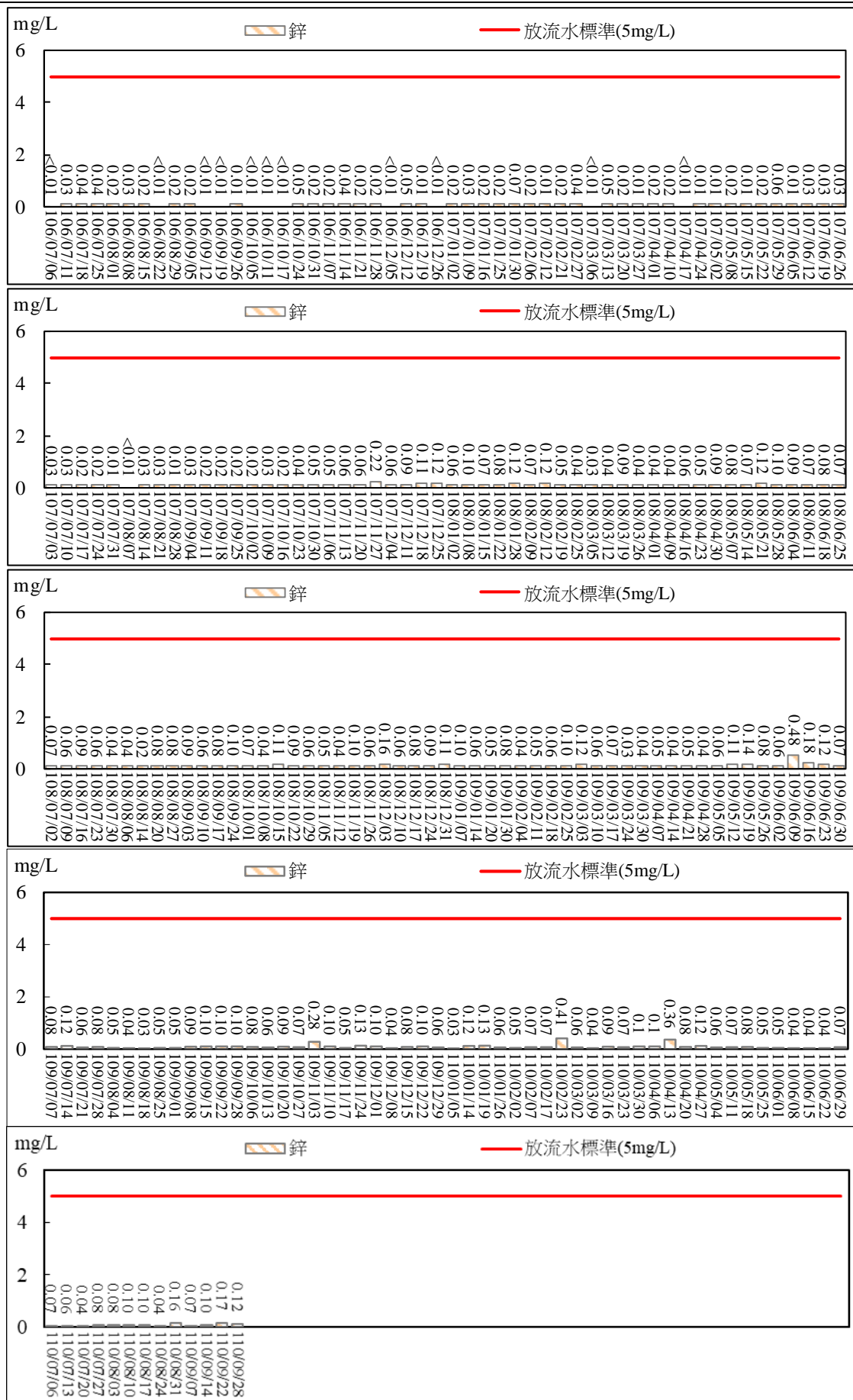
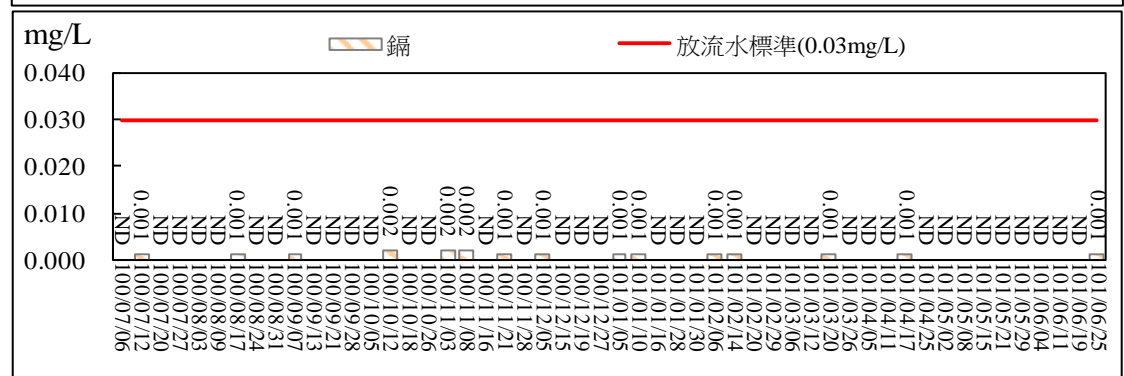
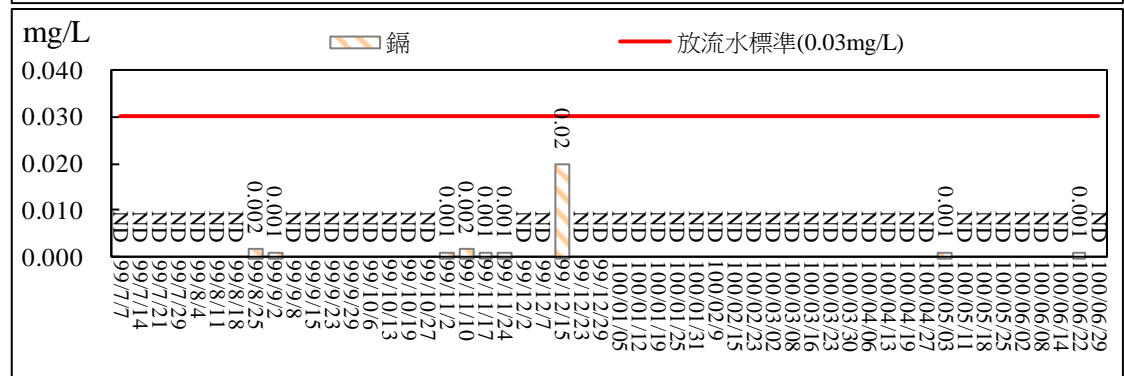
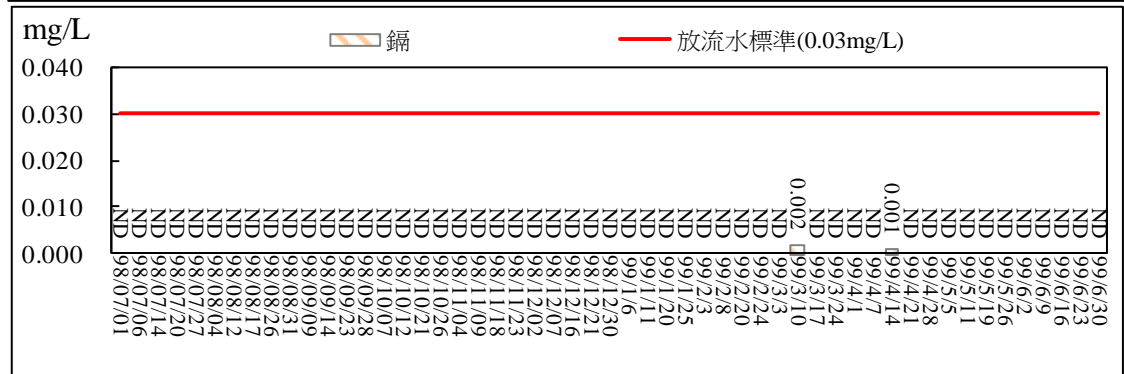
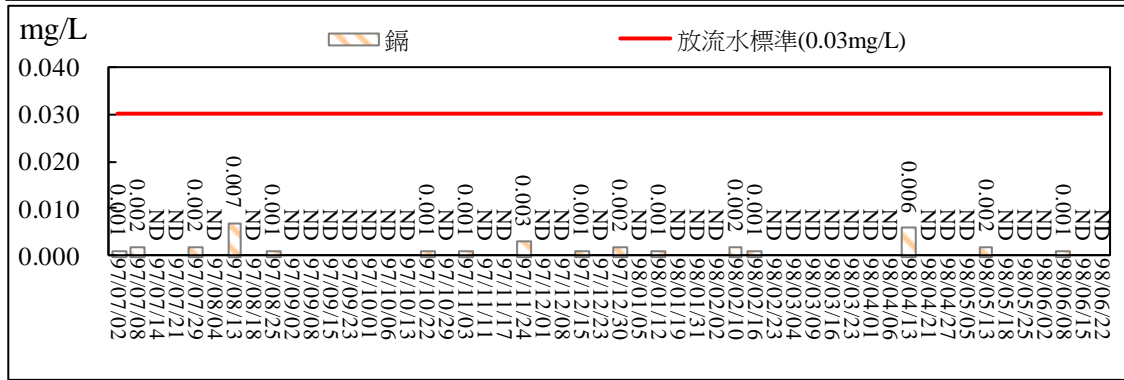
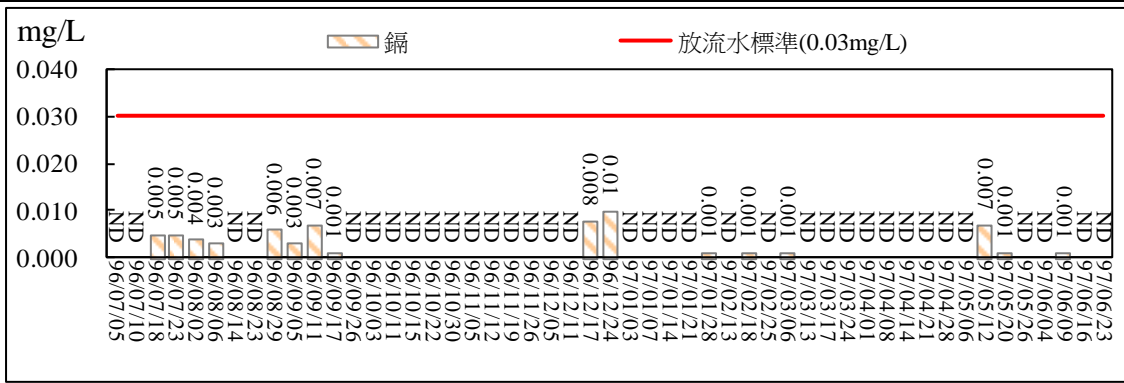
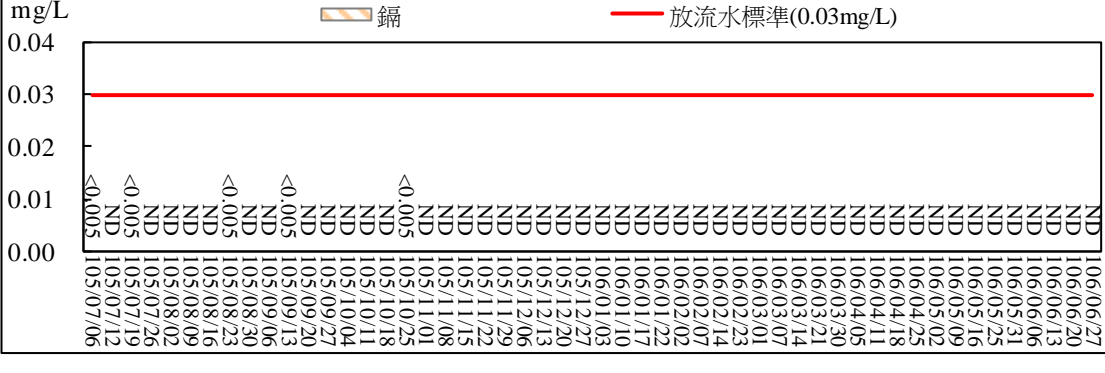
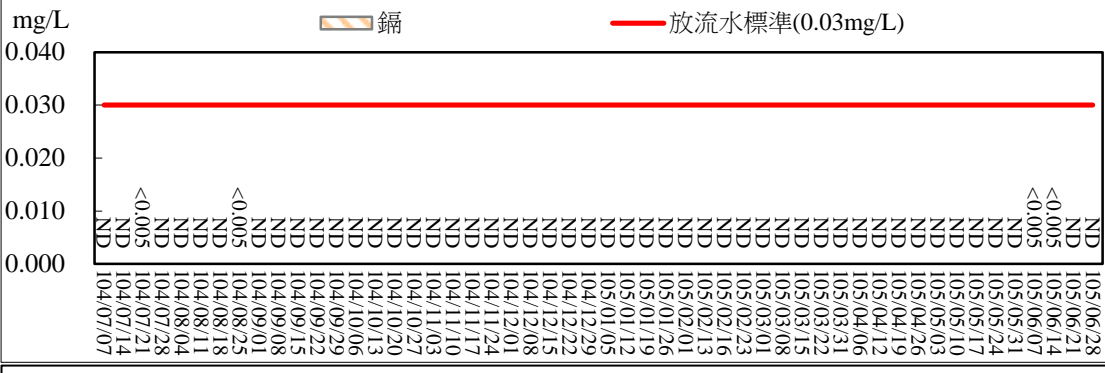
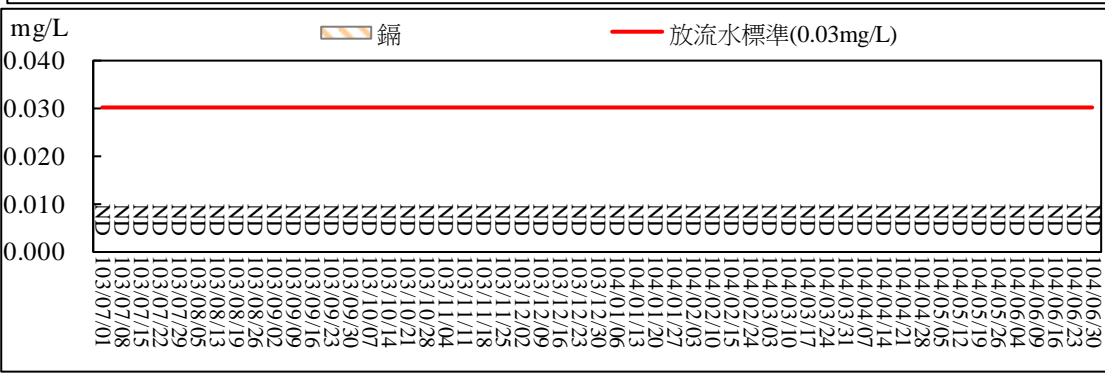
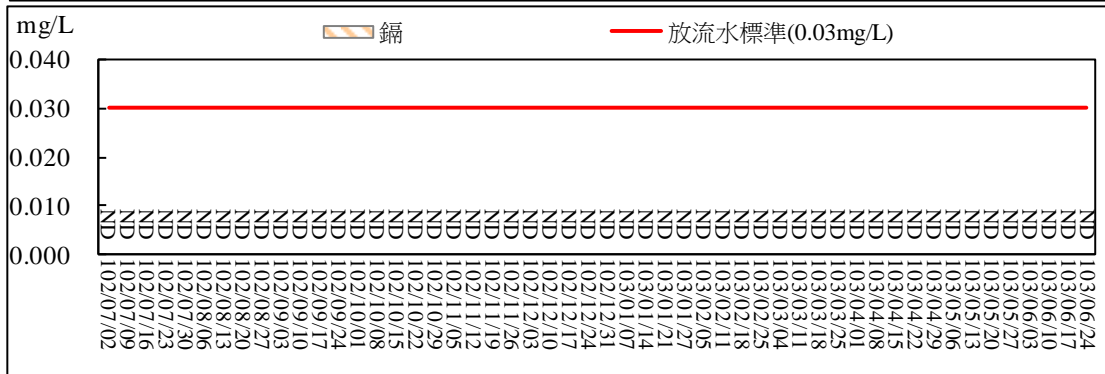
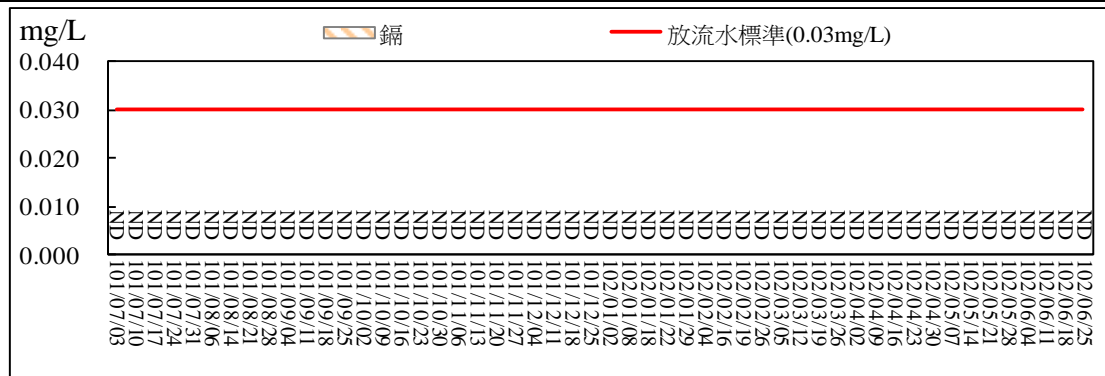


圖 2.39 污水處理廠放流口放流水質監測結果比較圖(鋅)





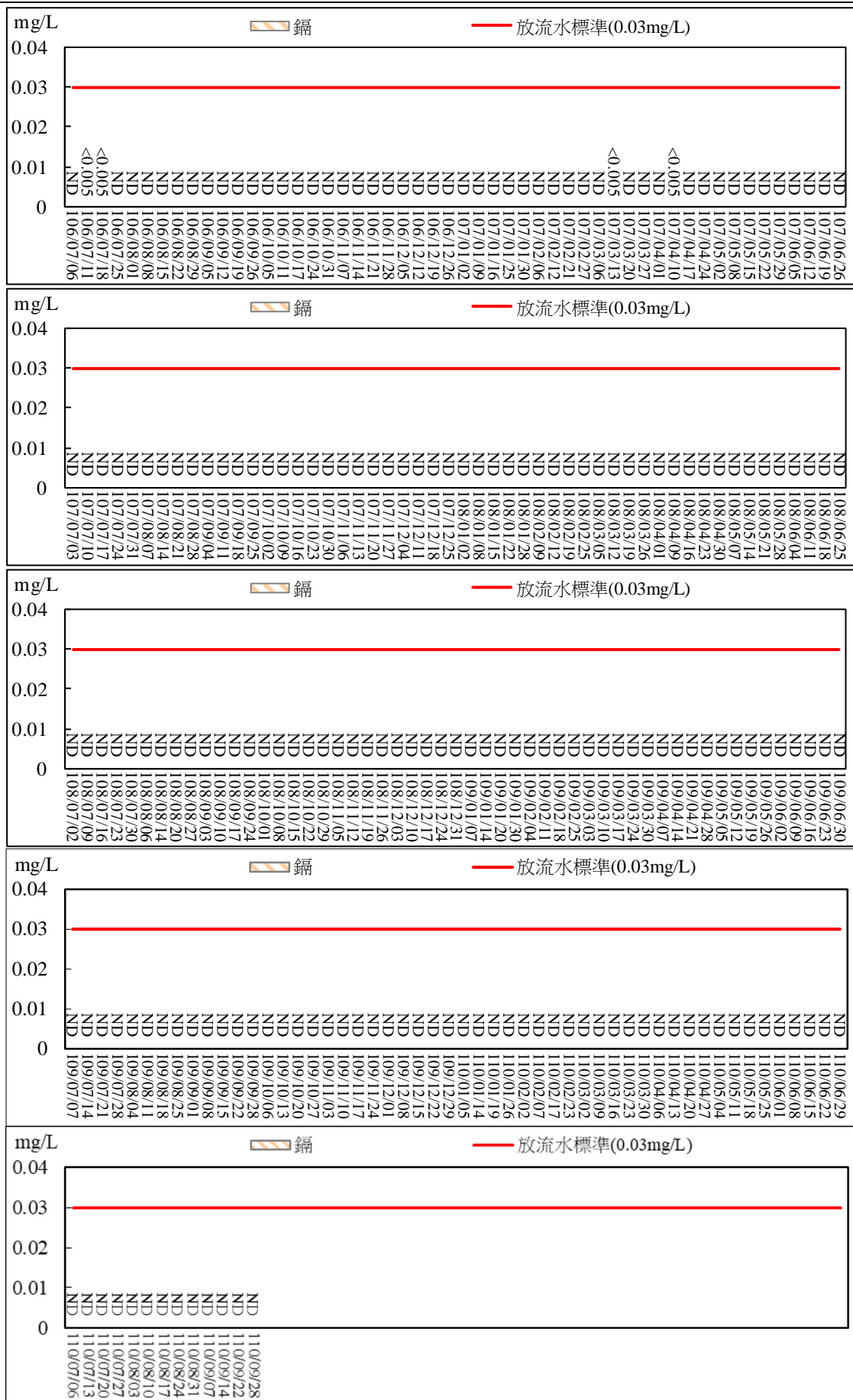
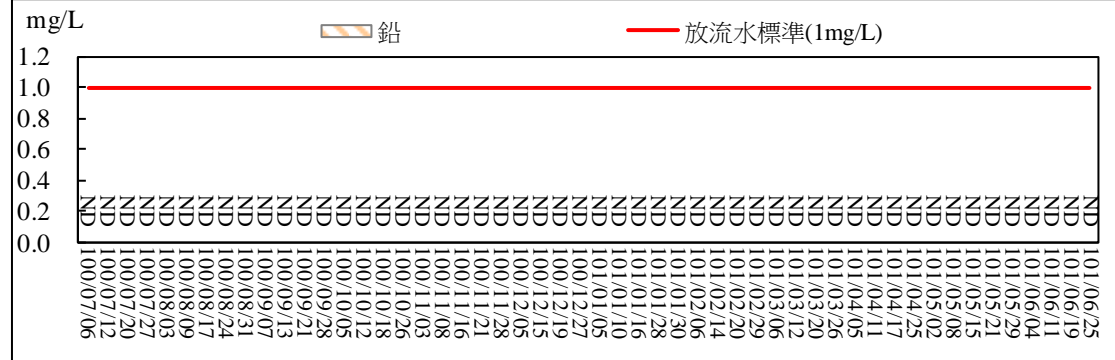
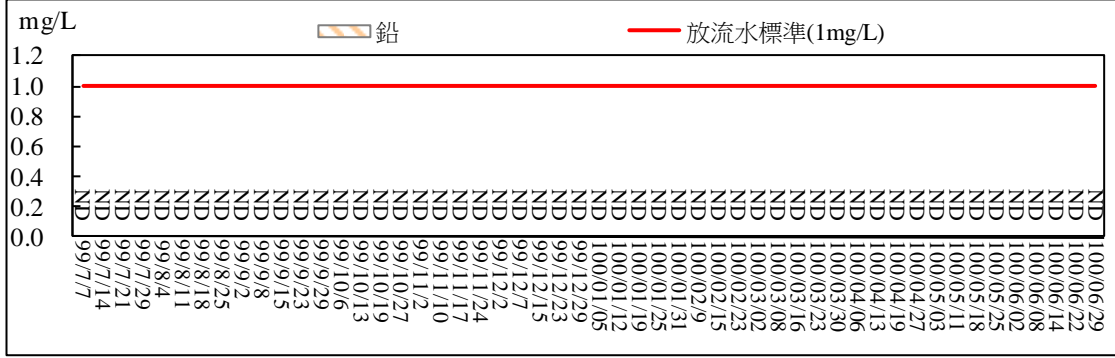
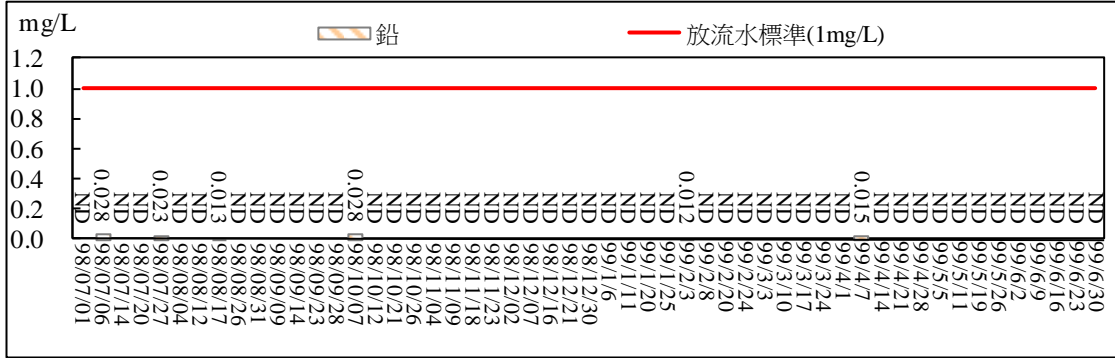
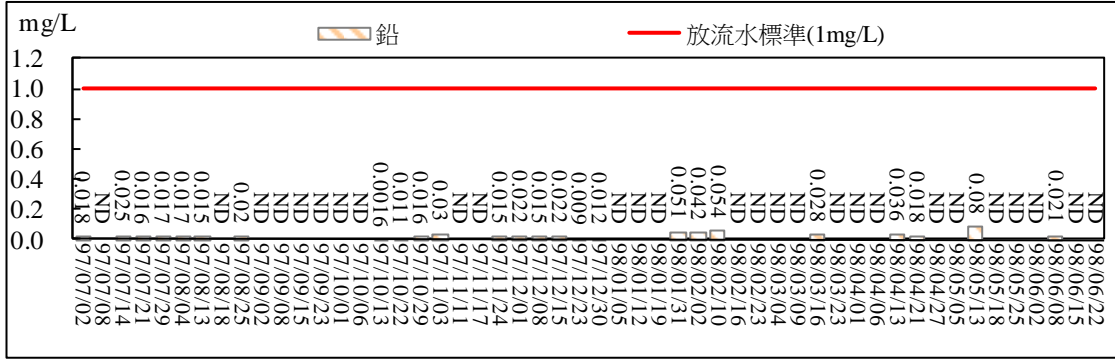
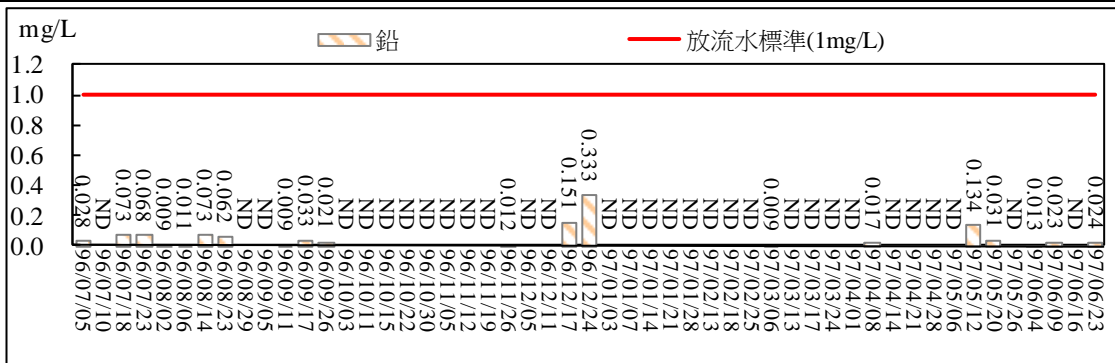
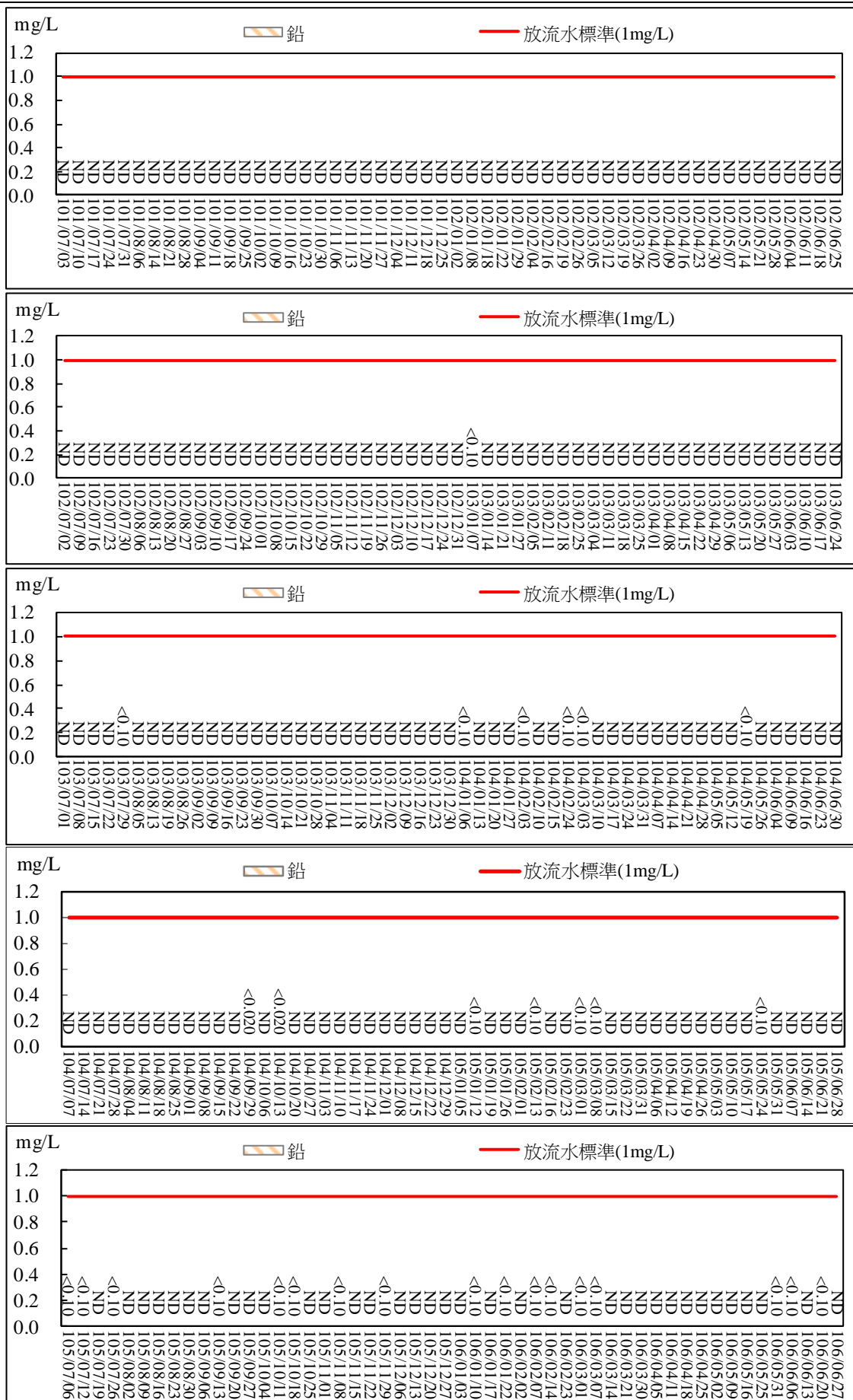


圖 2.40 污水處理廠放流口放流水質監測結果比較圖(鎘)





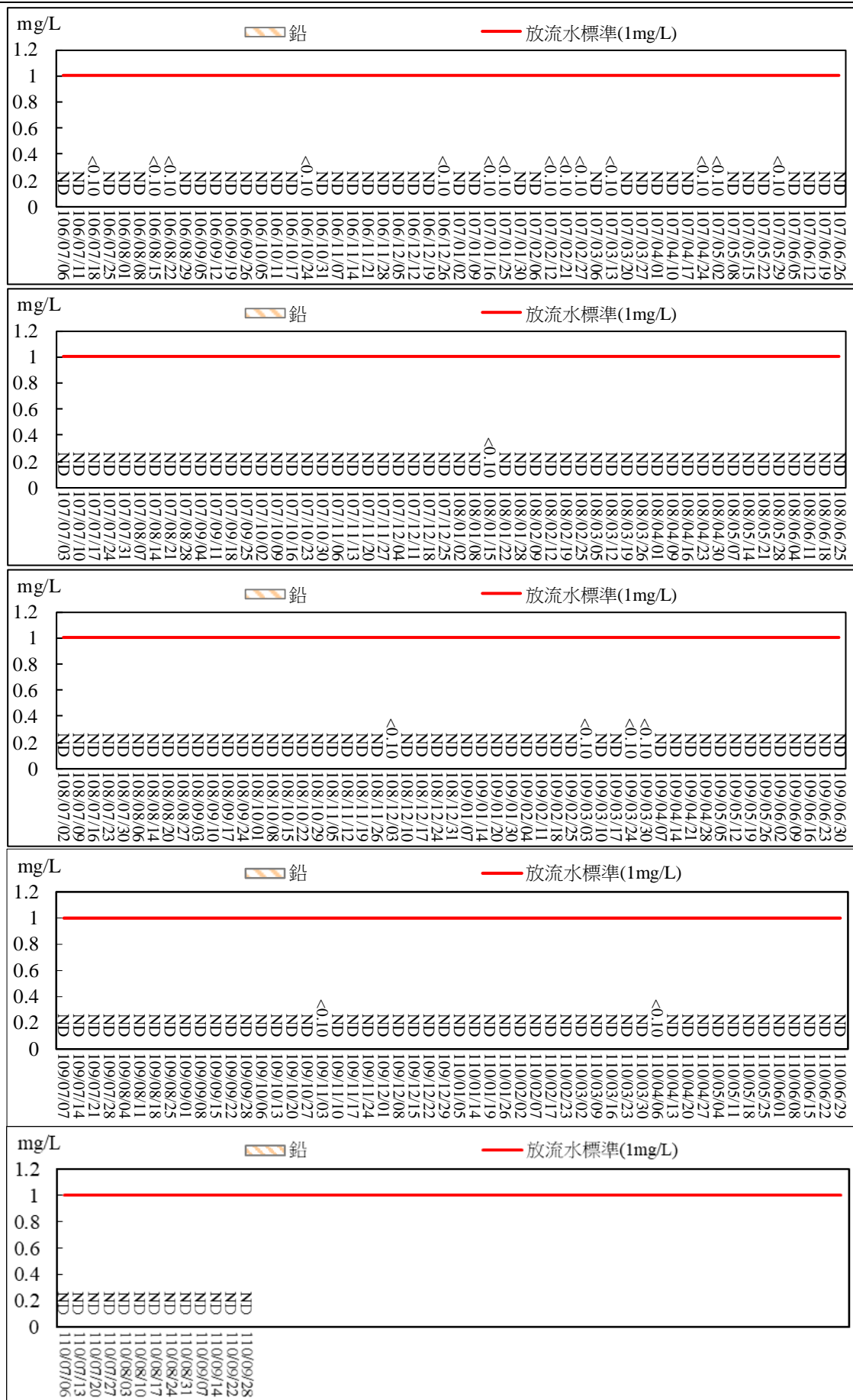
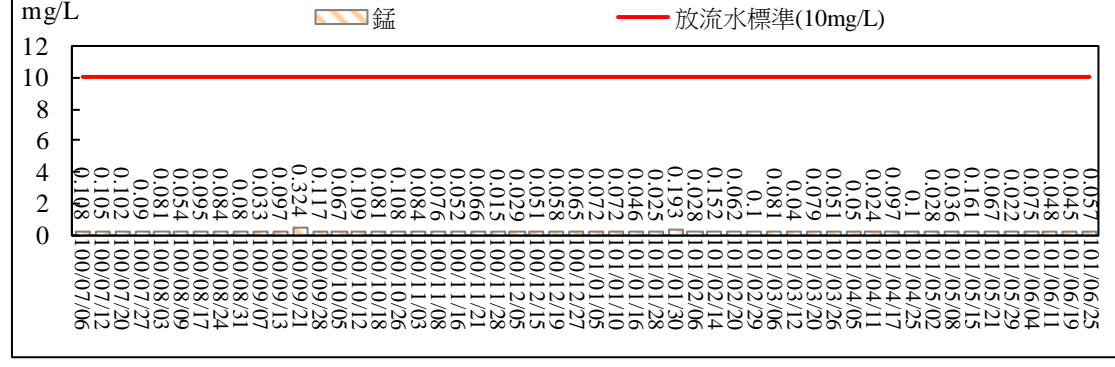
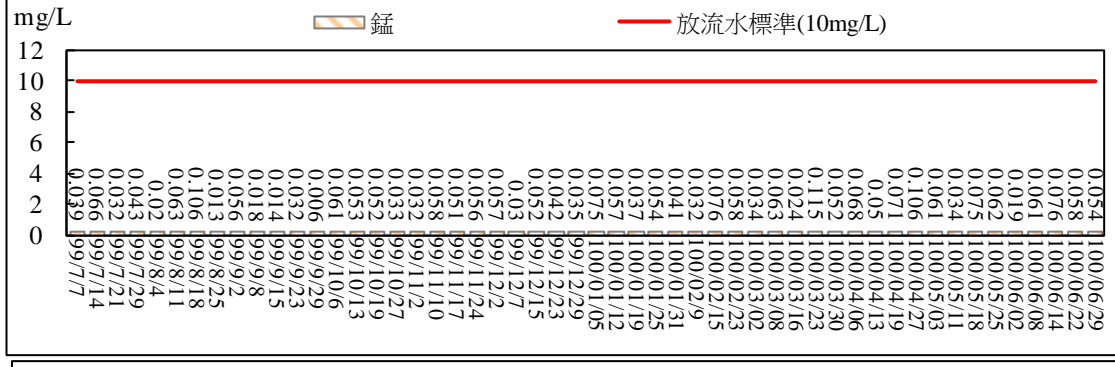
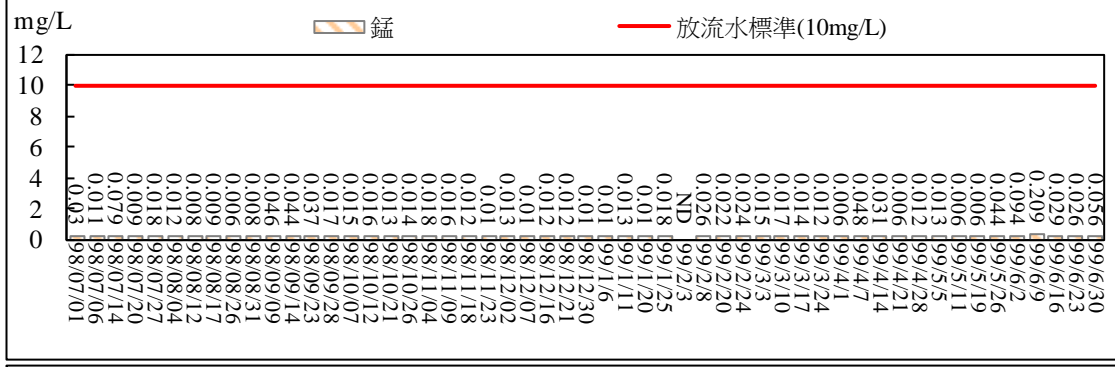
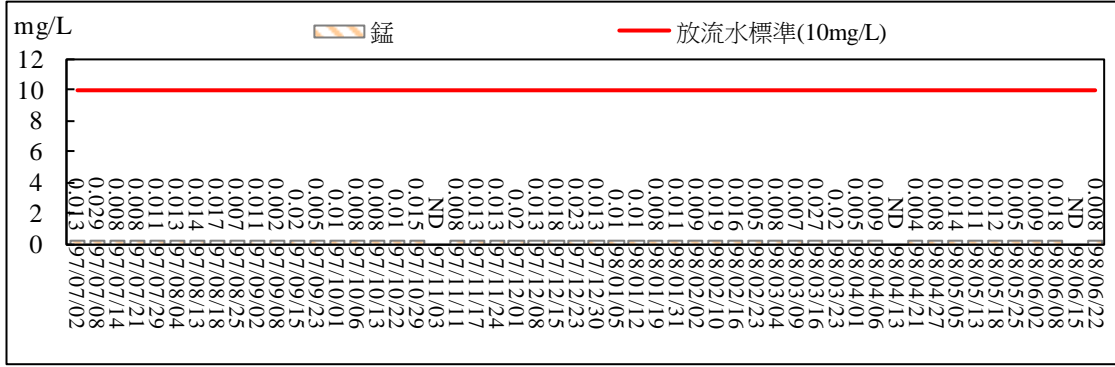
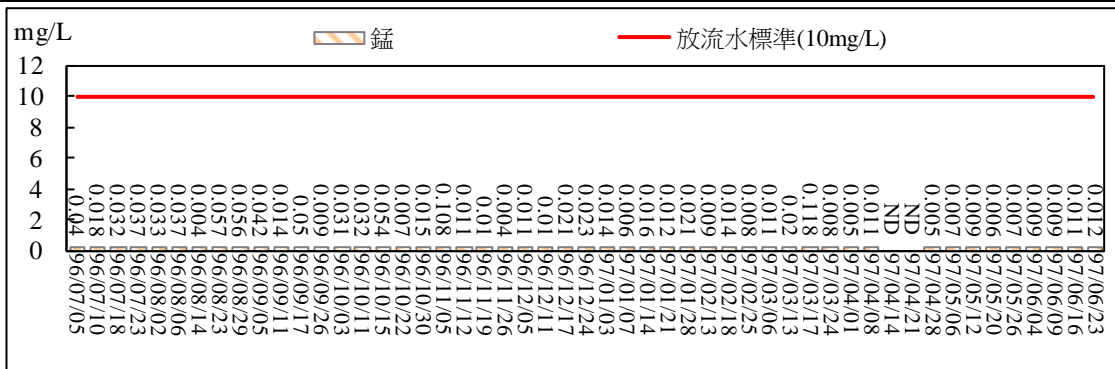
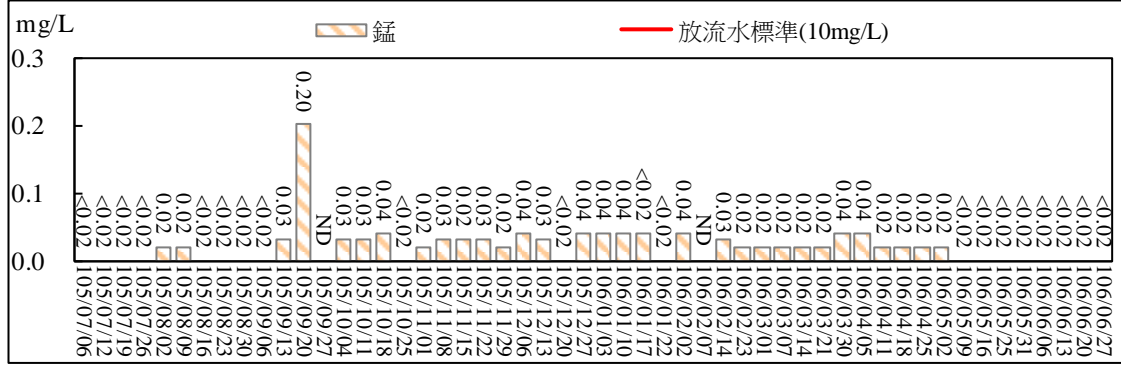
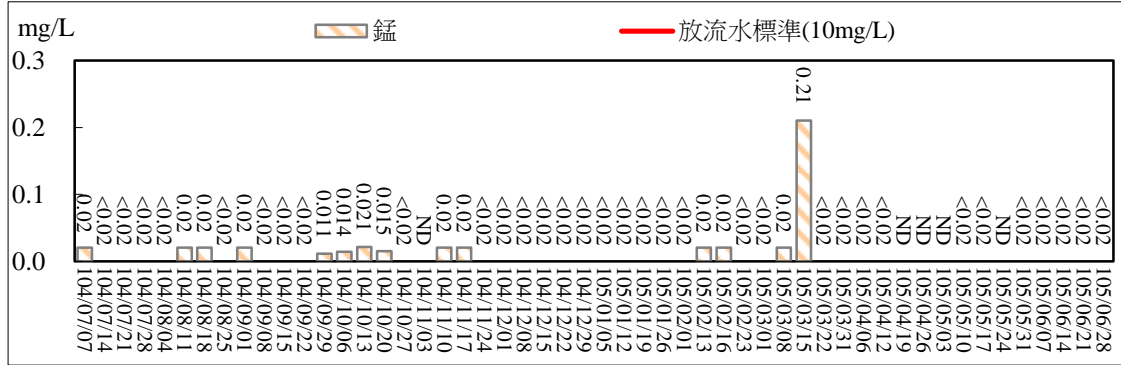
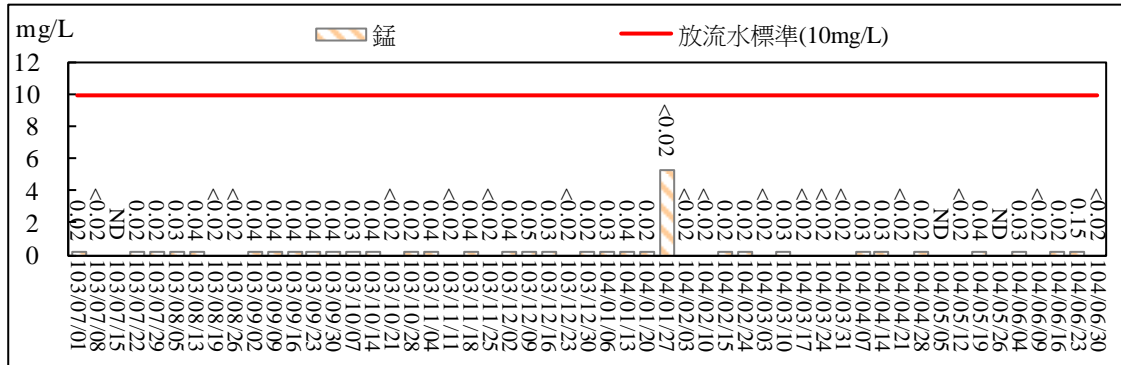
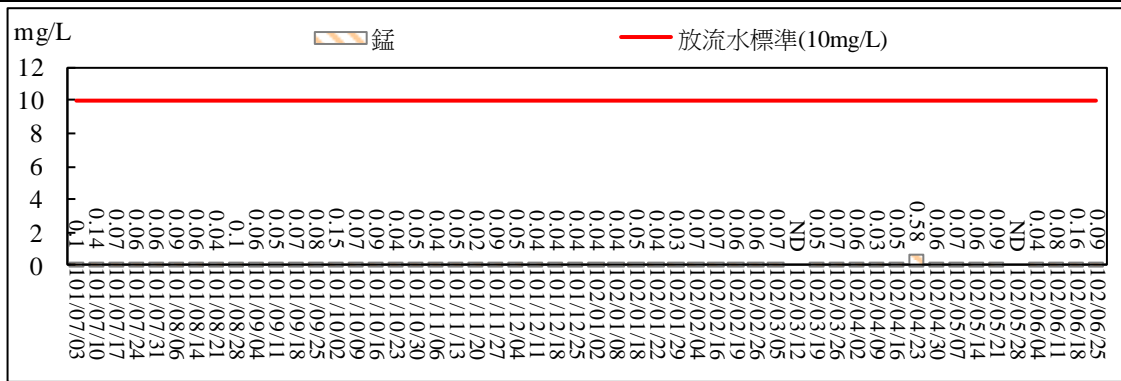


圖 2.41 污水處理廠放流口放流水質監測結果比較圖(鉛)





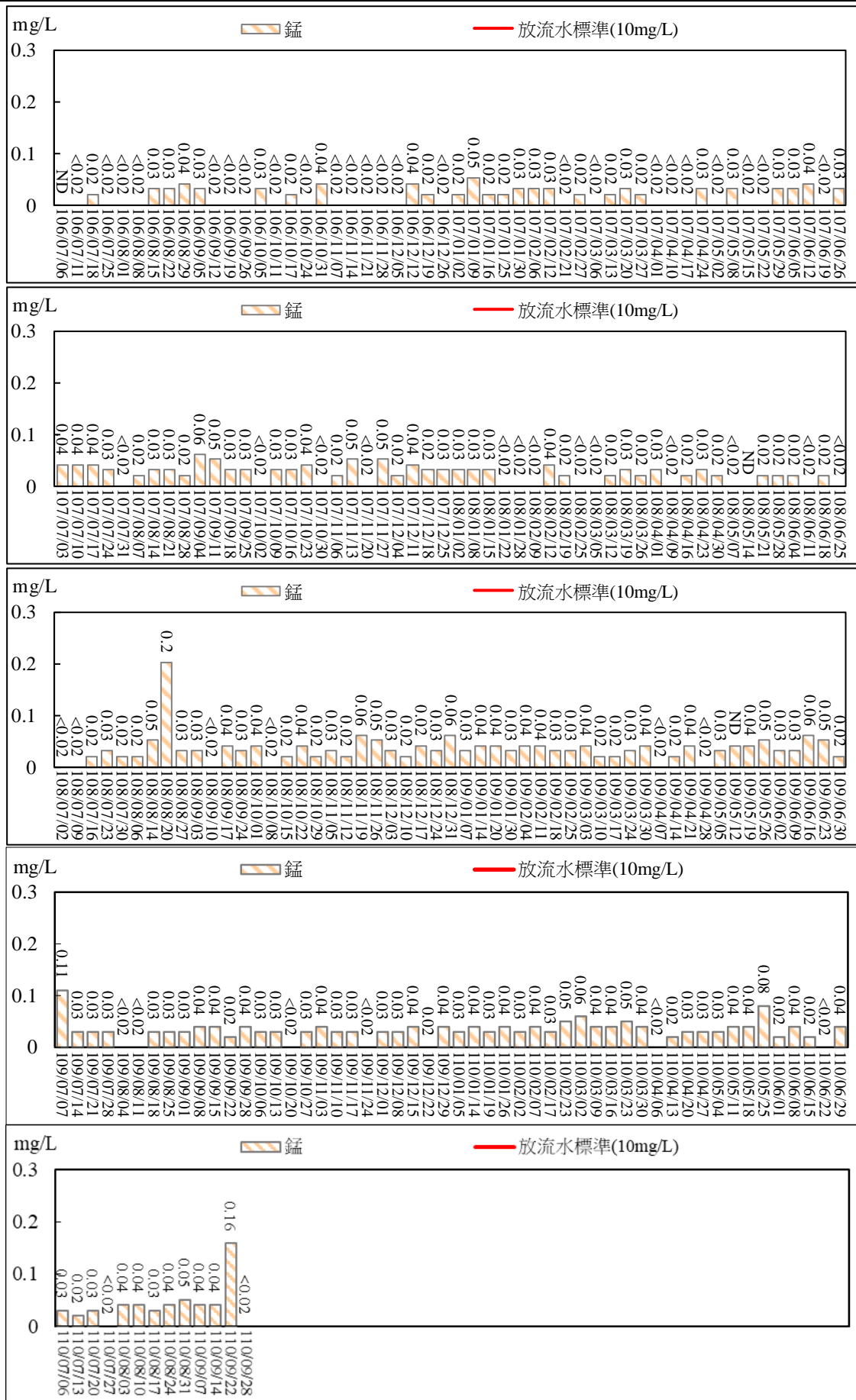
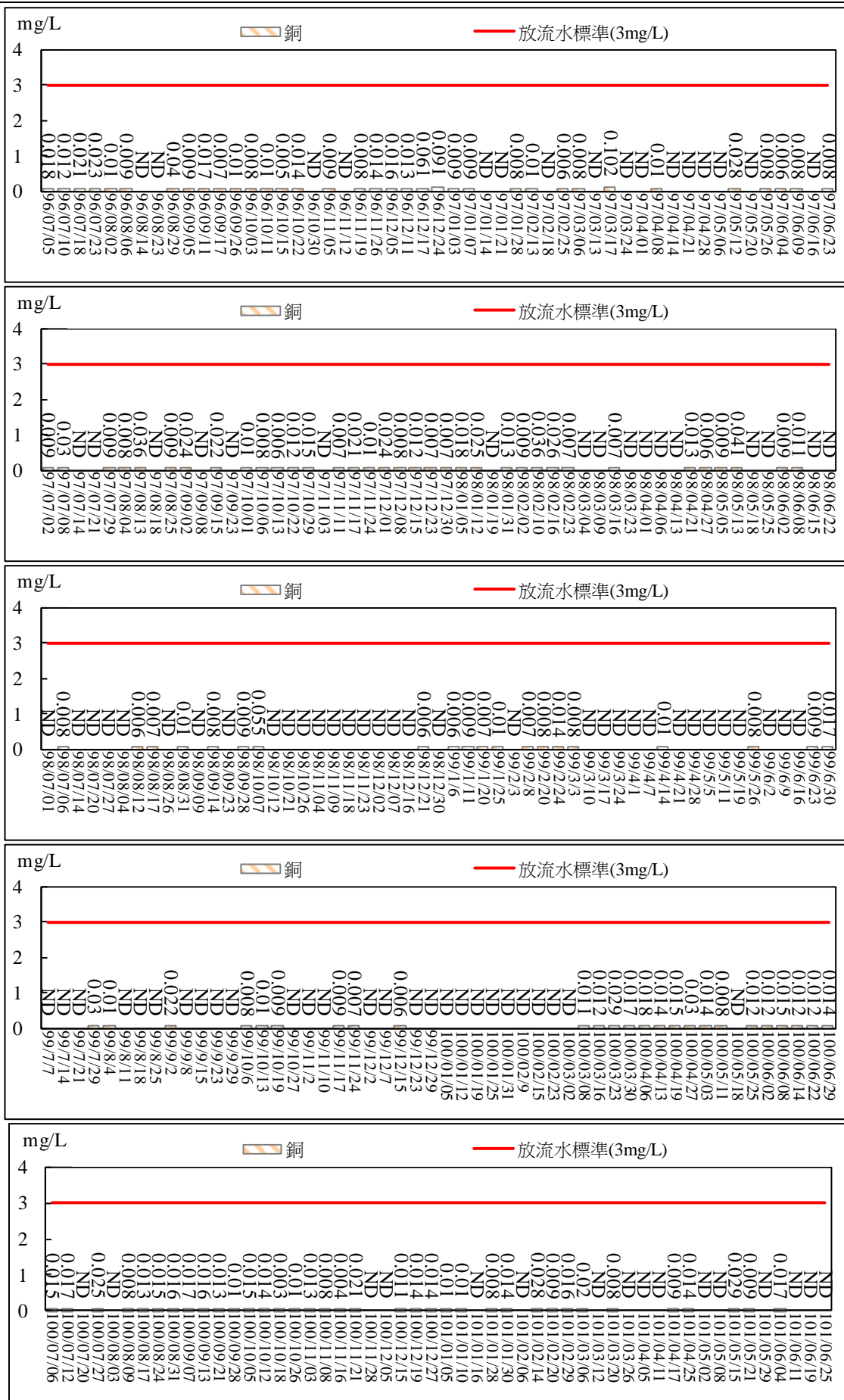
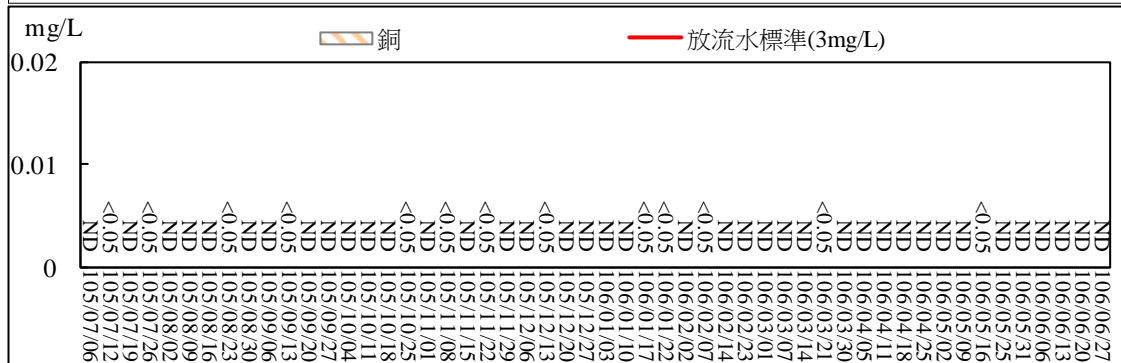
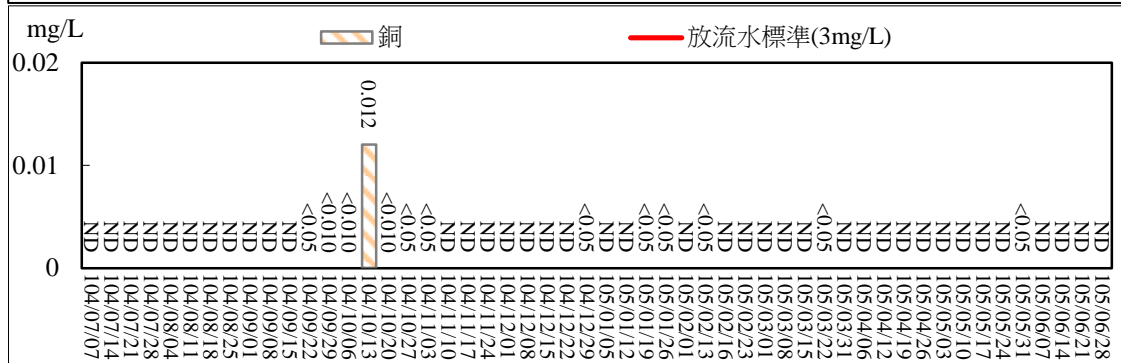
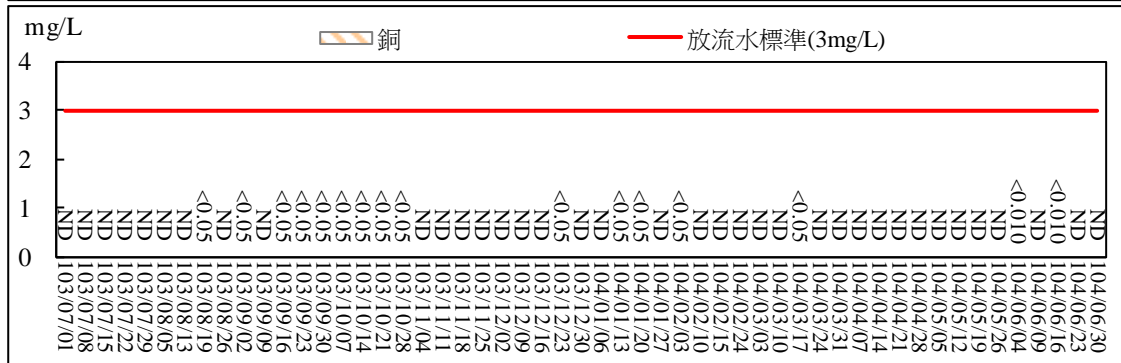
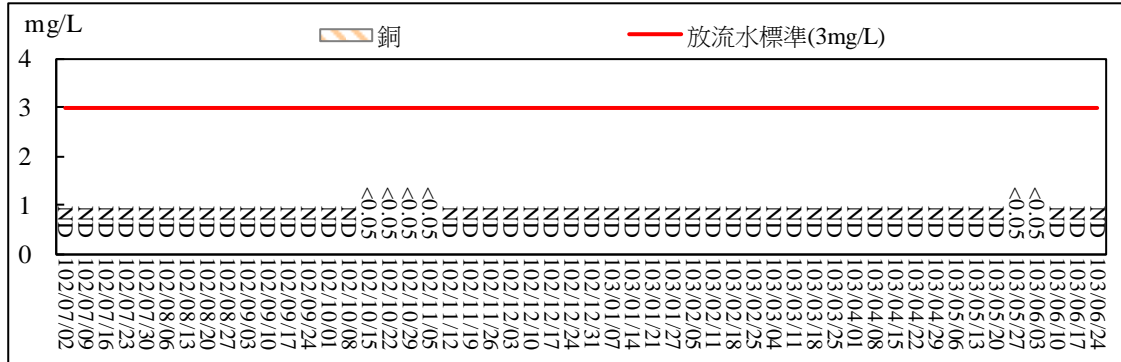
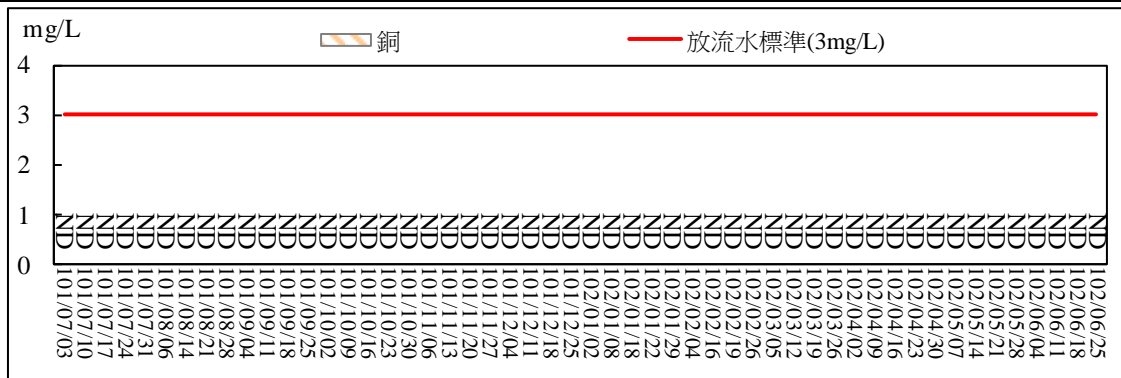


圖 2.42 污水處理廠放流口放流水質監測結果比較圖(錳)





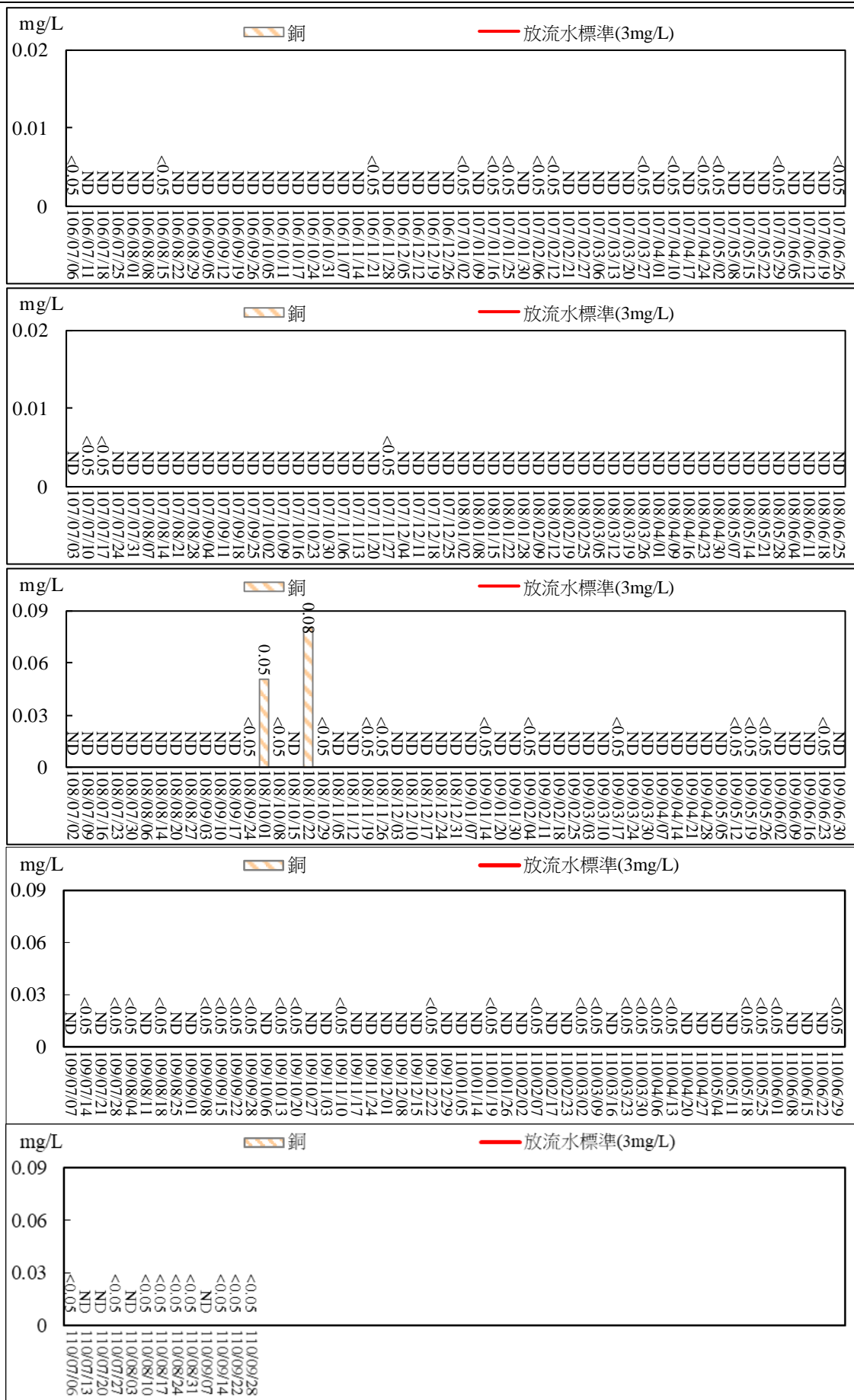
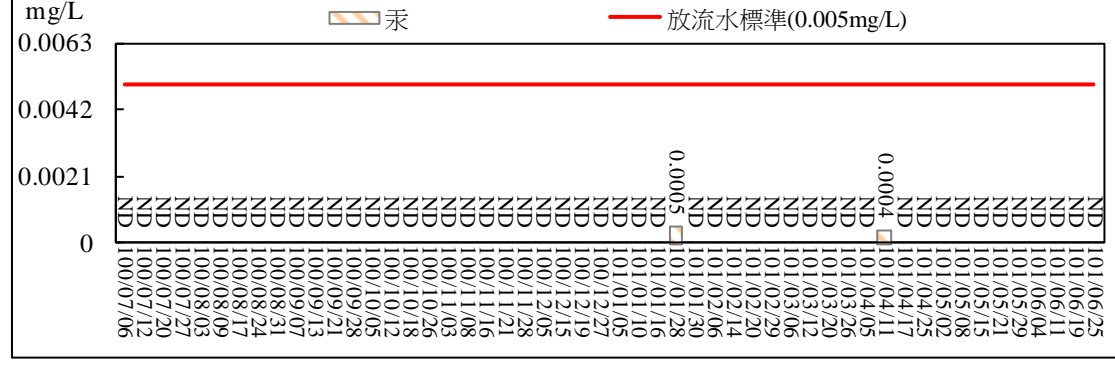
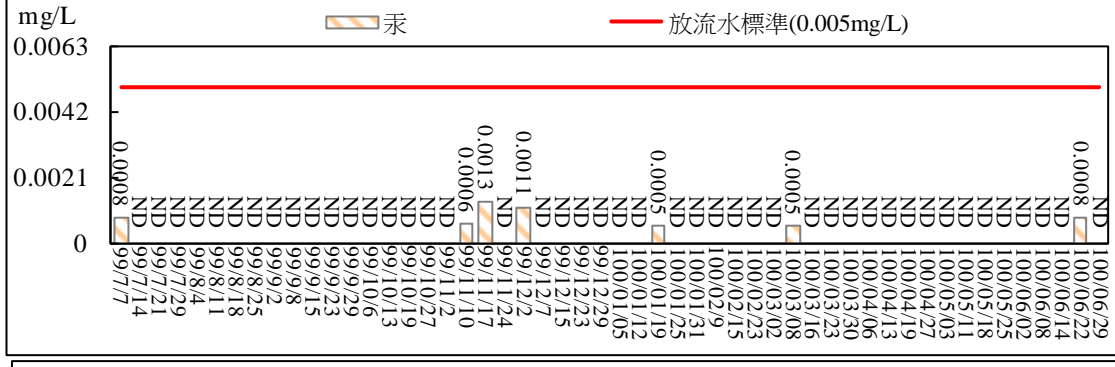
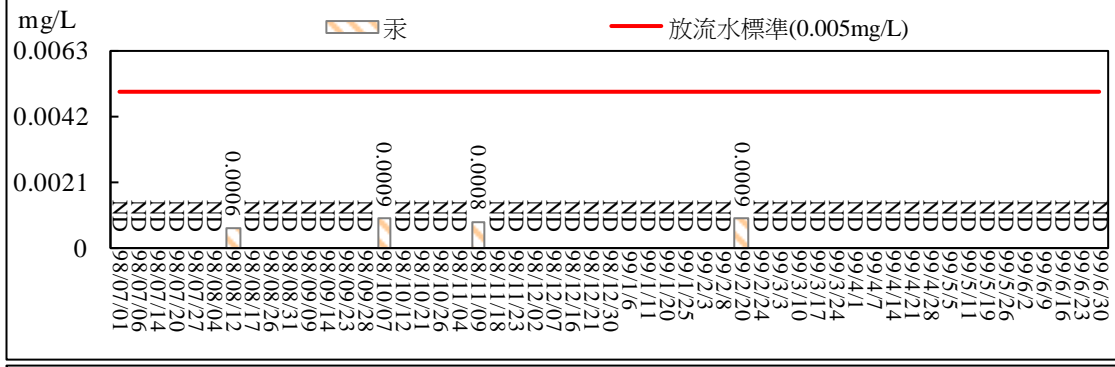
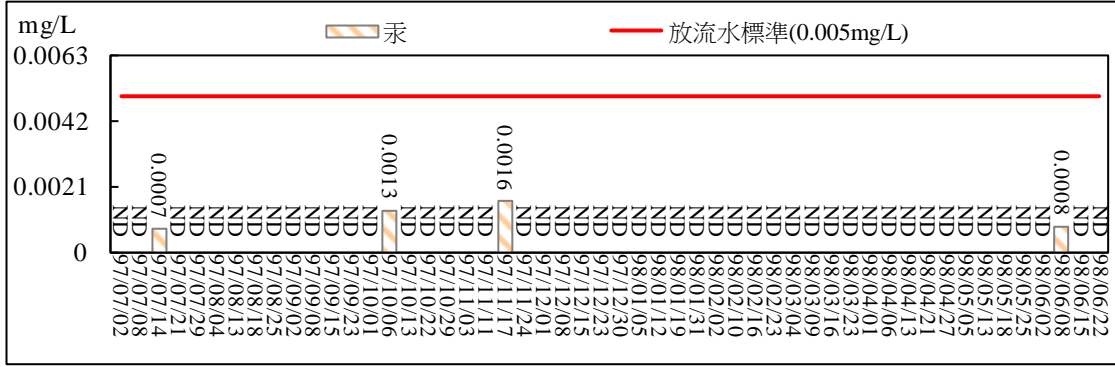
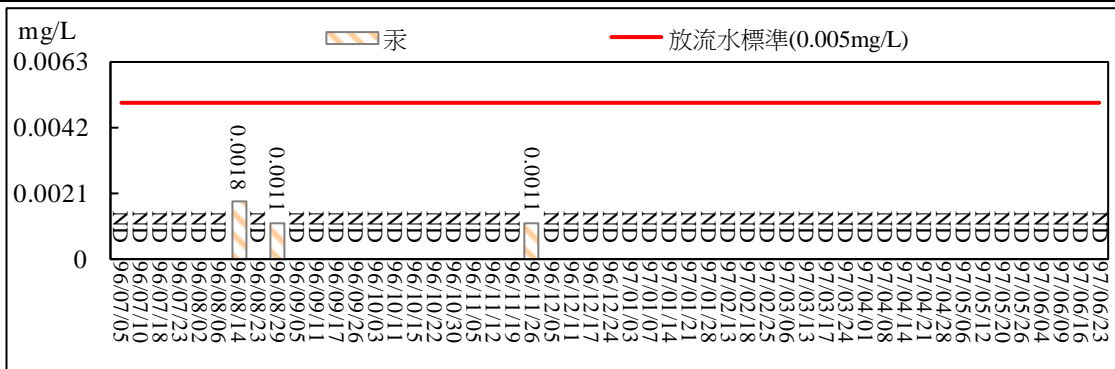
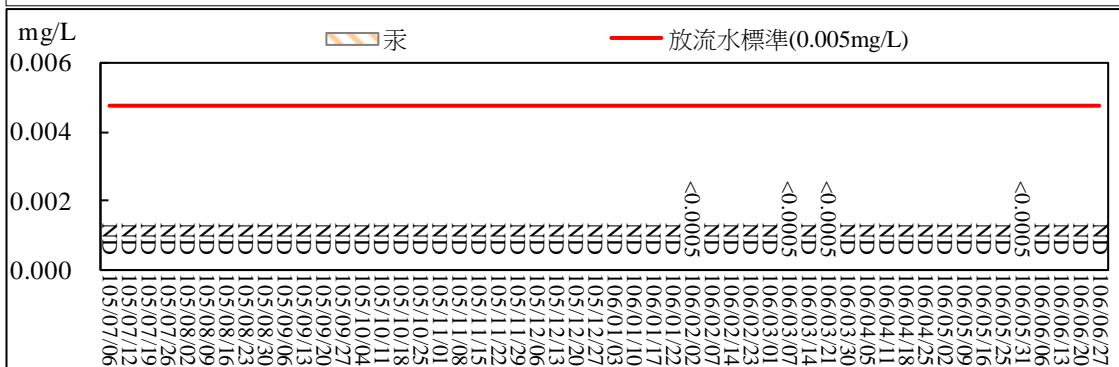
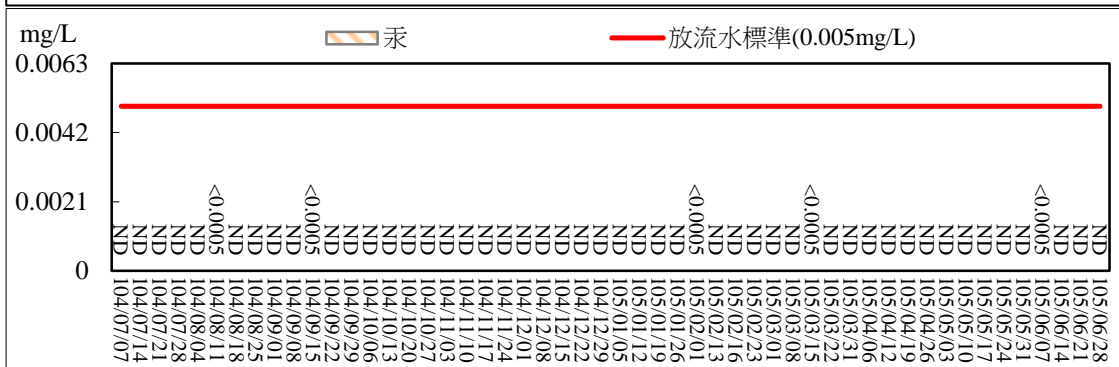
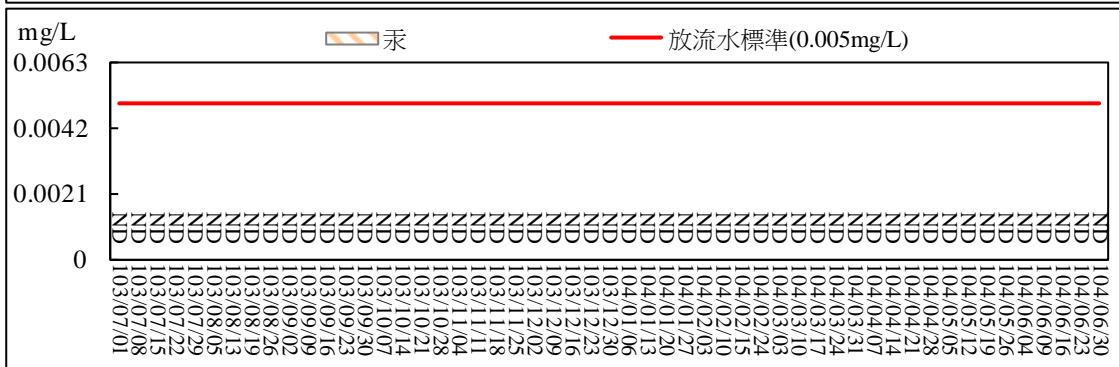
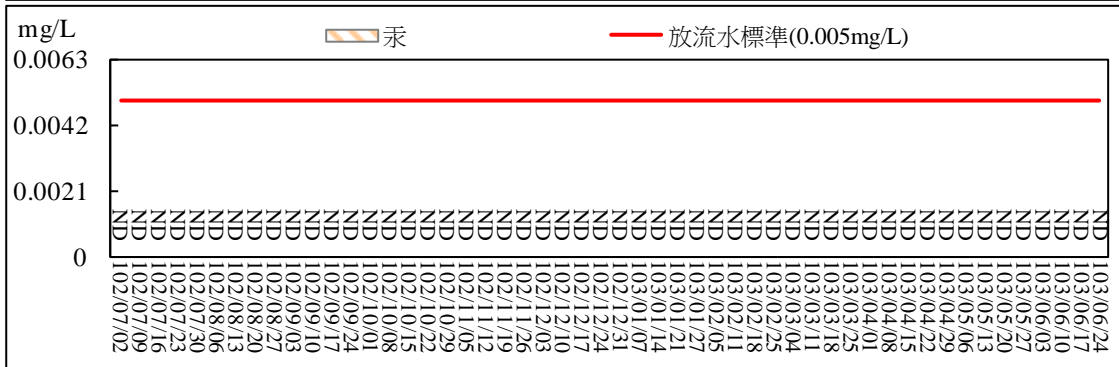
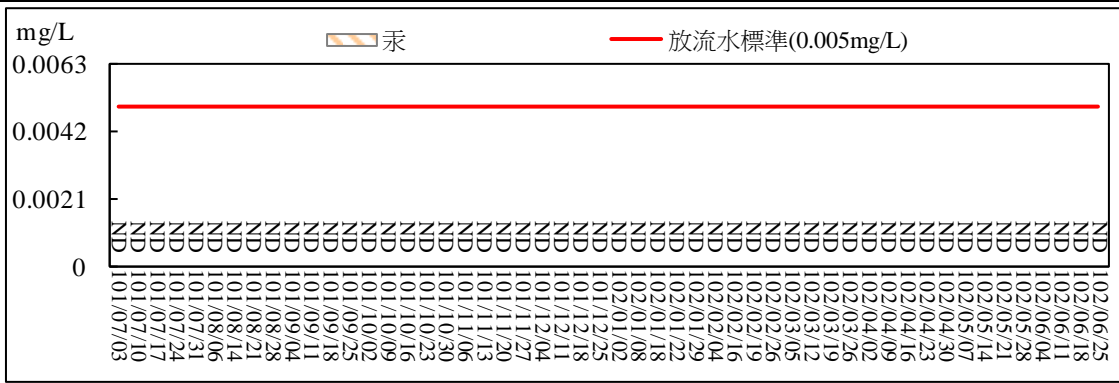


圖 2.43 污水處理廠放流口放流水質監測結果比較圖(銅)





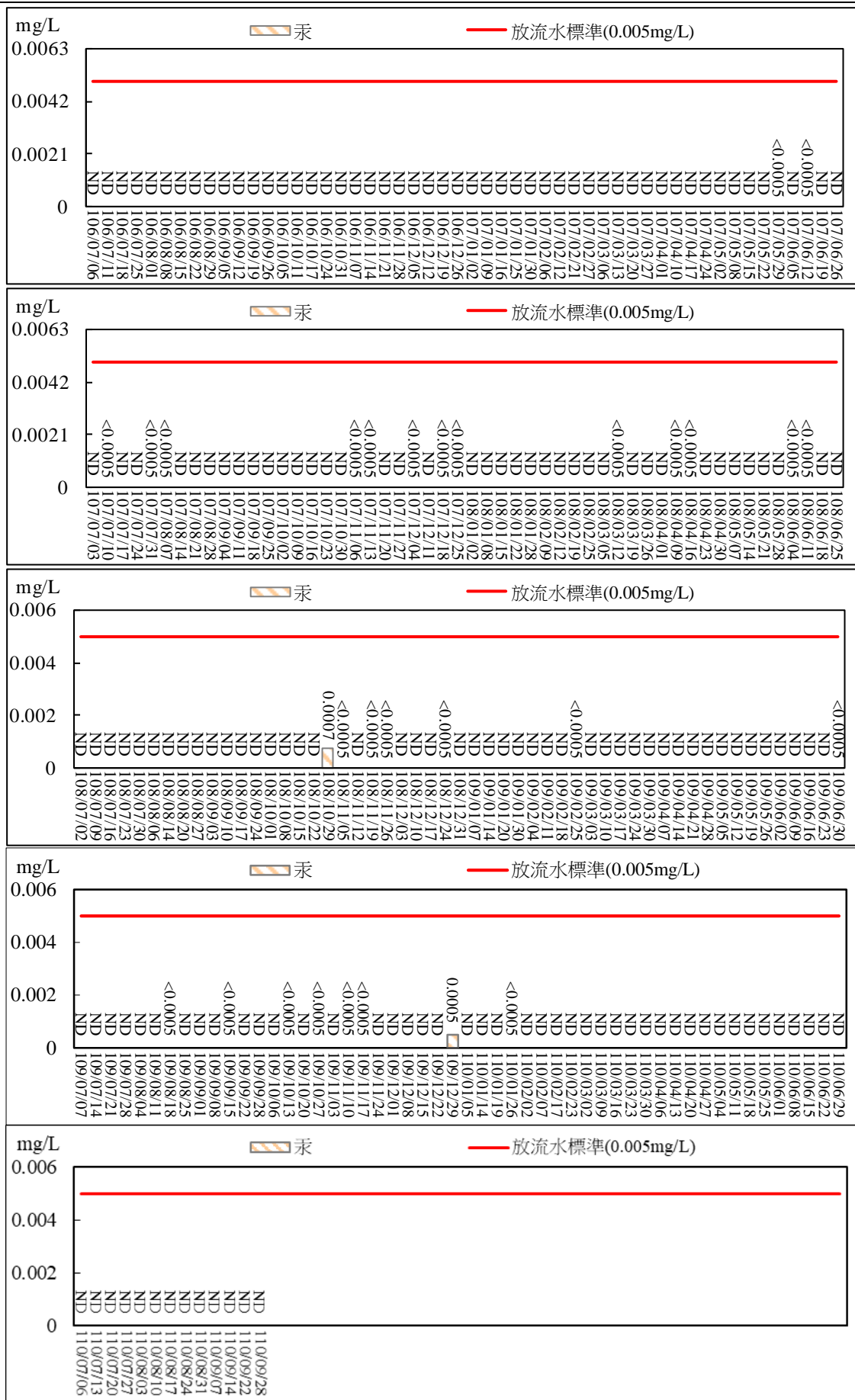
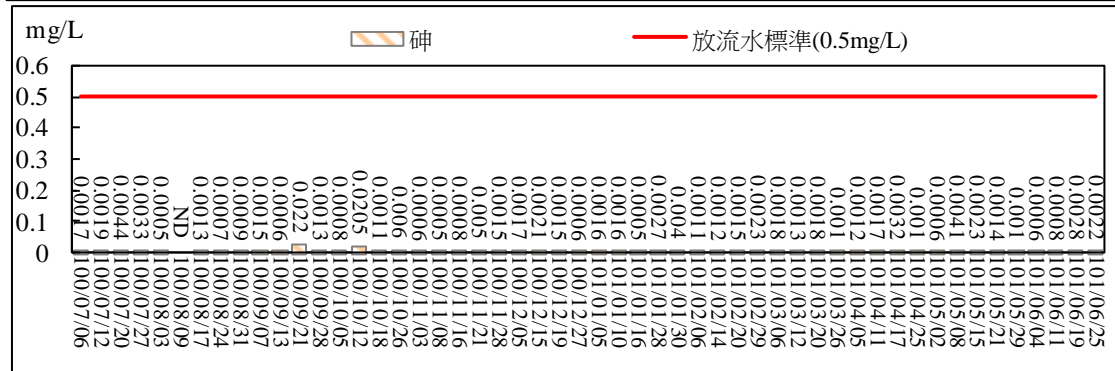
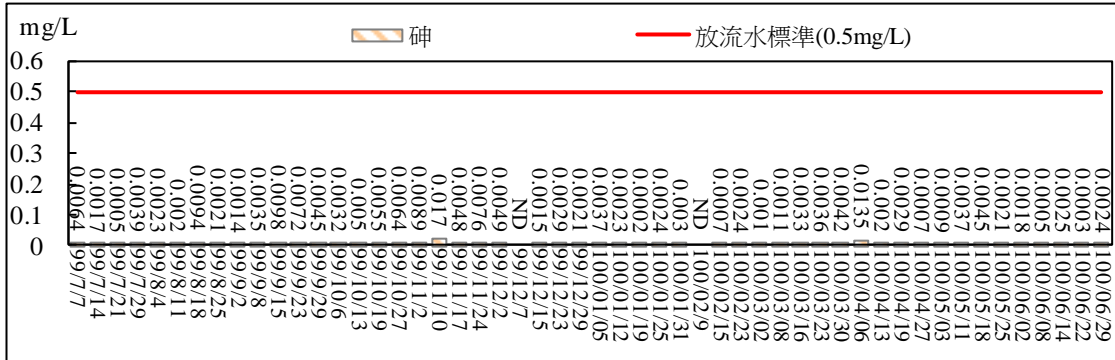
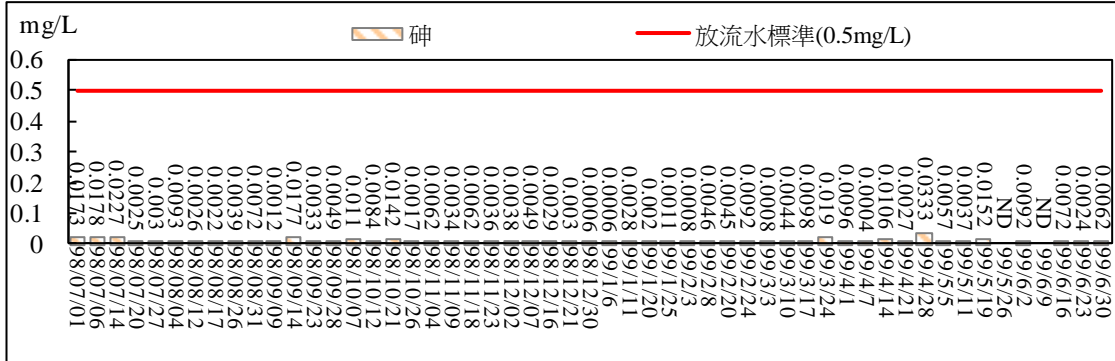
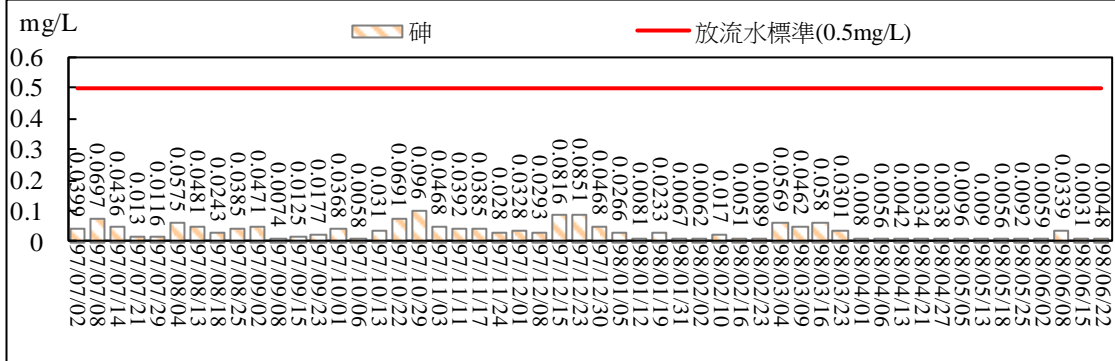
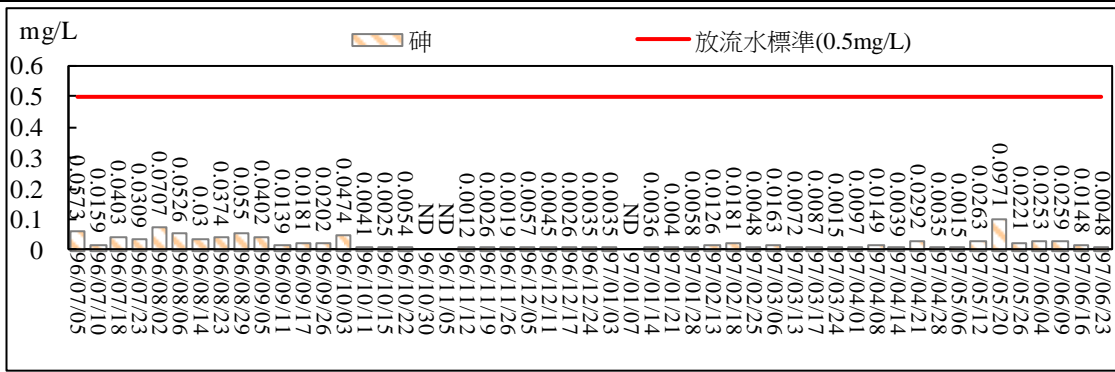
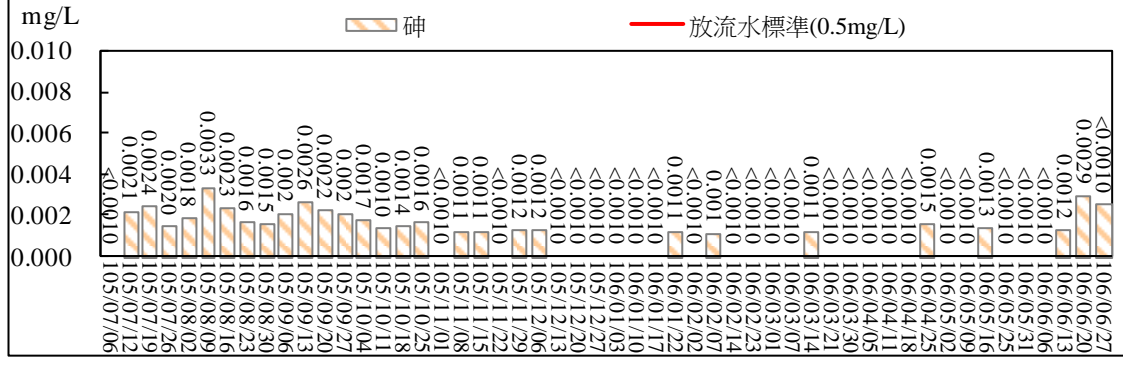
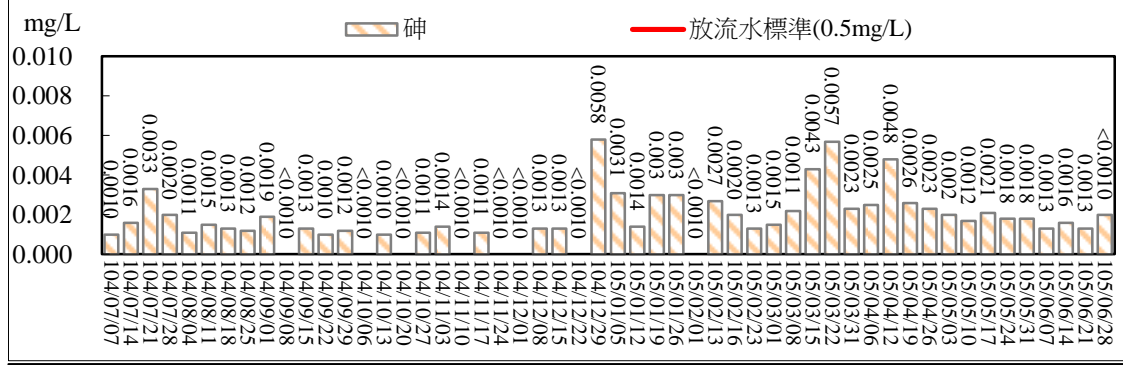
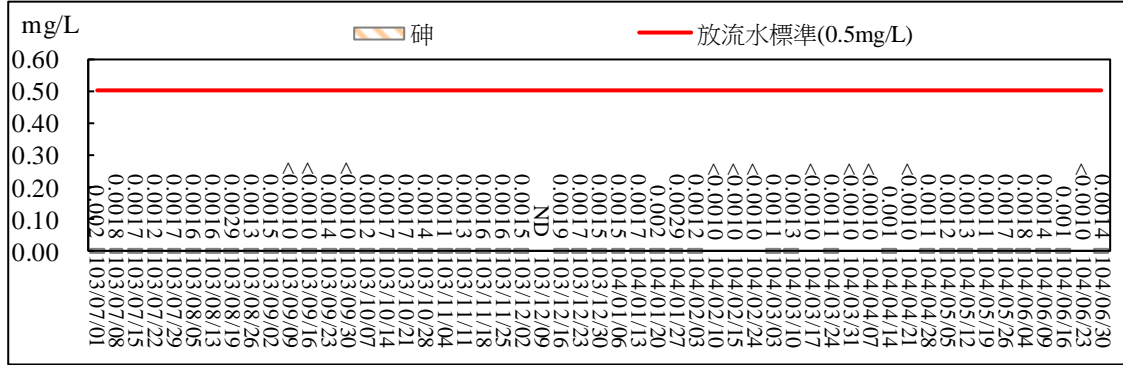
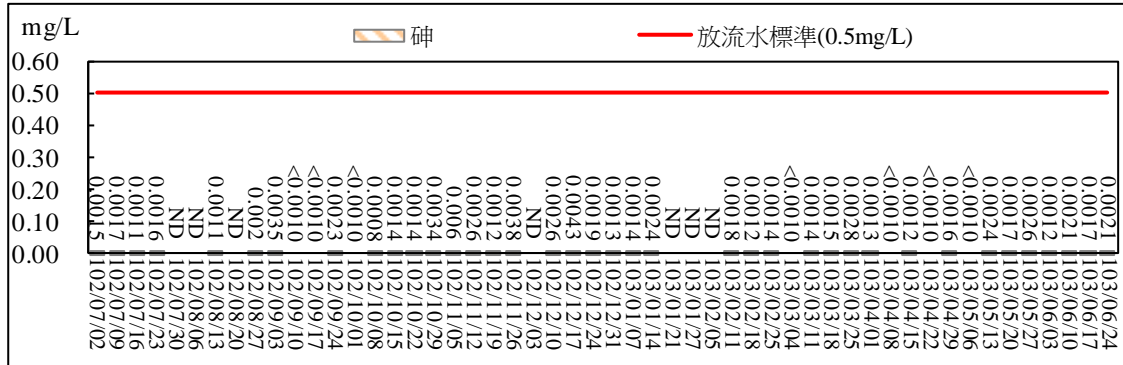
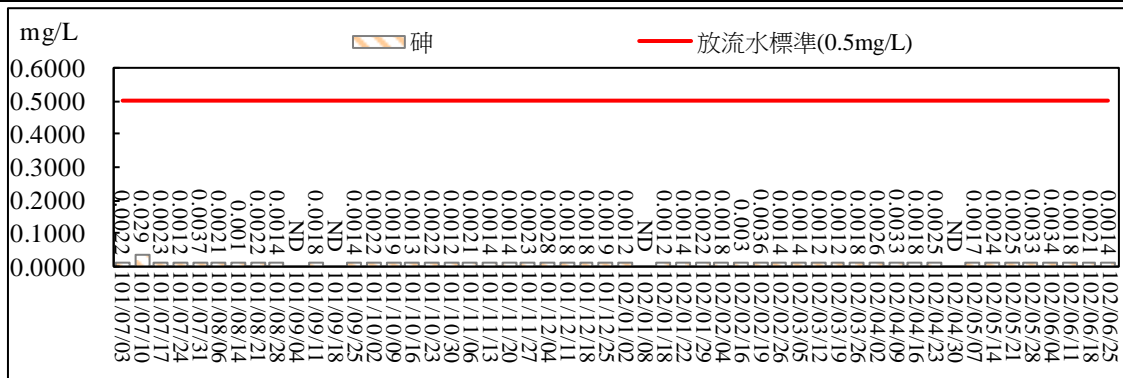


圖 2.44 污水處理廠放流口放流水質監測結果比較圖(汞)





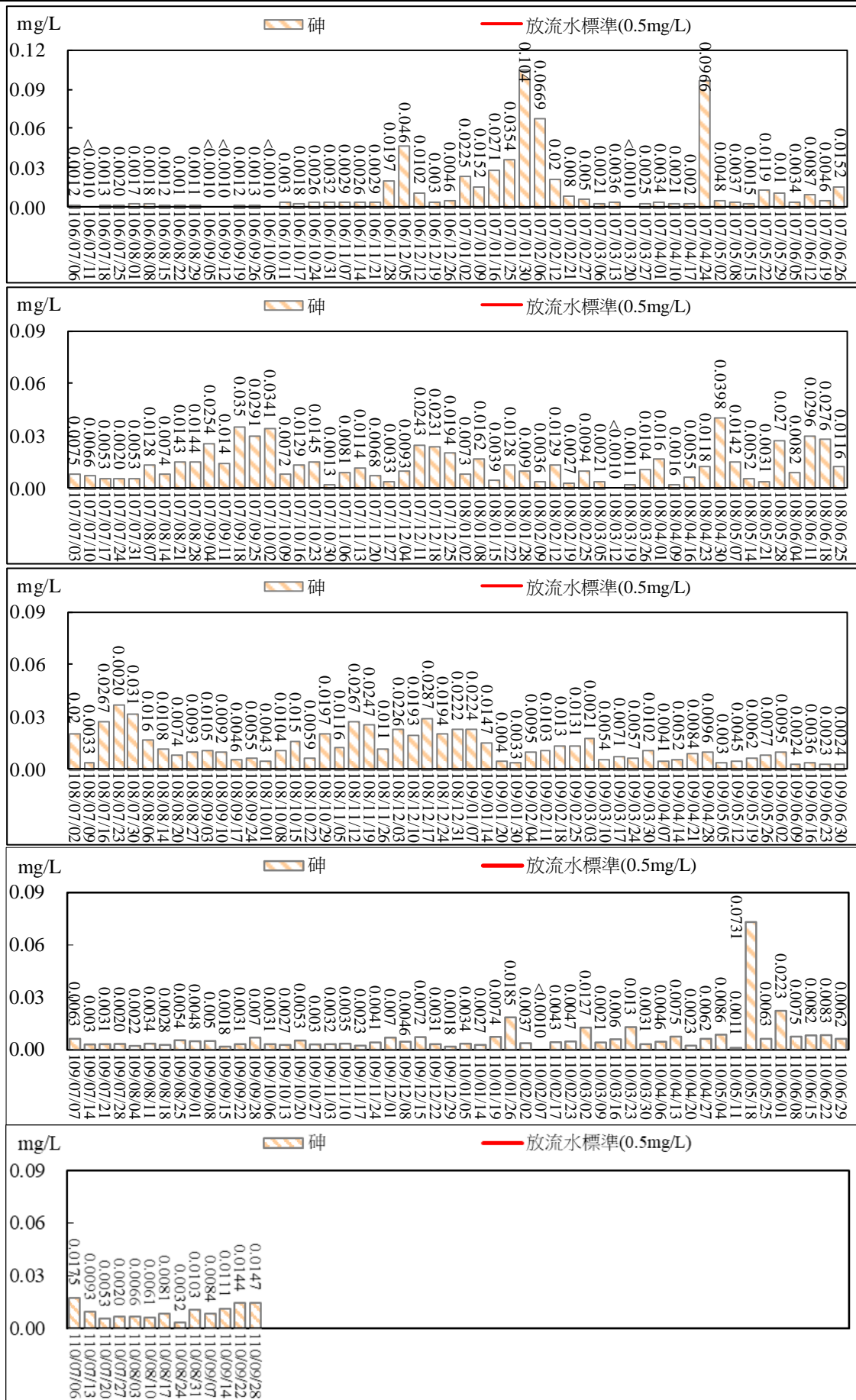
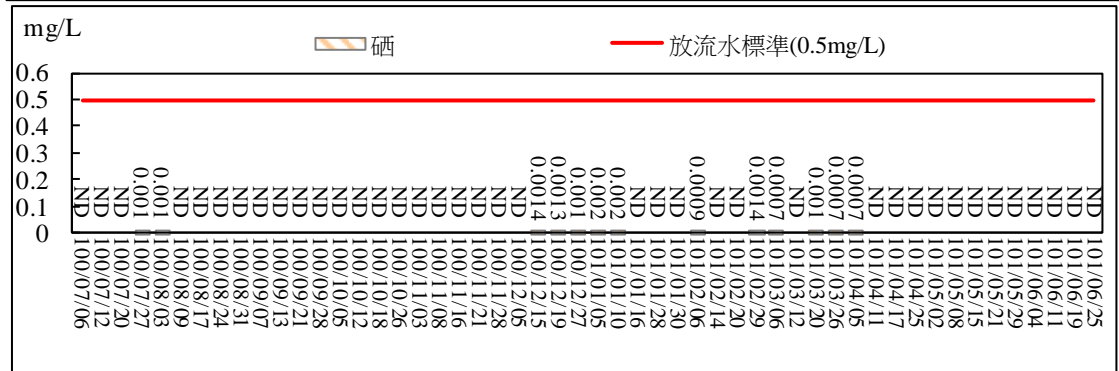
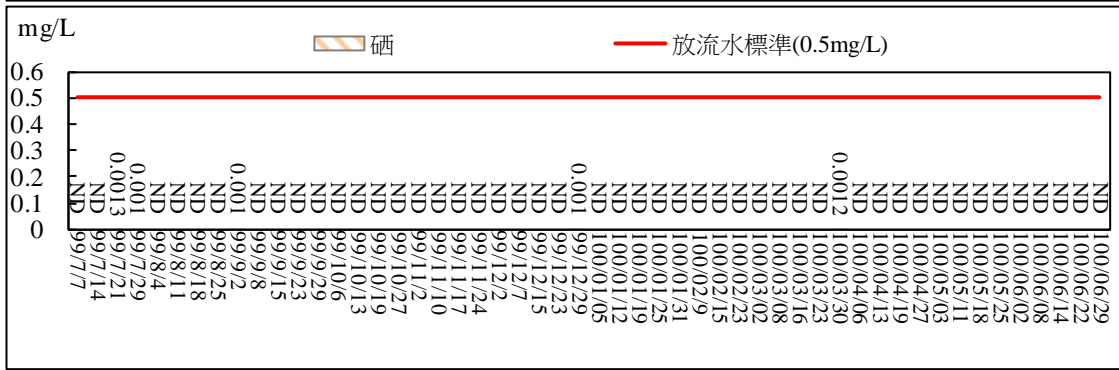
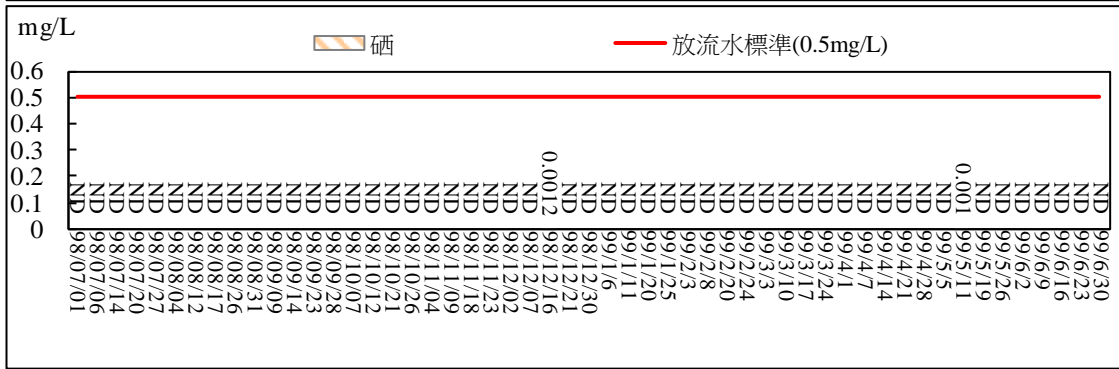
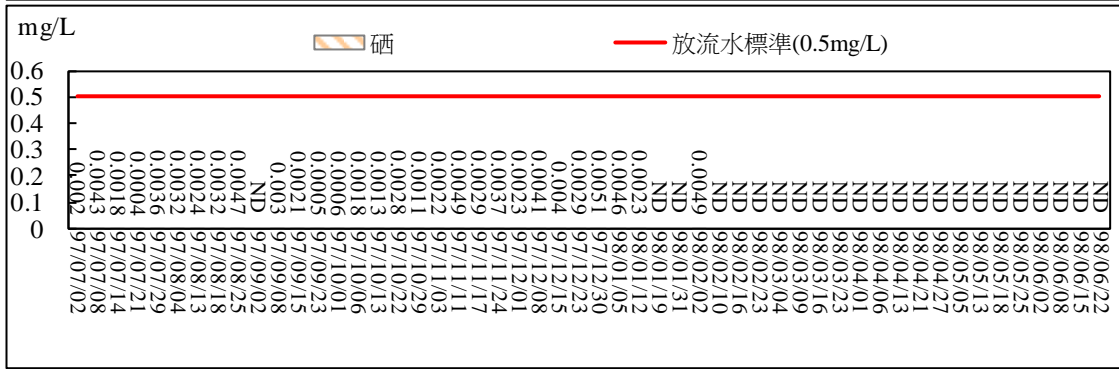
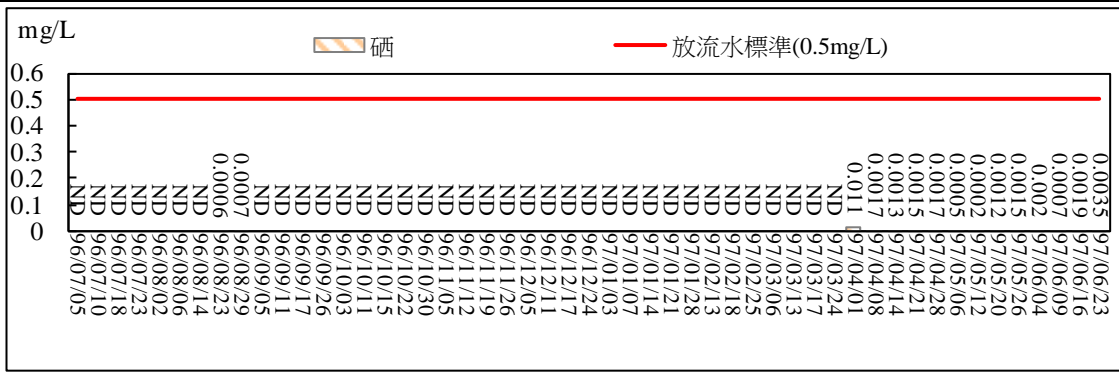
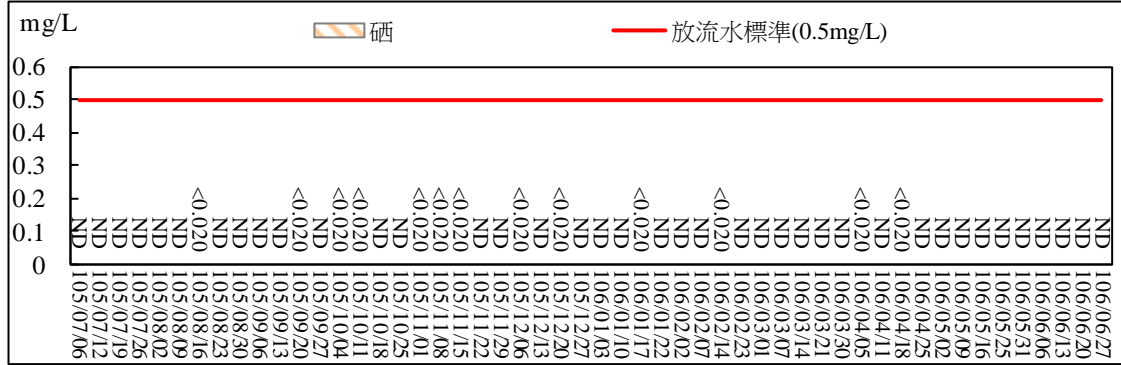
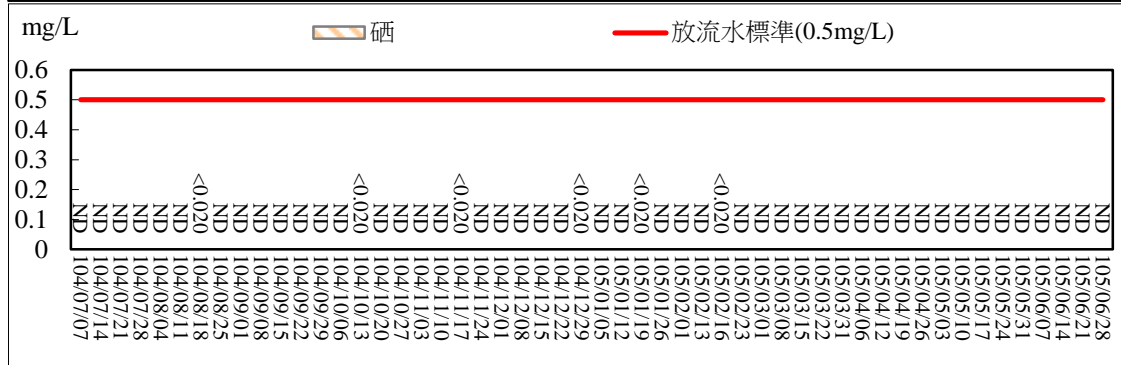
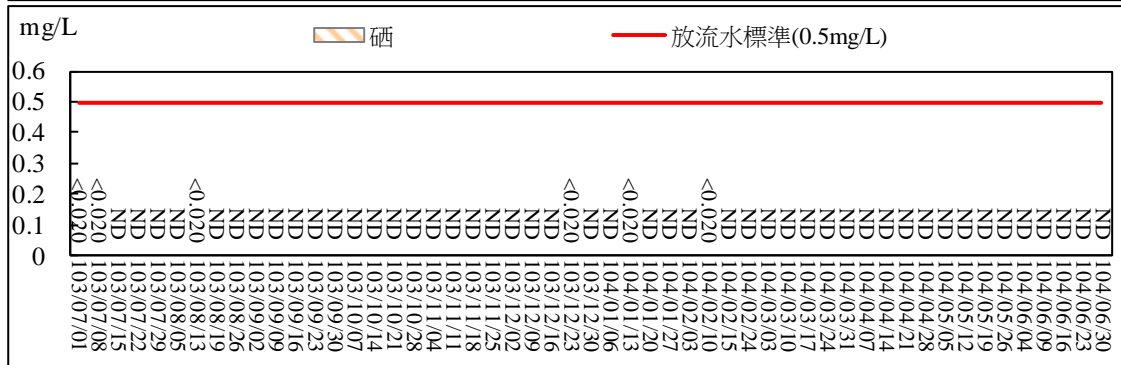
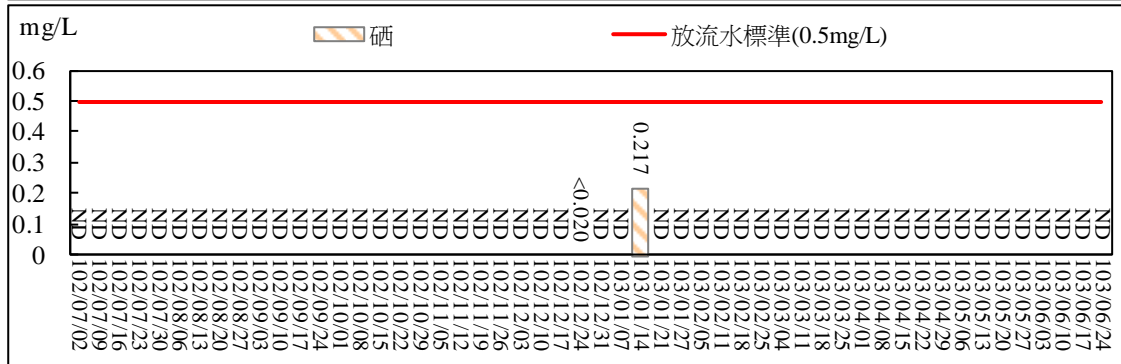
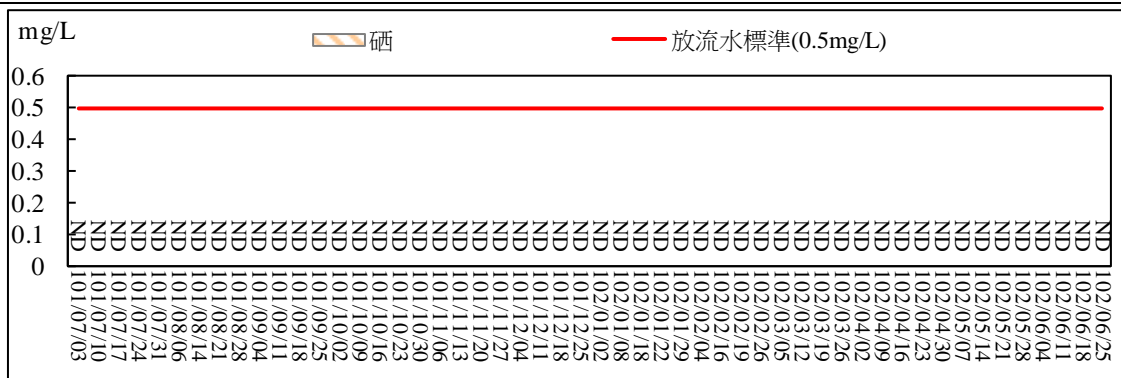


圖 2.45 污水處理廠放流口放流水質監測結果比較圖(砷)





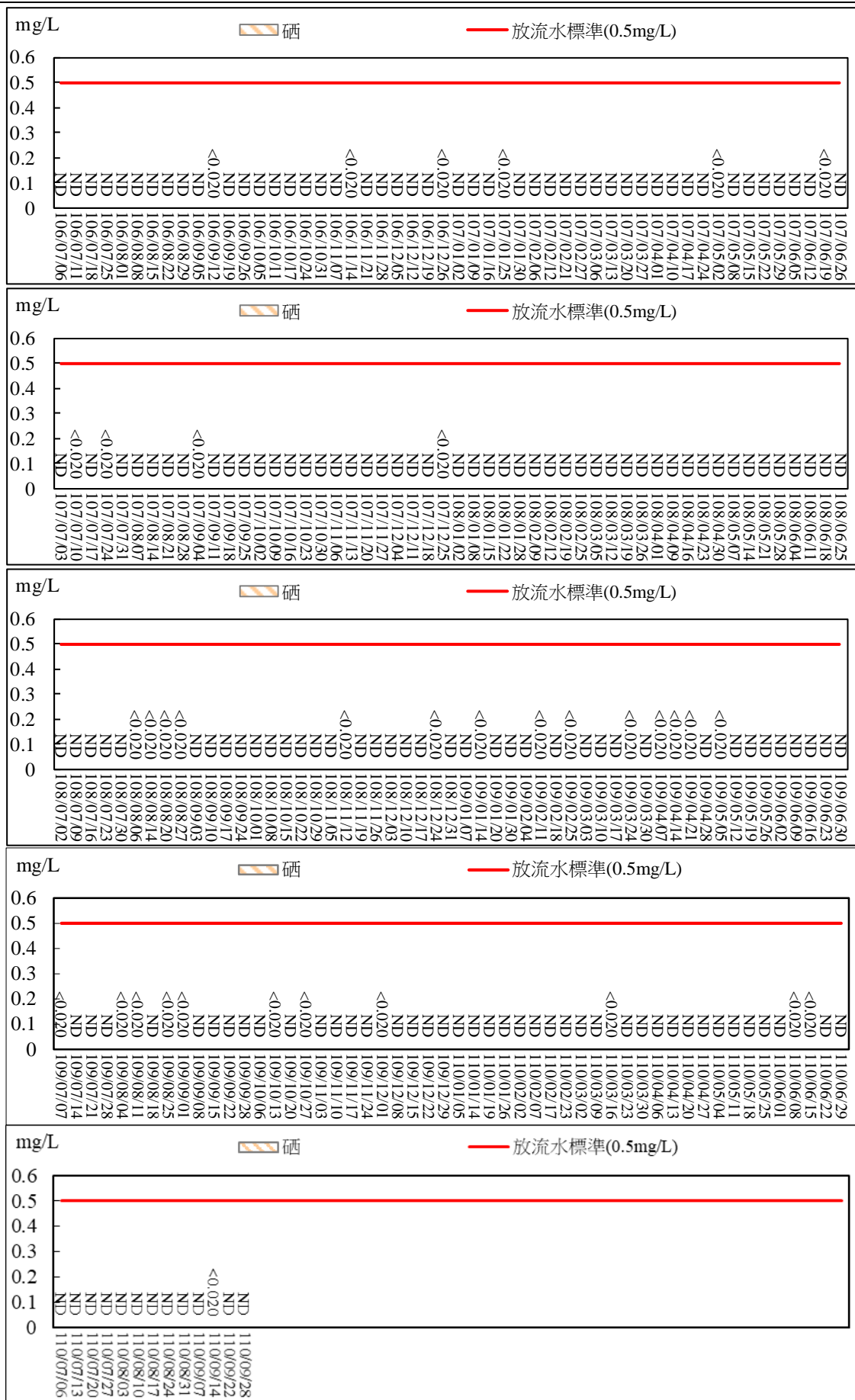
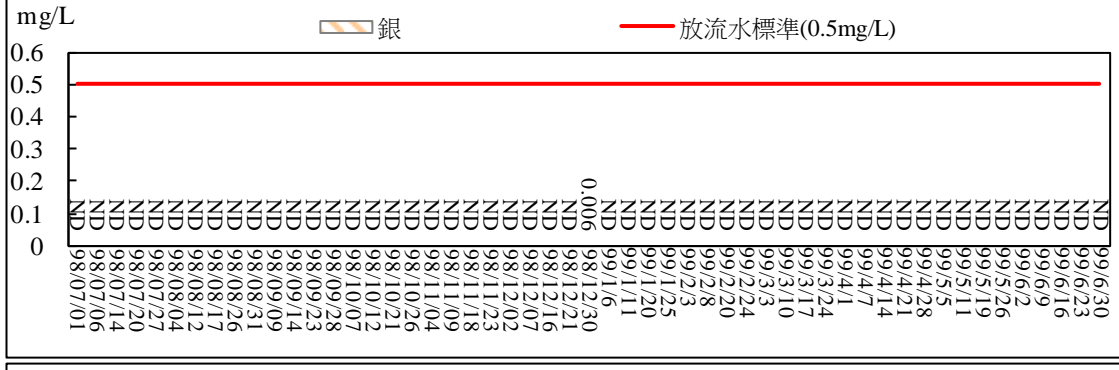
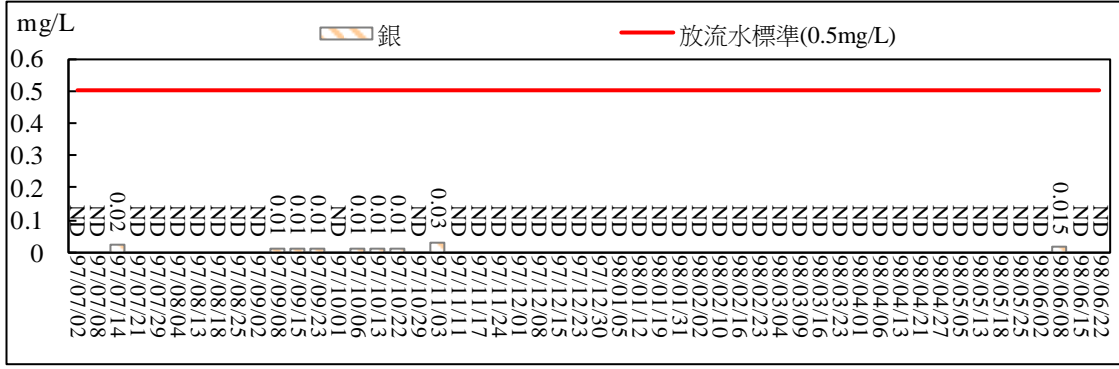
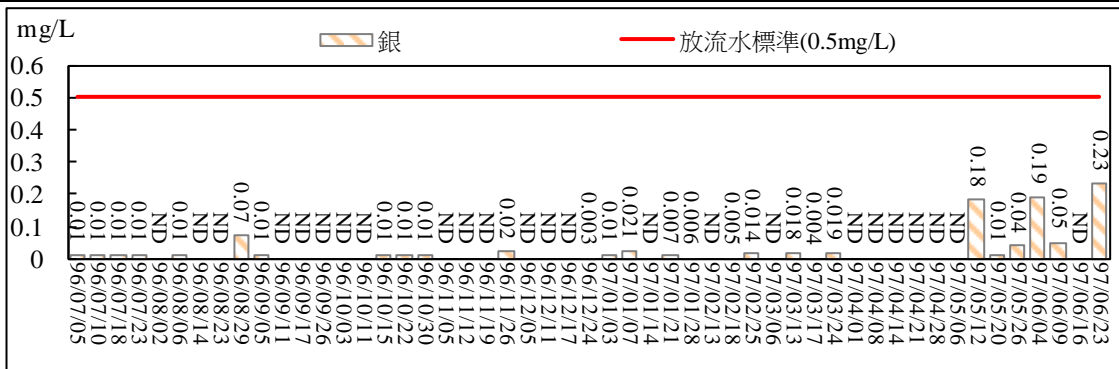
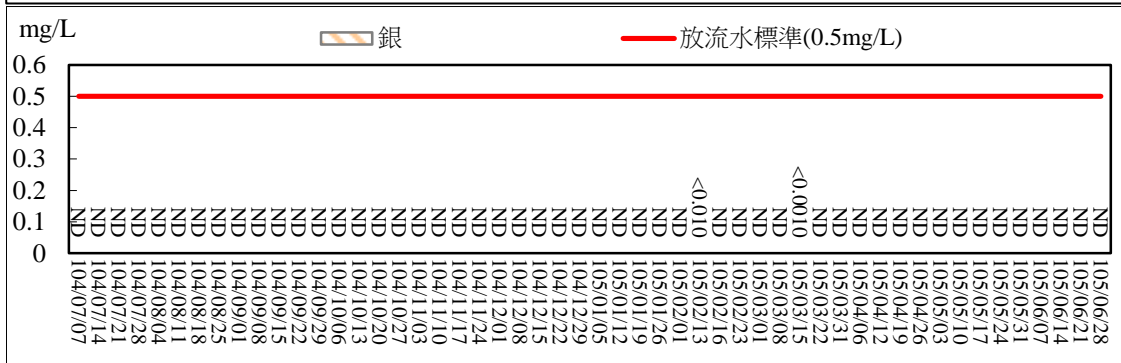
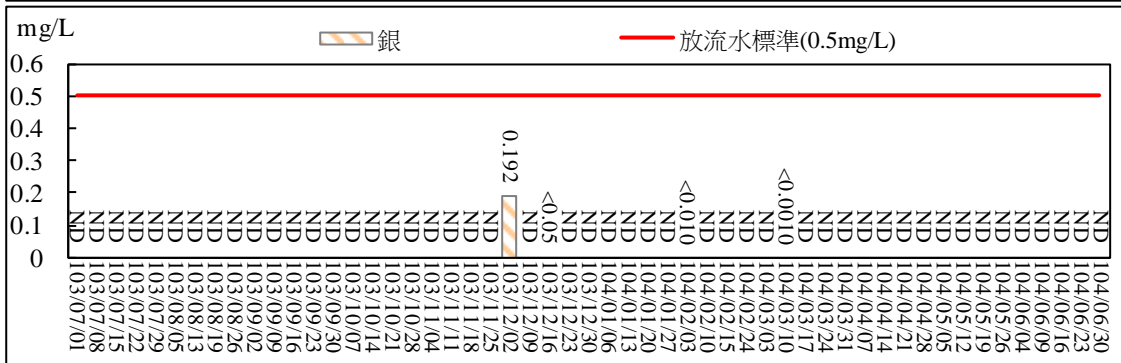
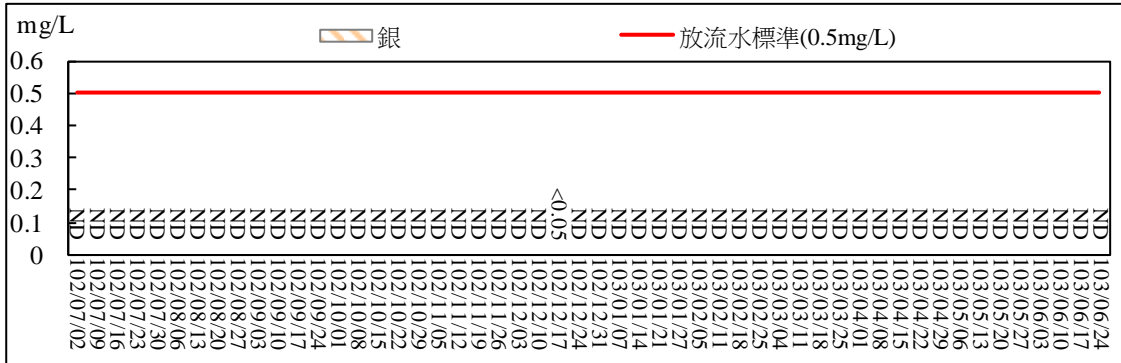
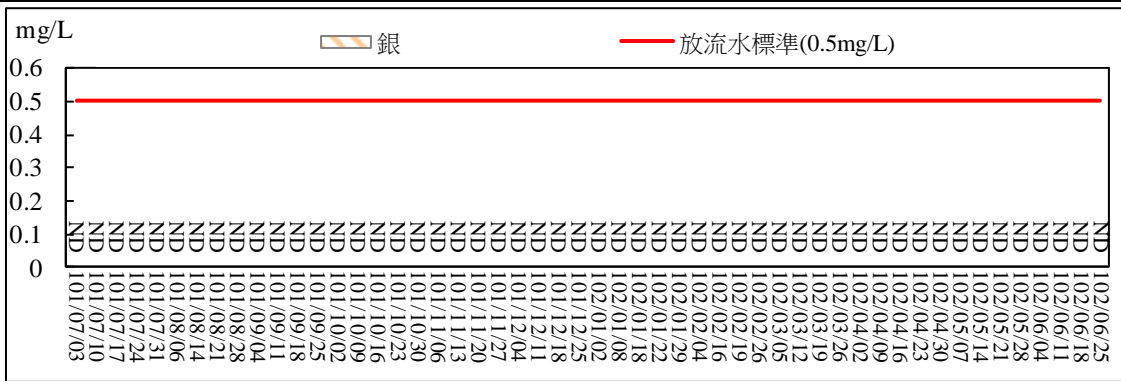


圖 2.46 污水處理廠放流口放流水質監測結果比較圖(硒)





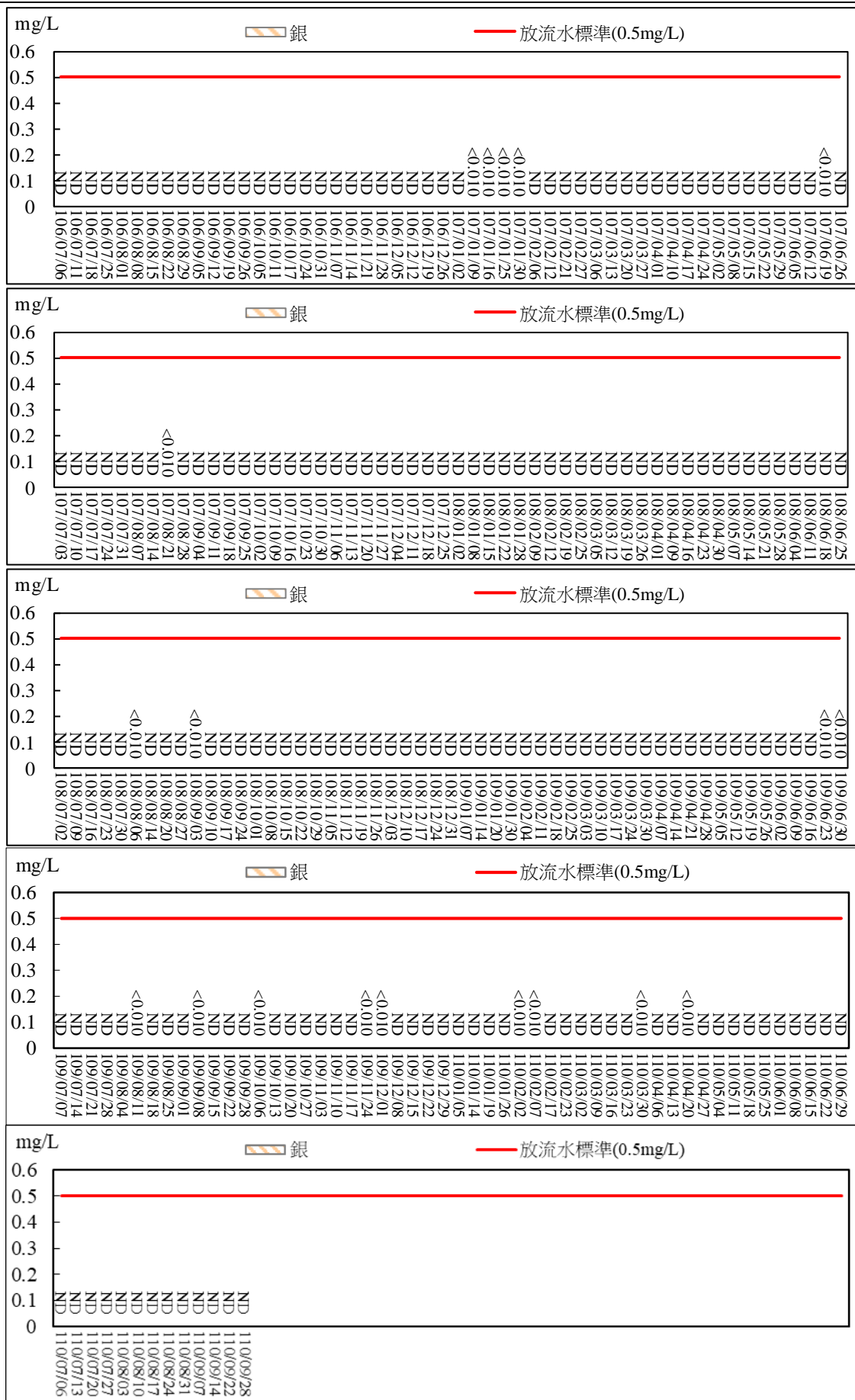
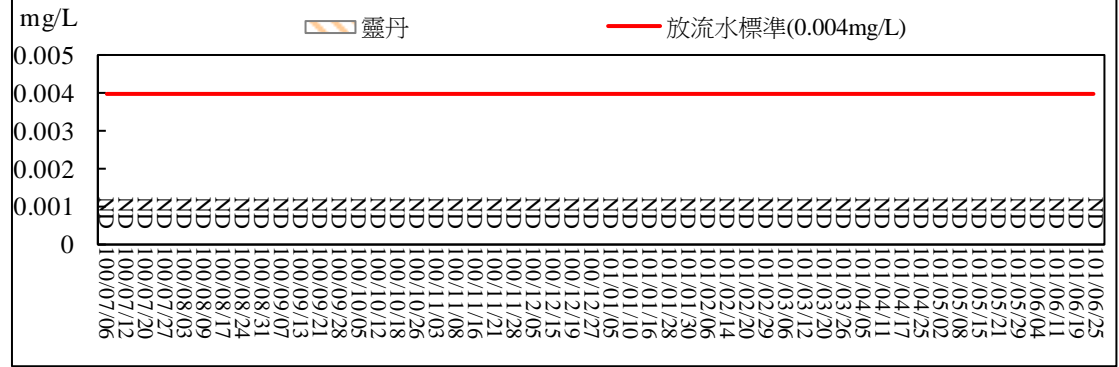
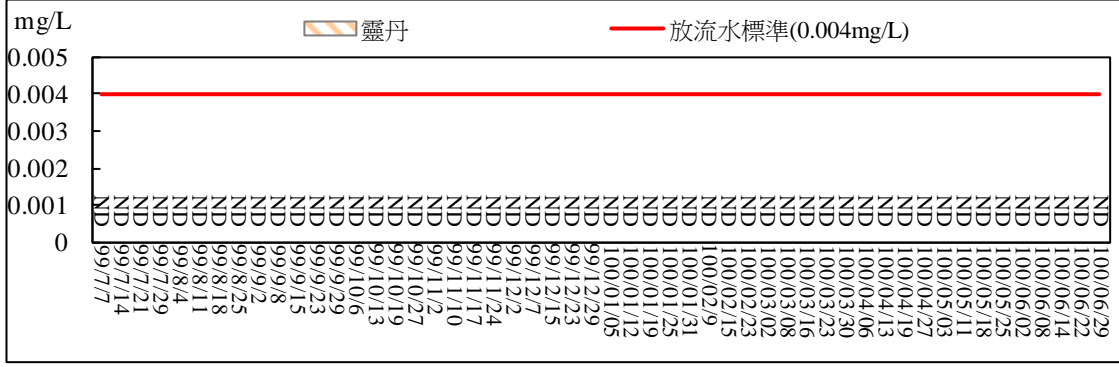
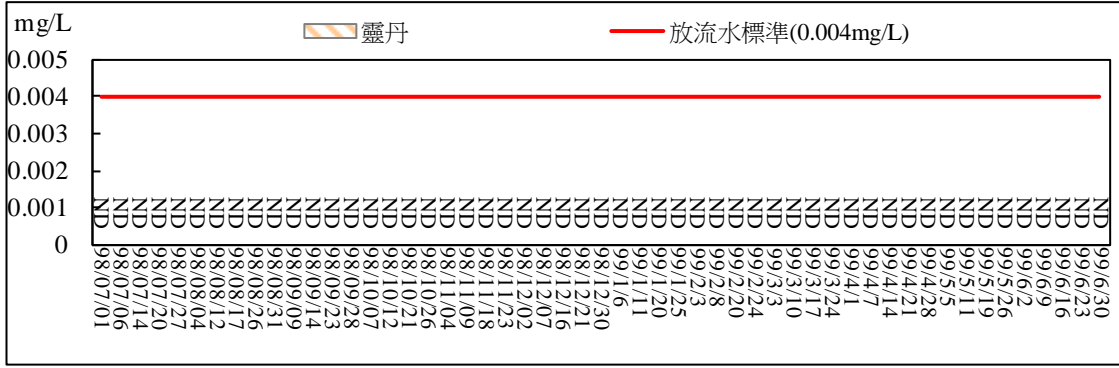
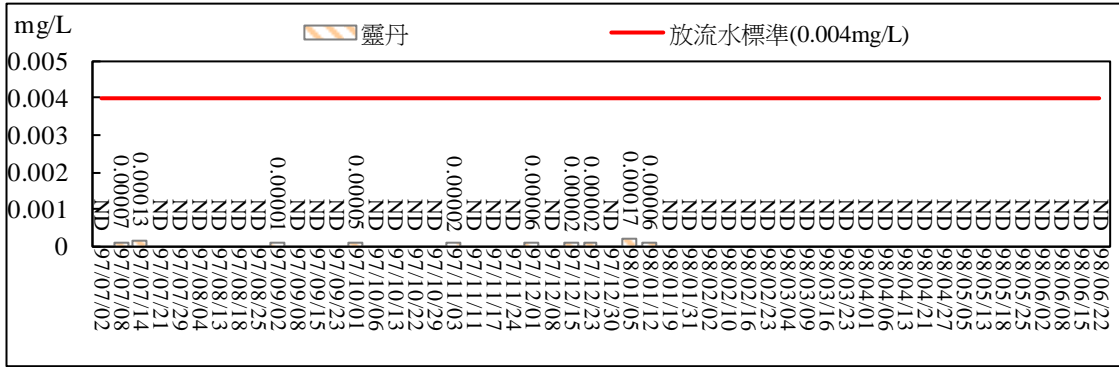
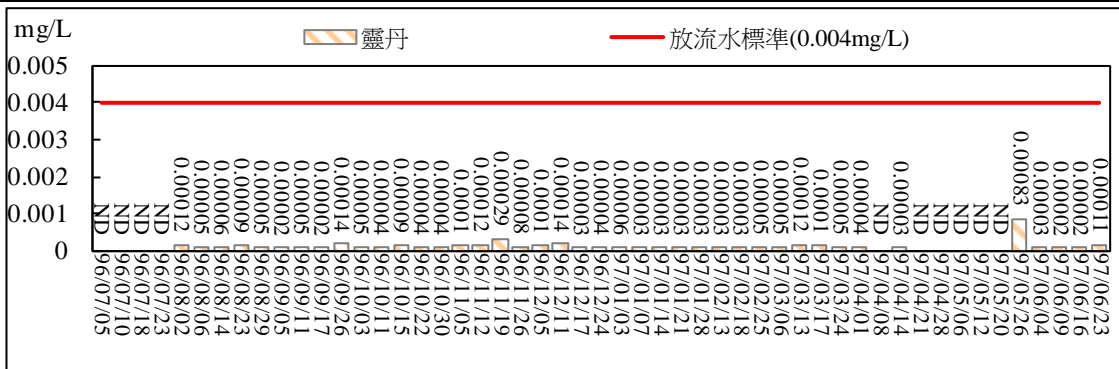
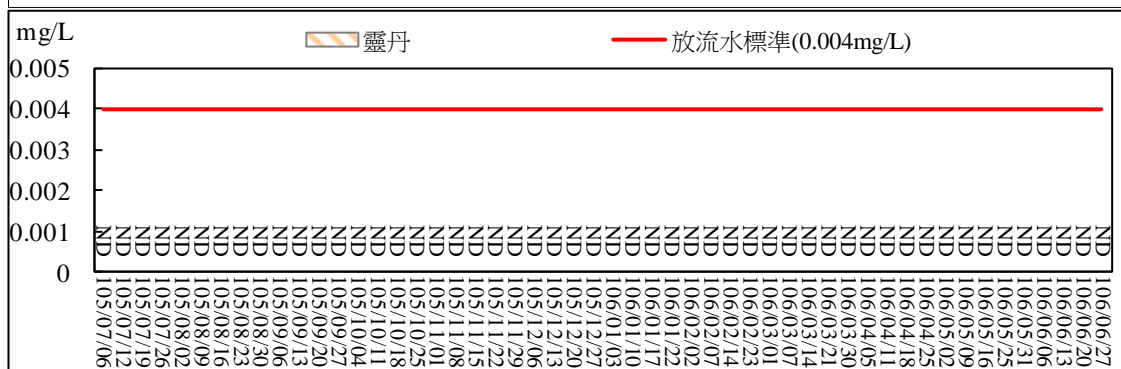
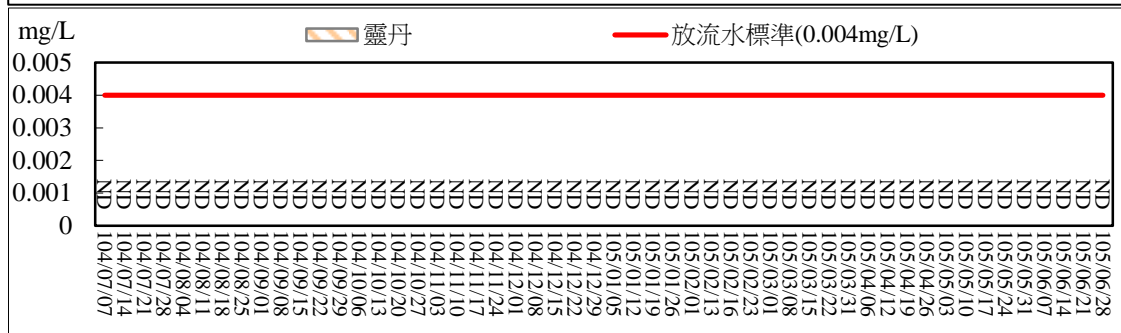
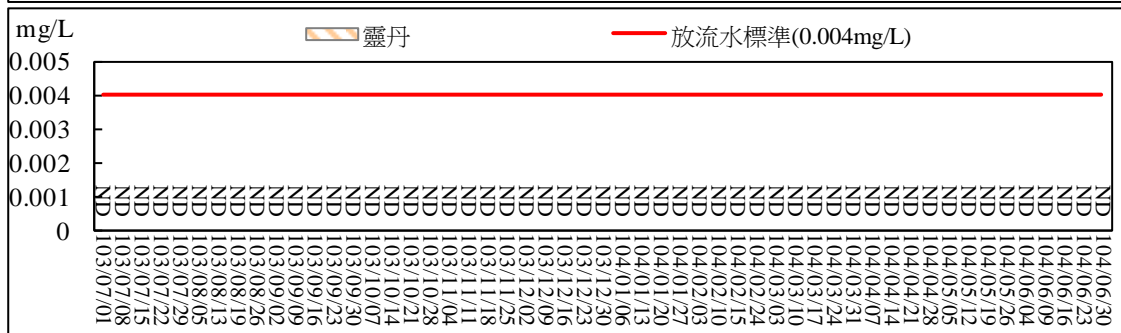
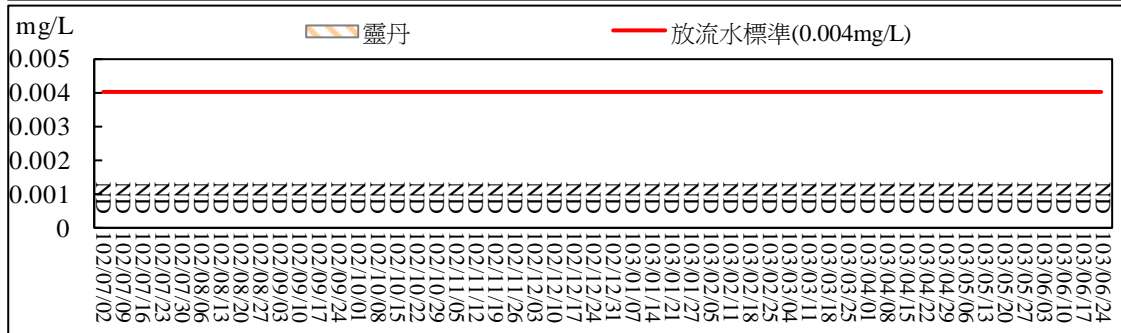
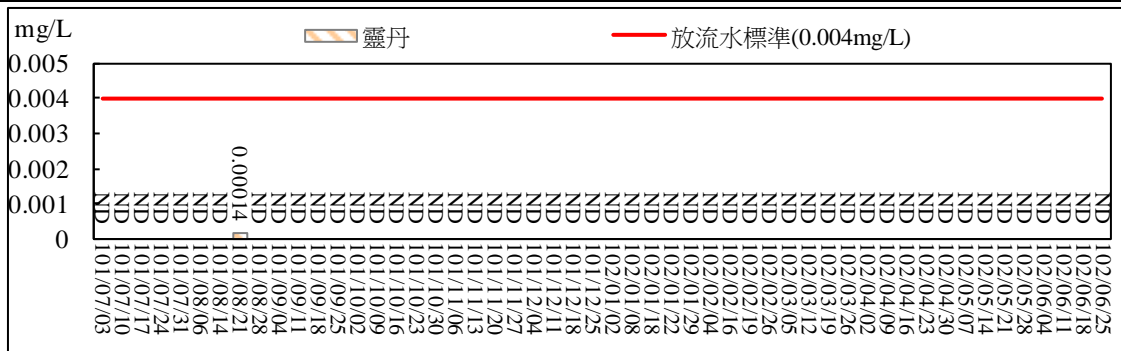


圖 2.47 污水處理廠放流口放流水質監測結果比較圖(銀)





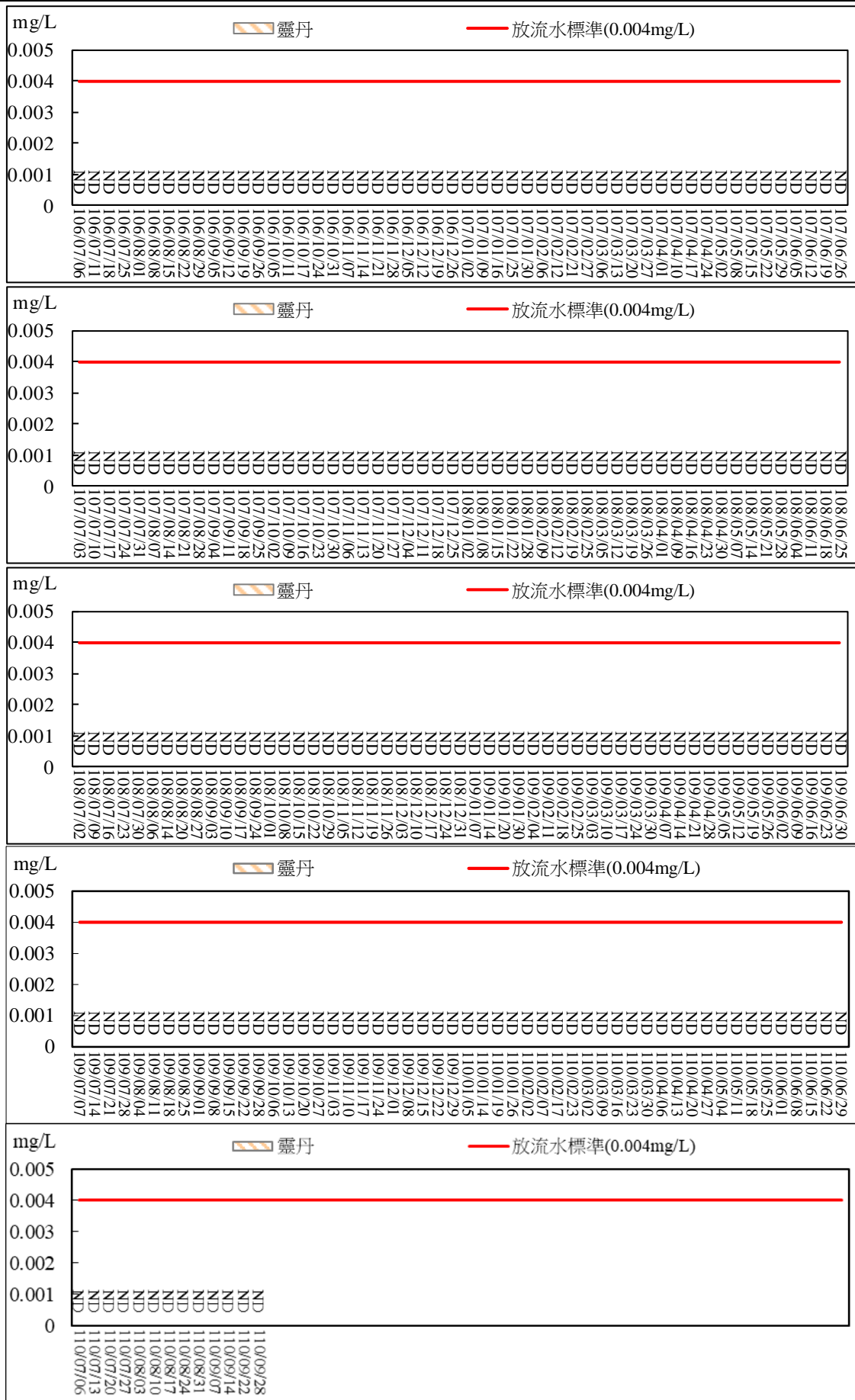
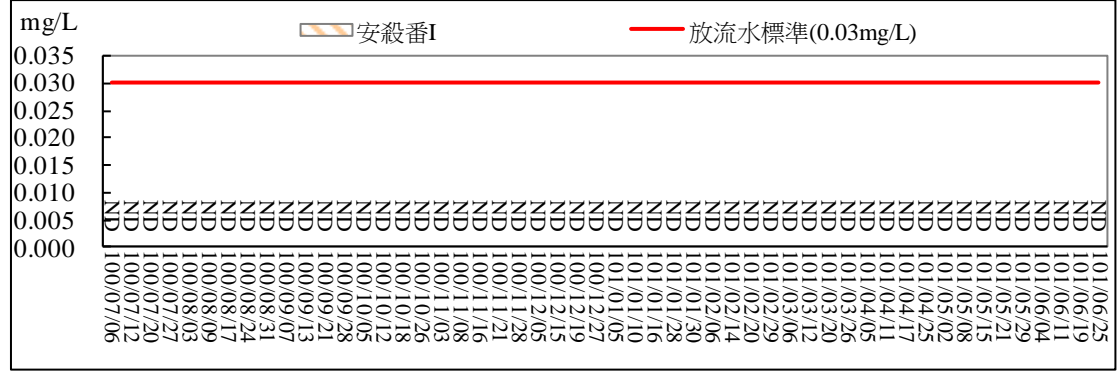
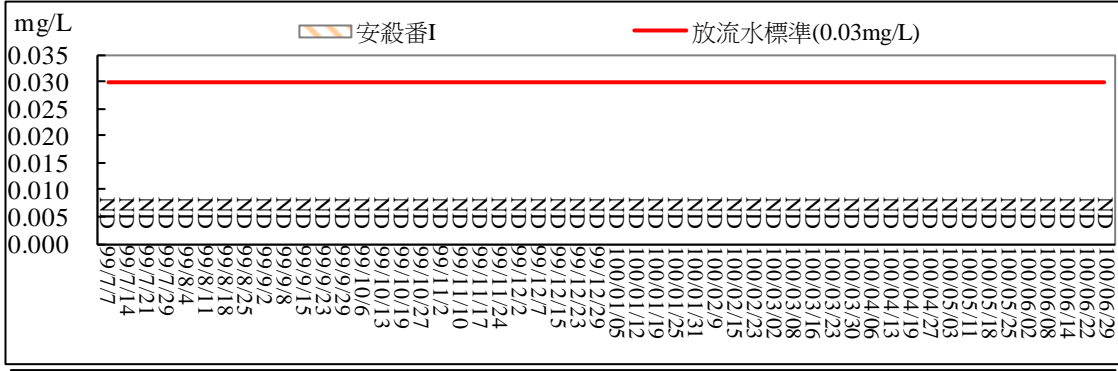
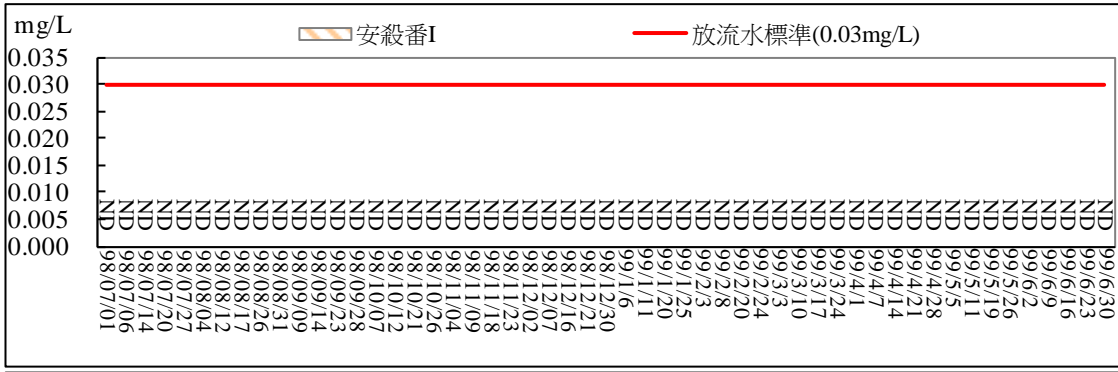
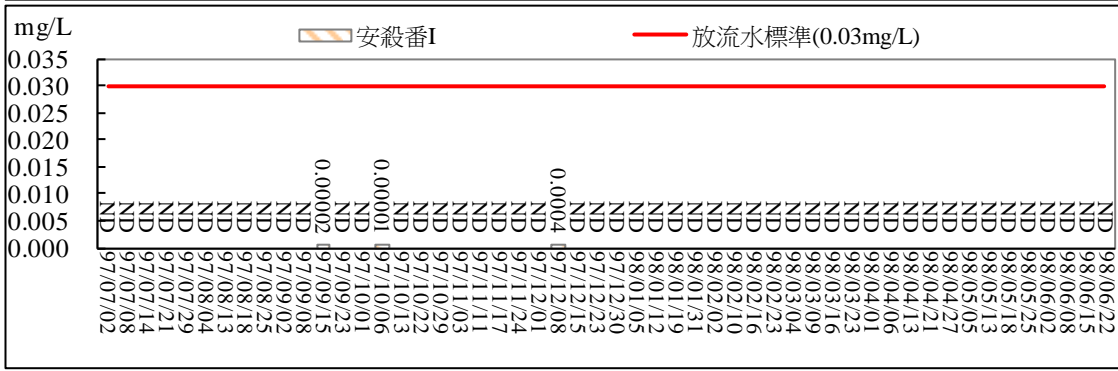
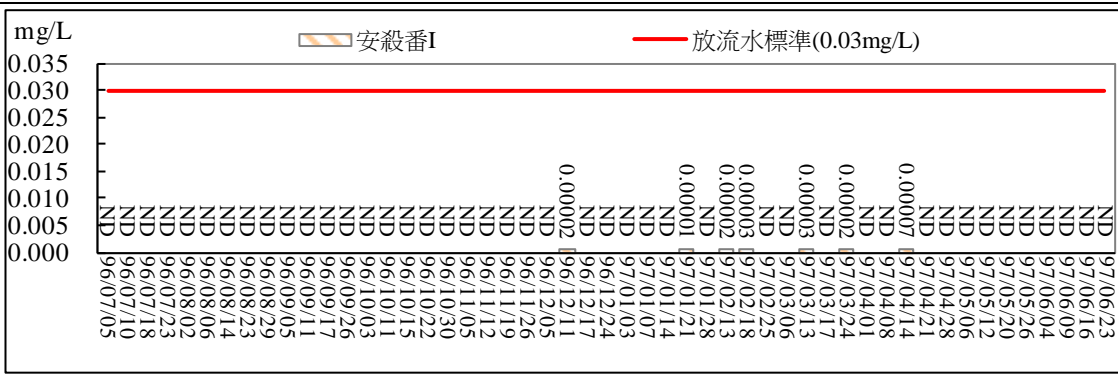
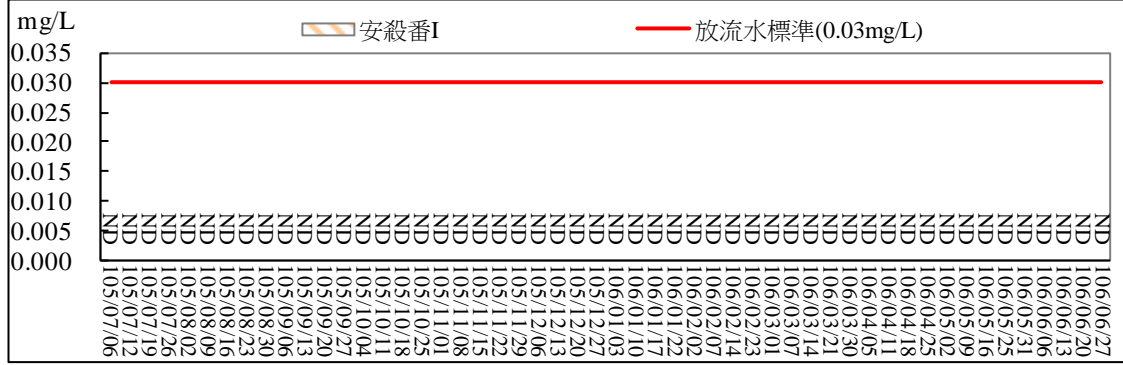
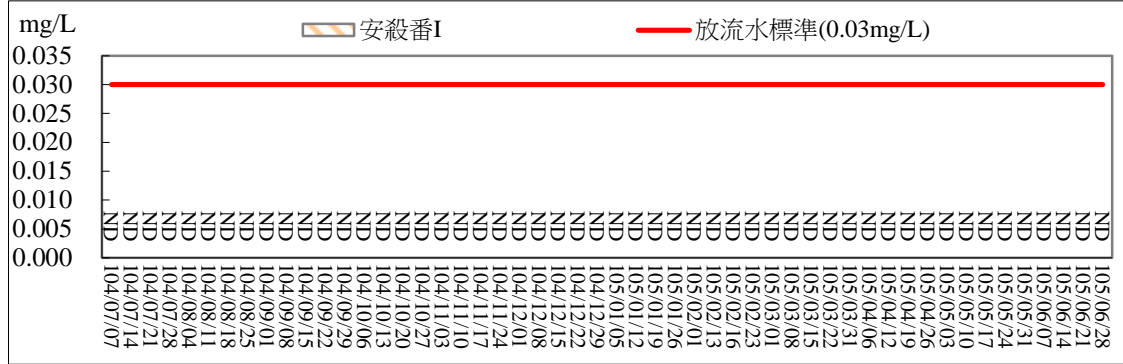
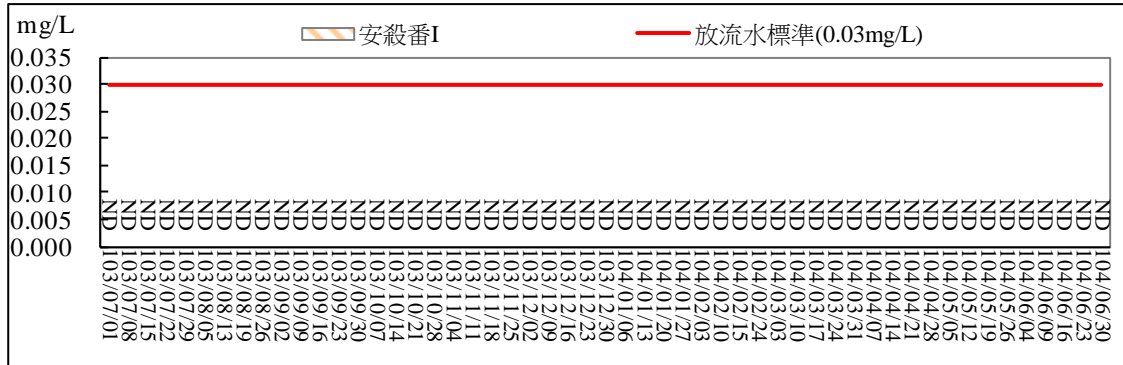
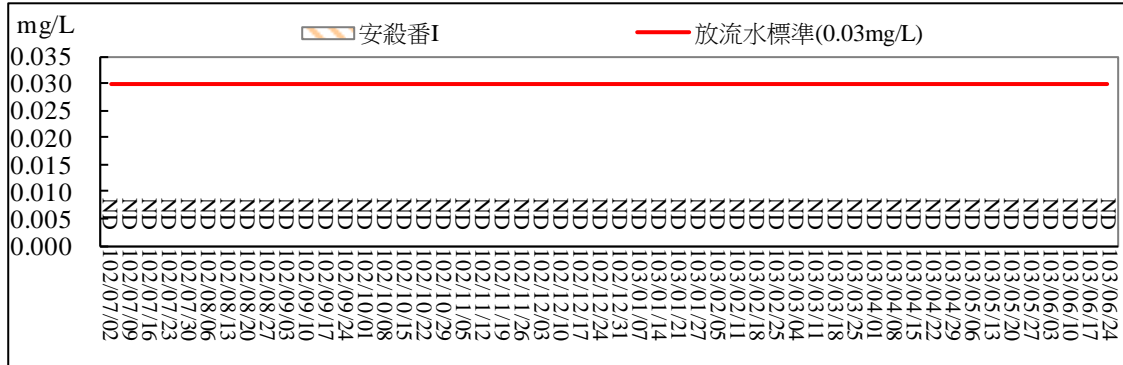
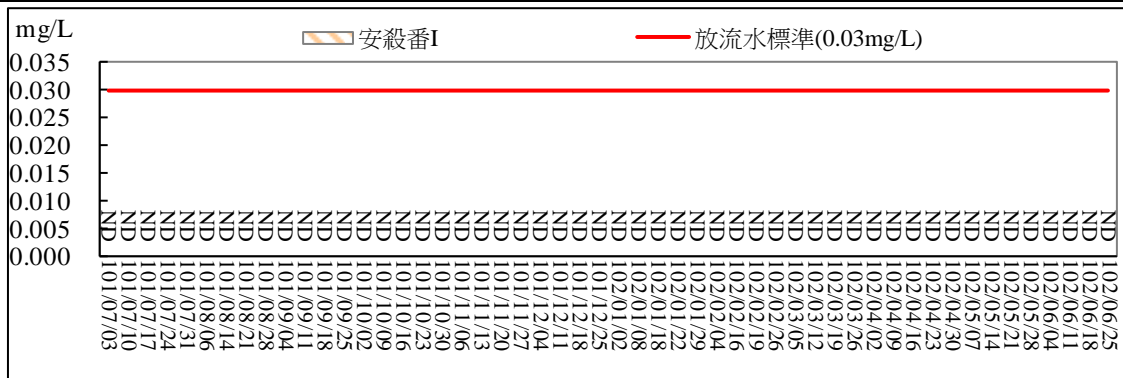


圖 2.48 污水處理廠放流口放流水質監測結果比較圖(靈丹)





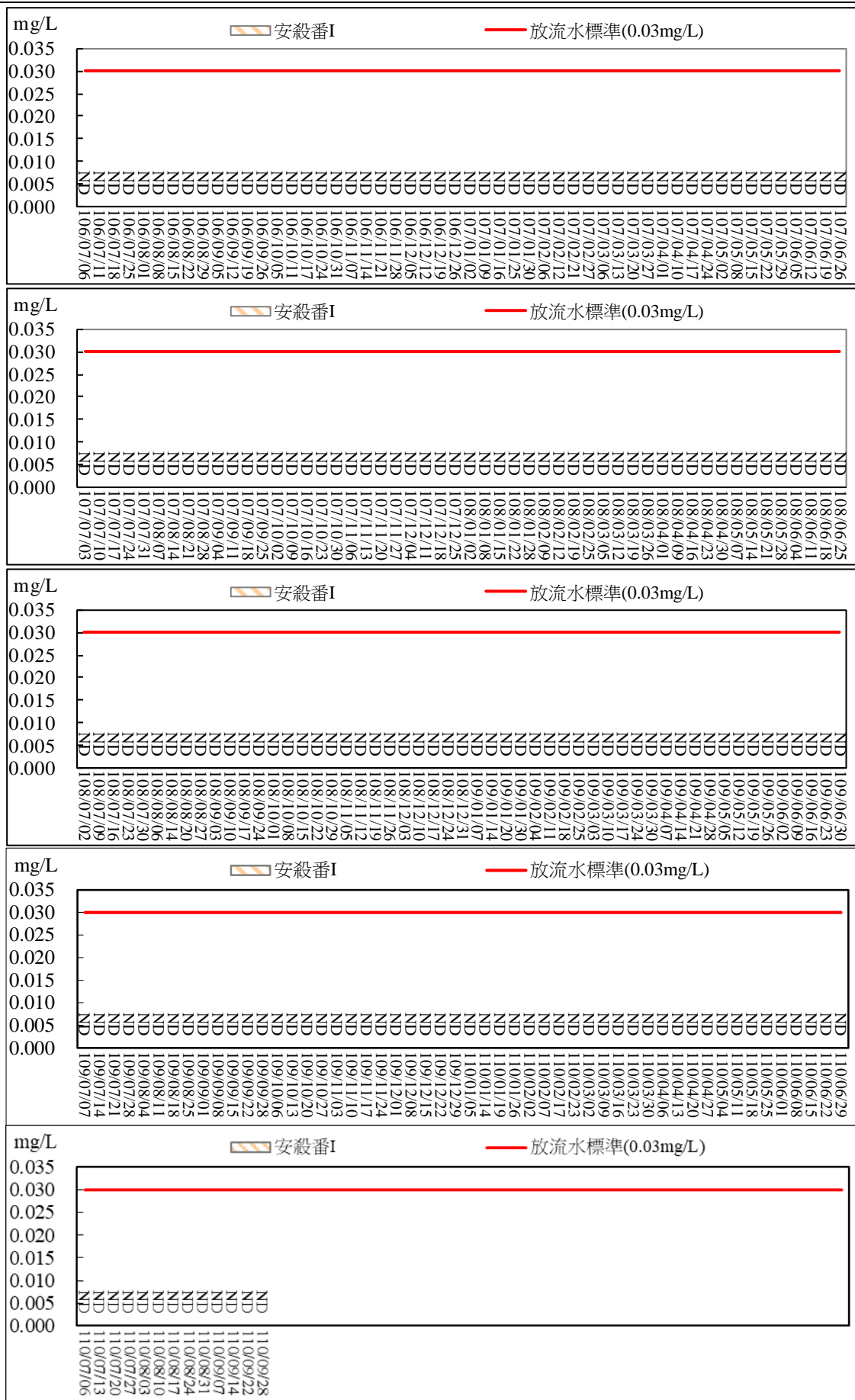
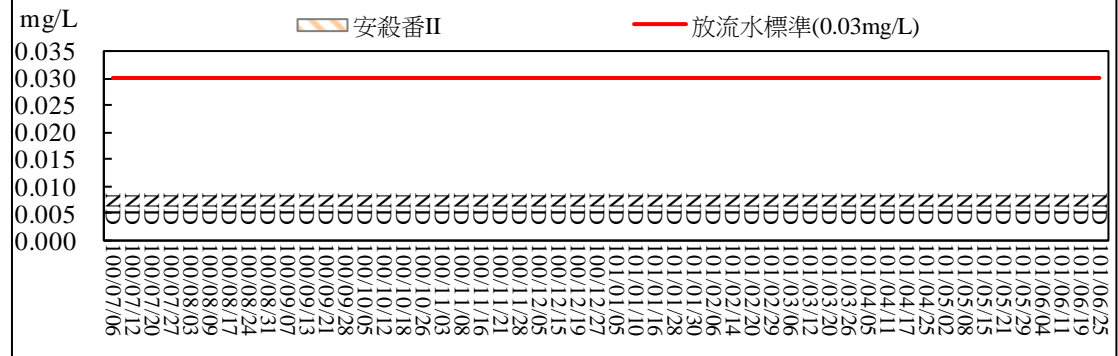
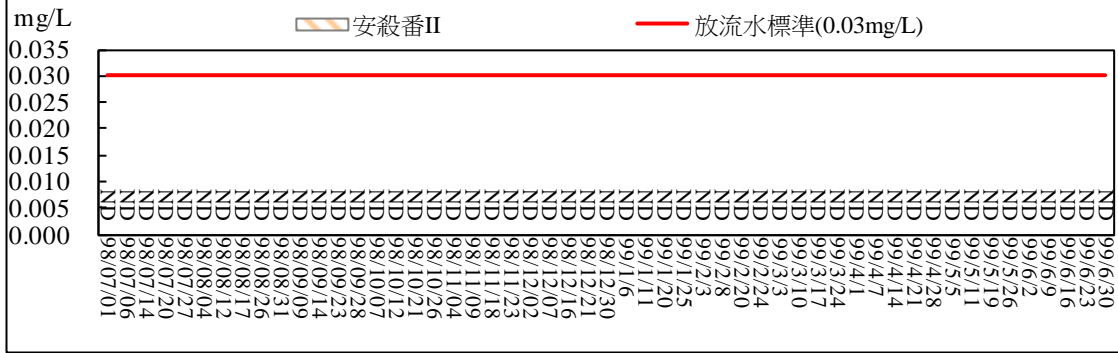
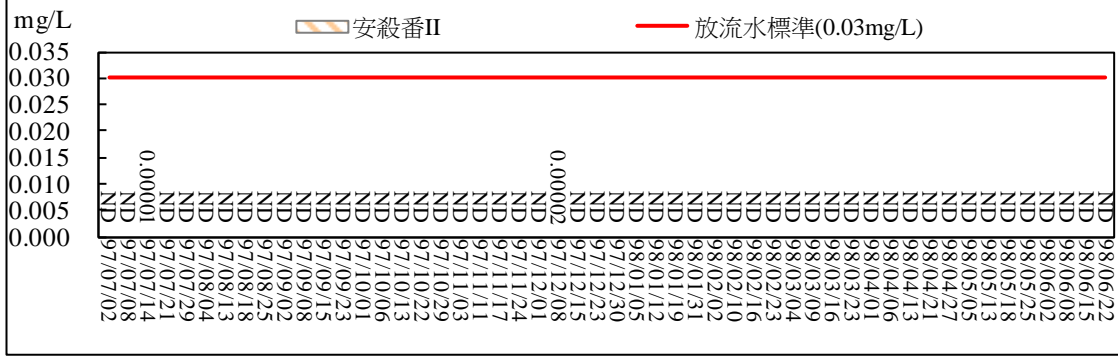
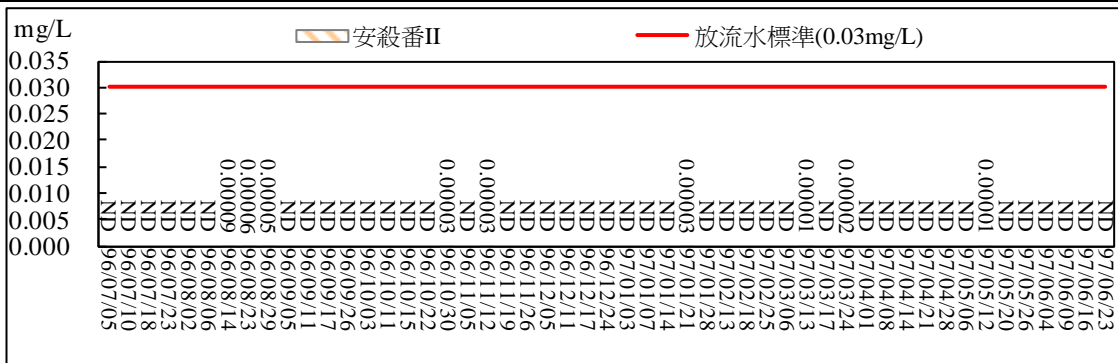
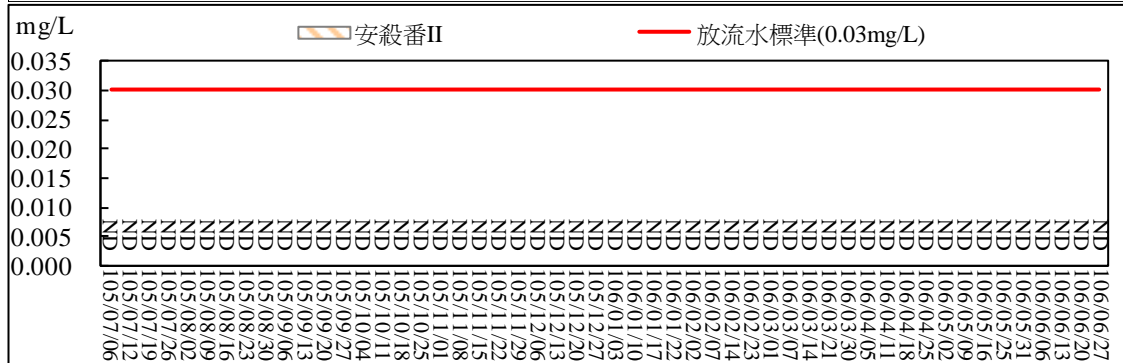
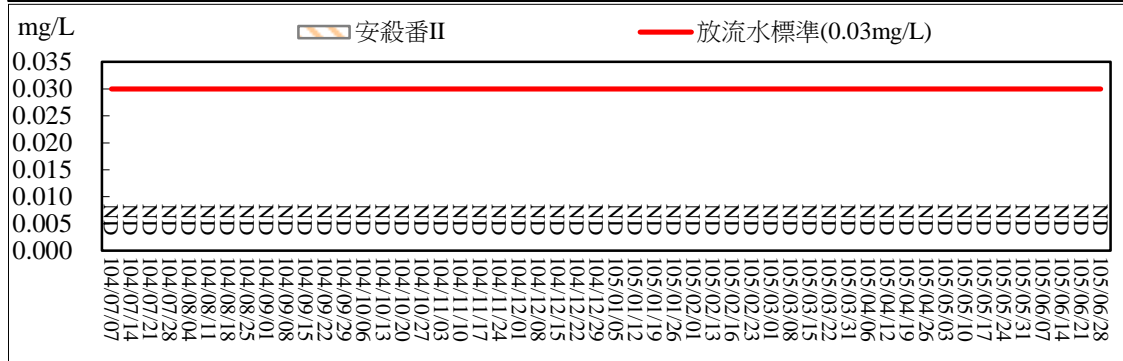
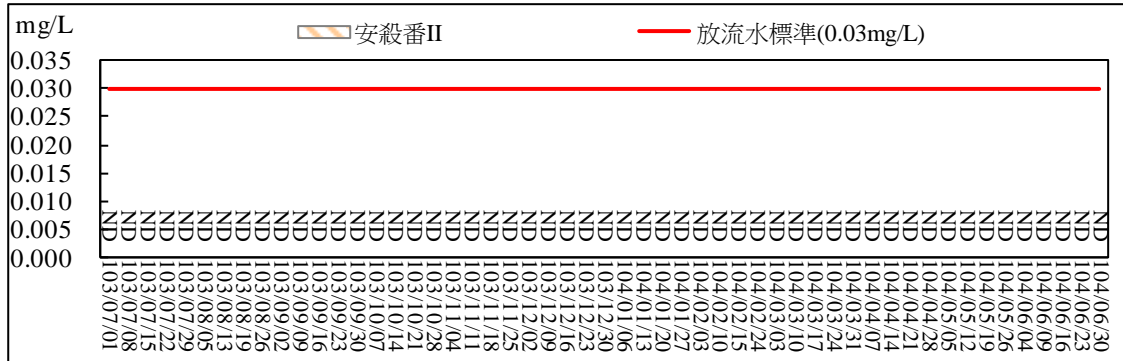
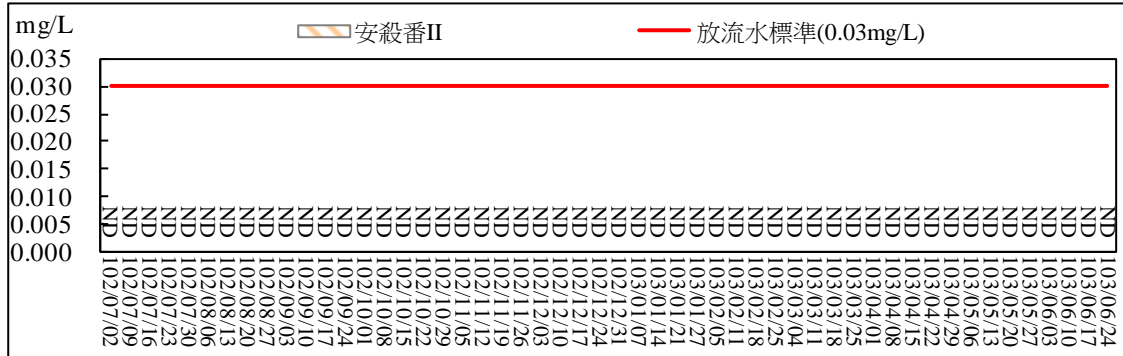
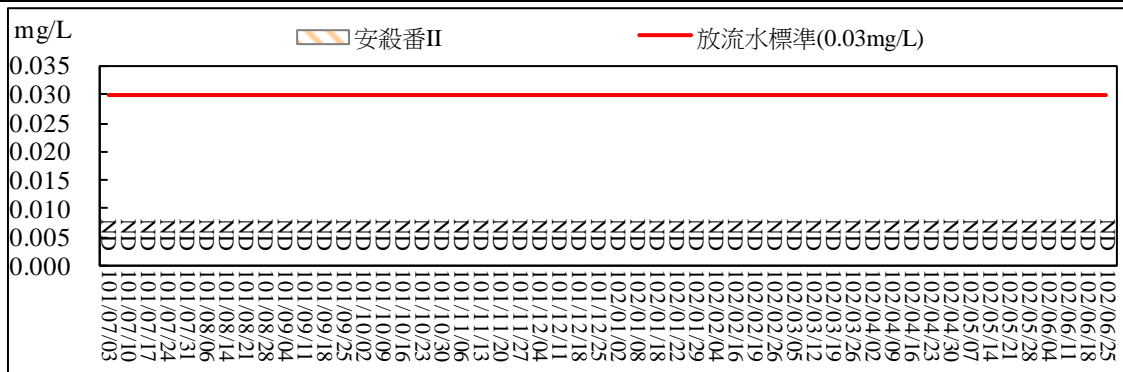


圖 2.49 污水處理廠放流口放流水質監測結果比較圖(安殺番 I)





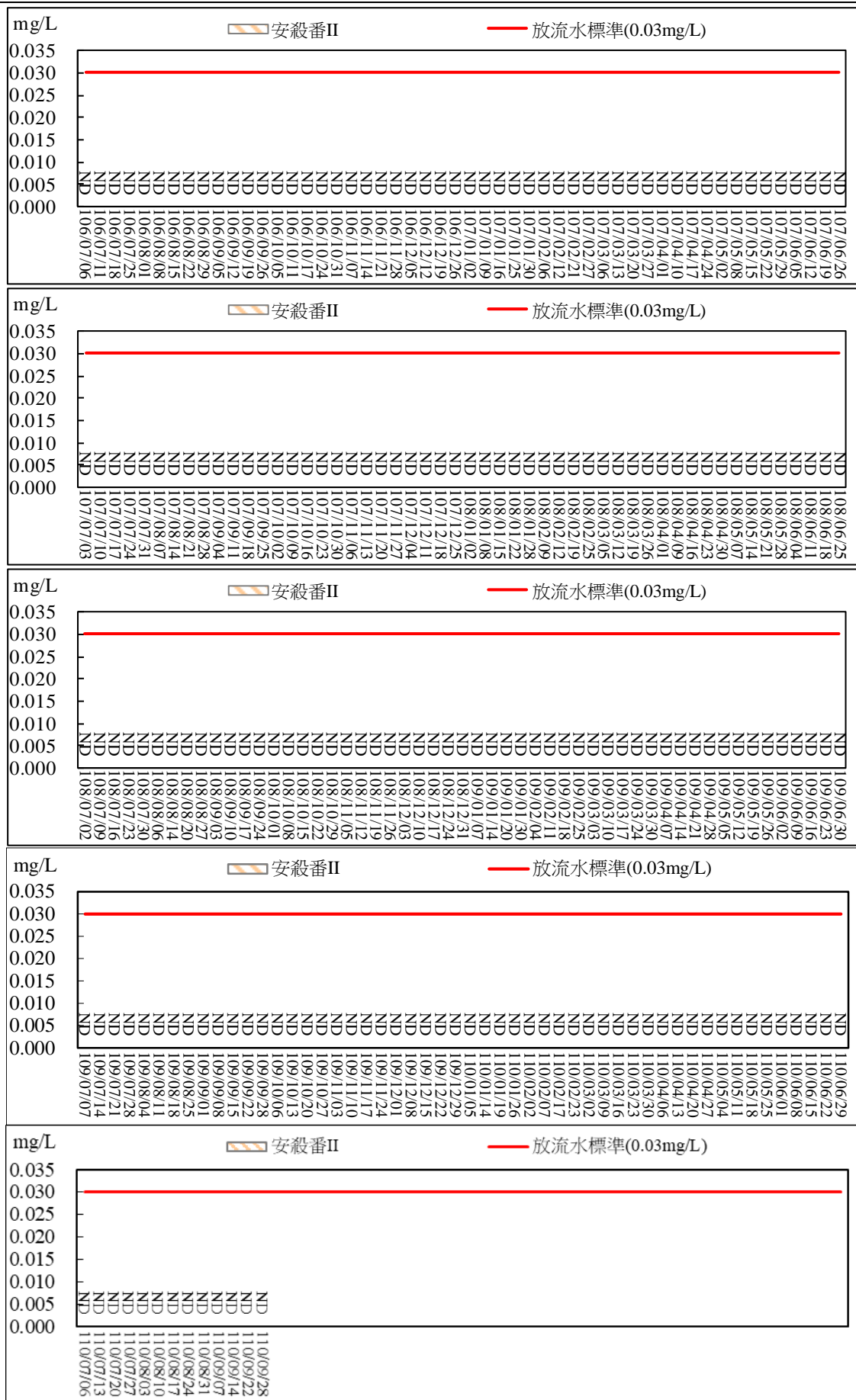
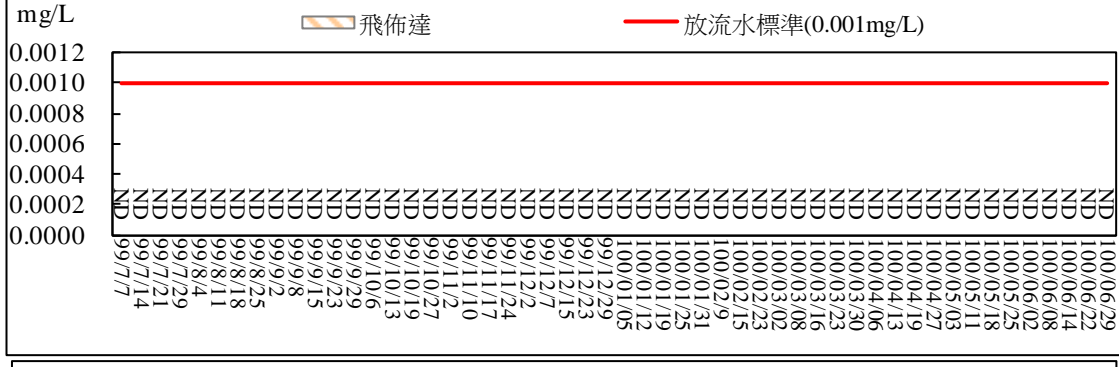
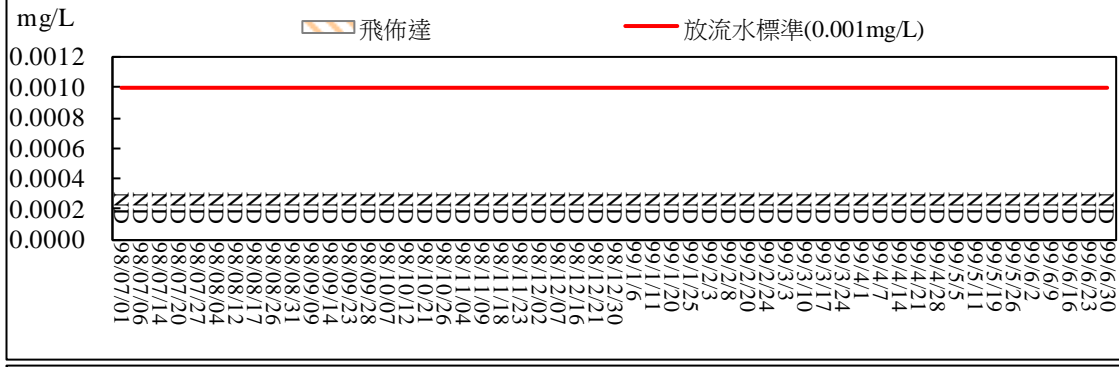
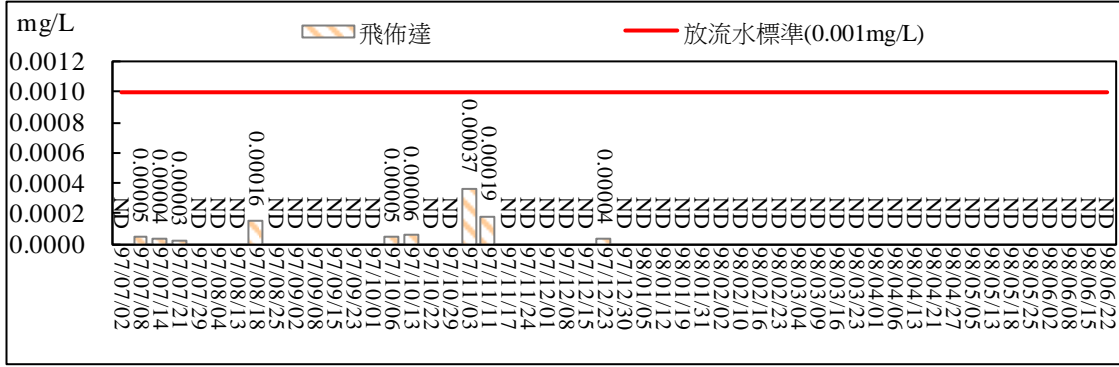
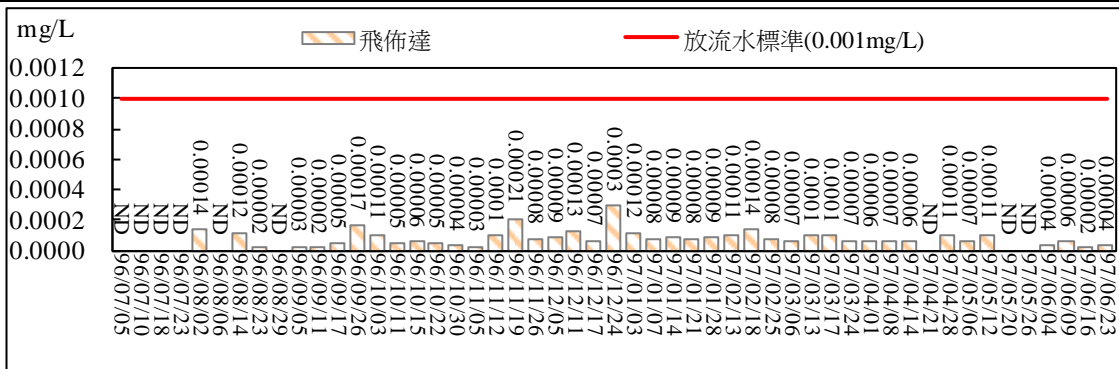
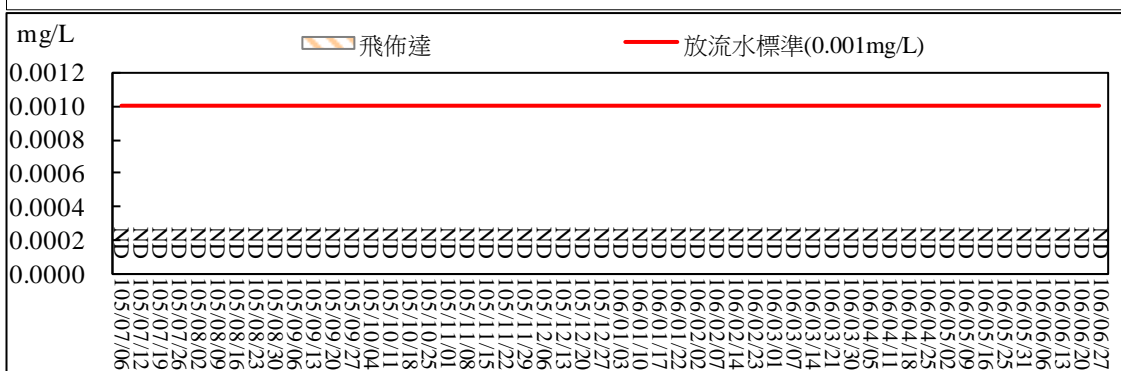
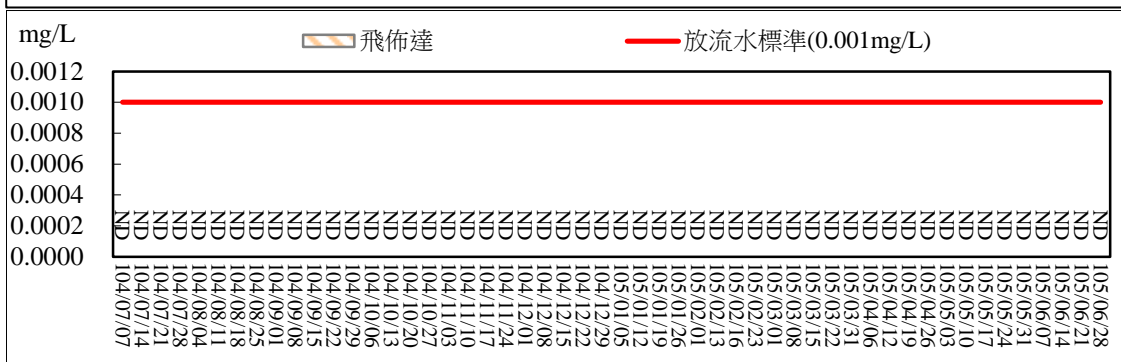
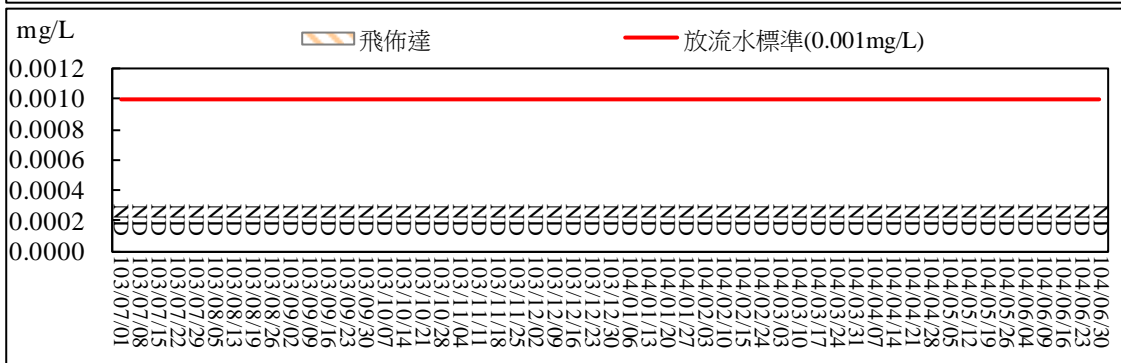
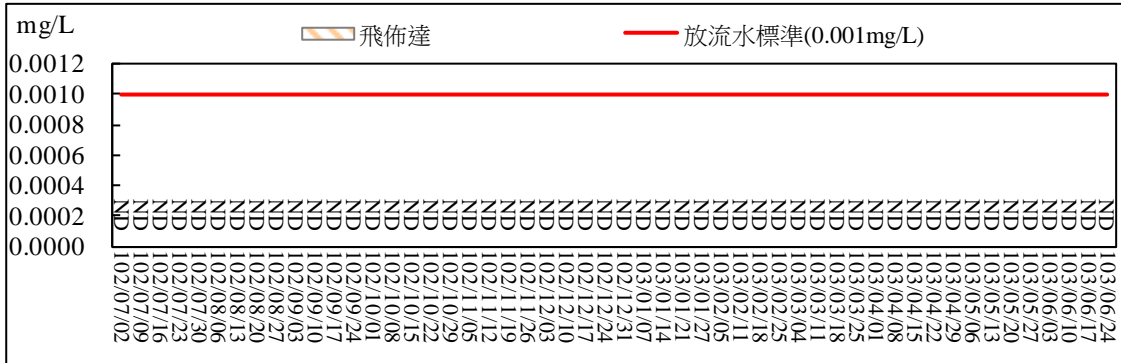
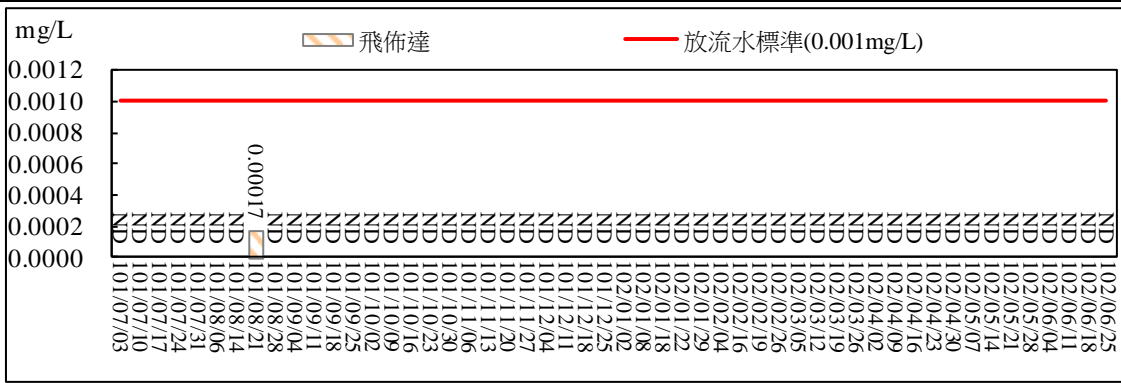


圖 2.50 污水處理廠放流口放流水質監測結果比較圖(安殺番 II)





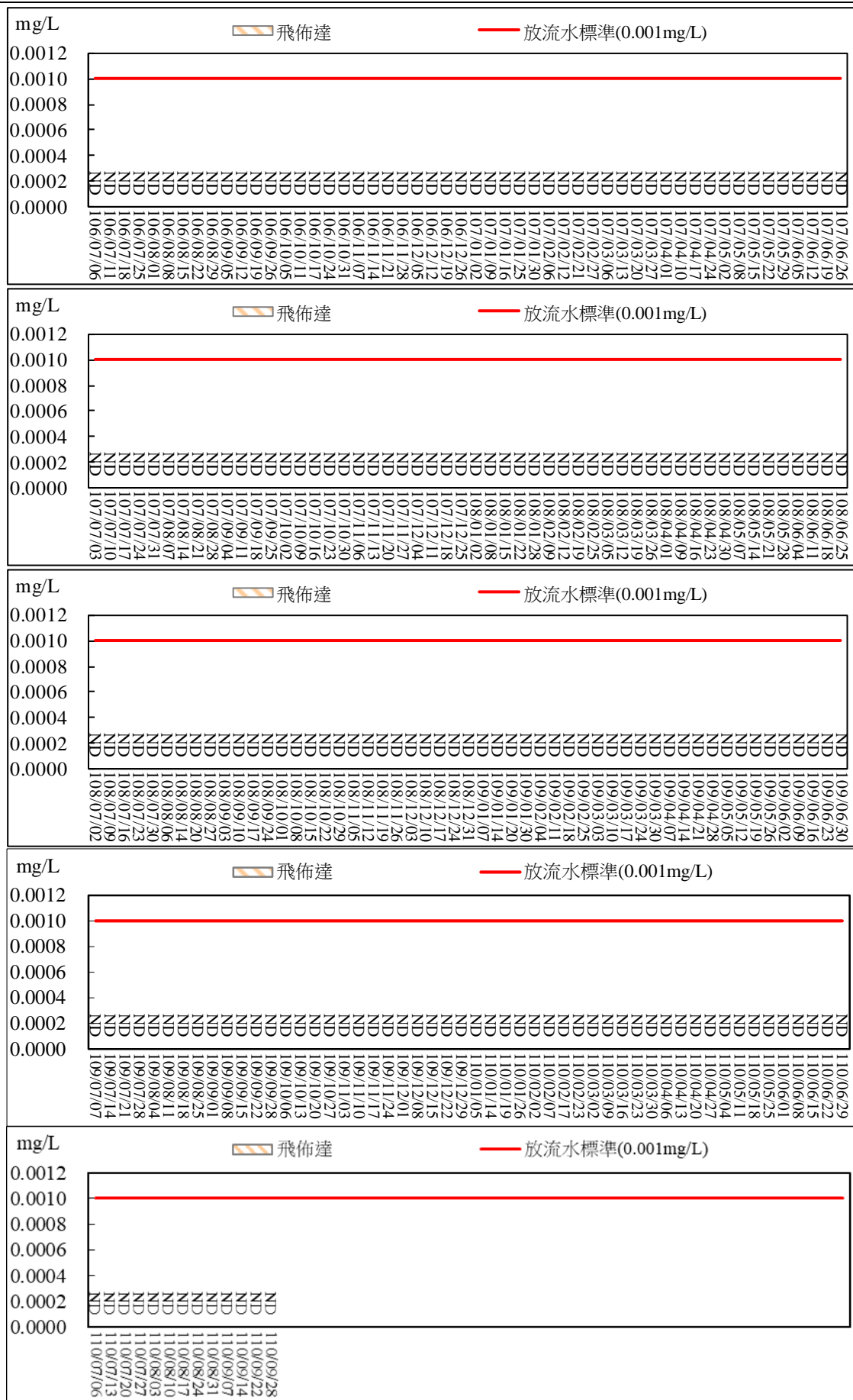
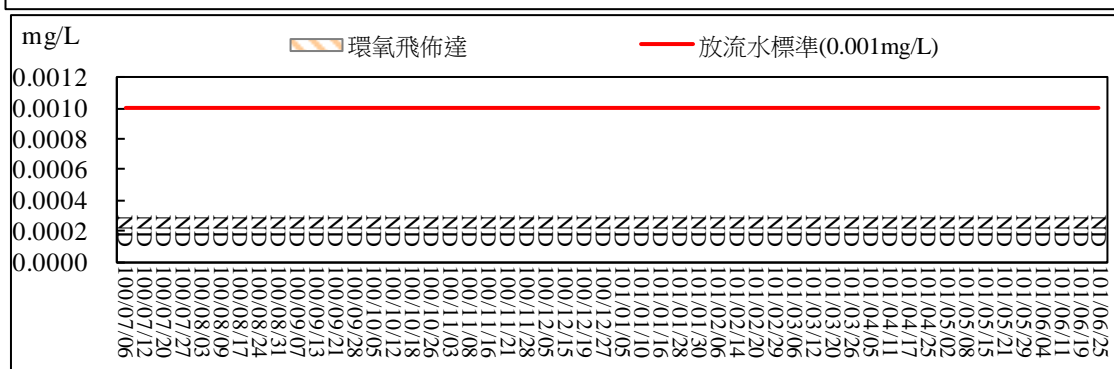
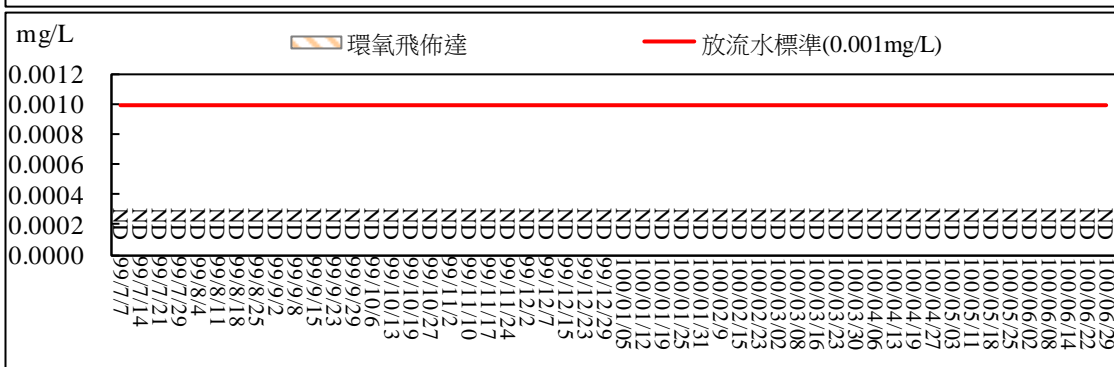
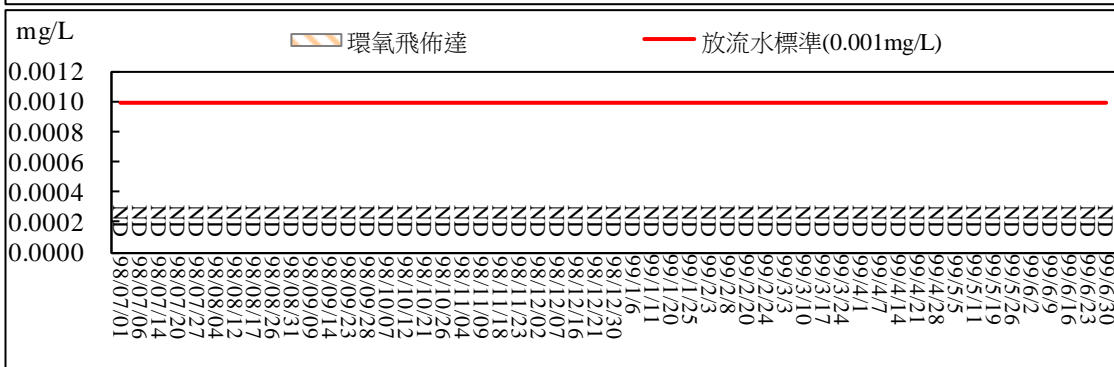
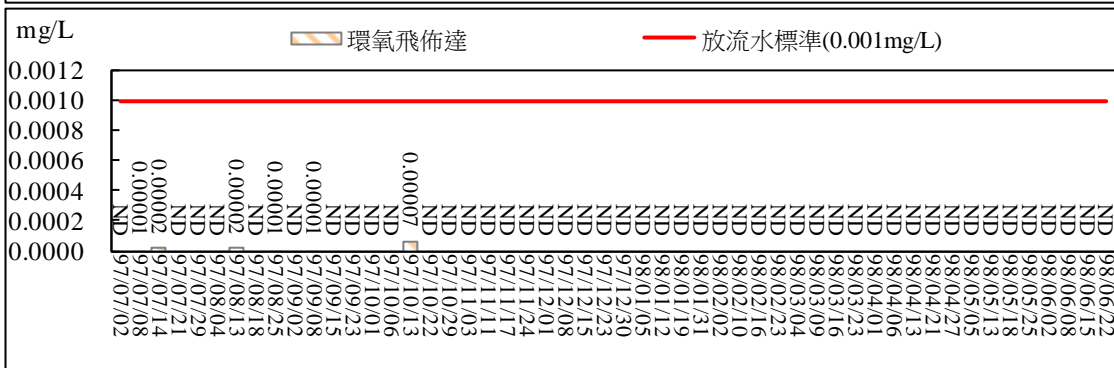
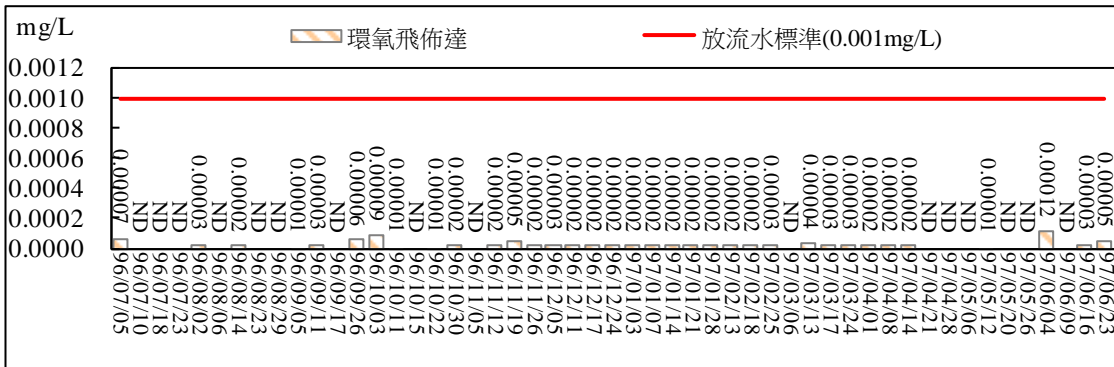
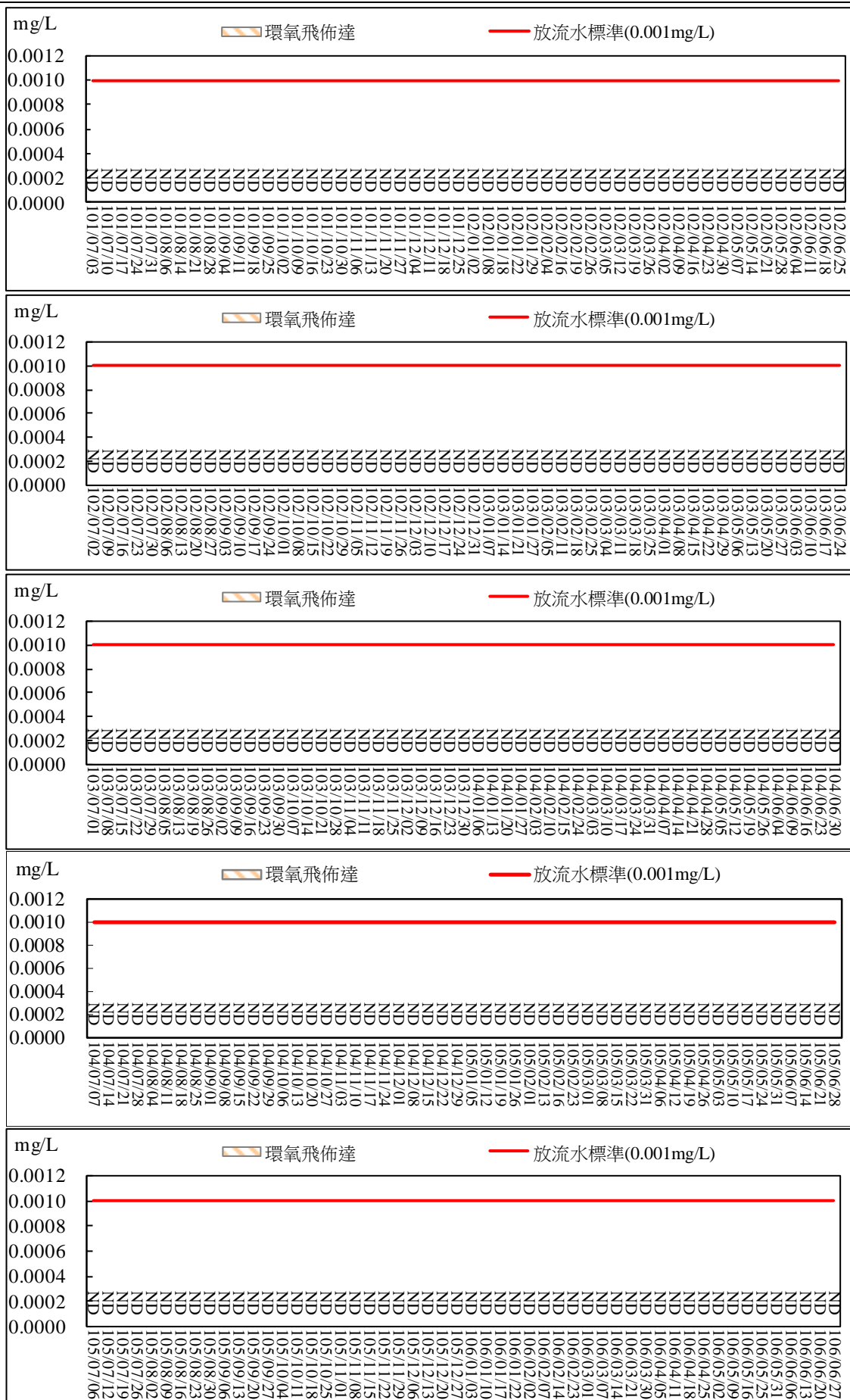


圖 2.51 污水處理廠放流口放流水質監測結果比較圖(飛佈達)





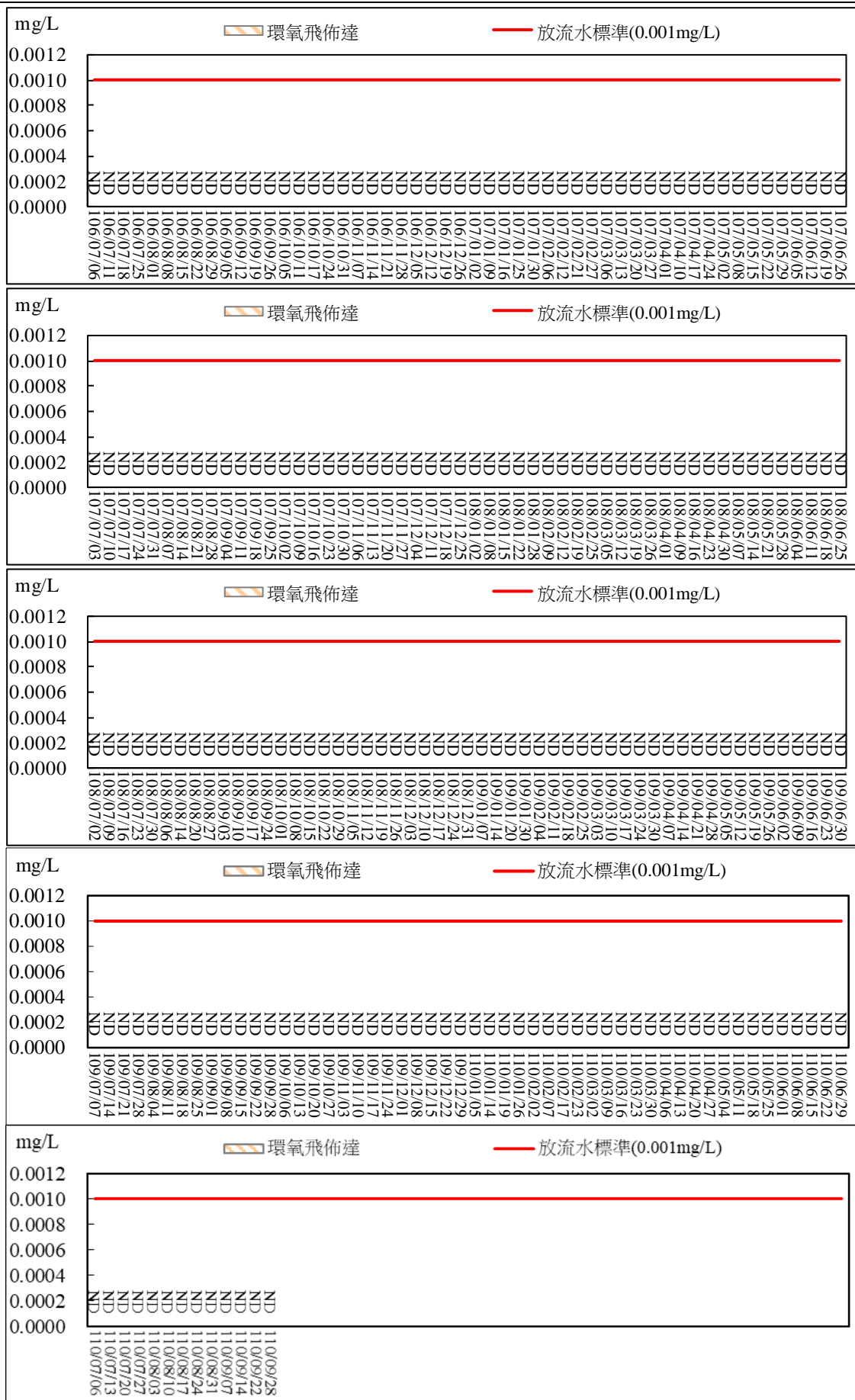
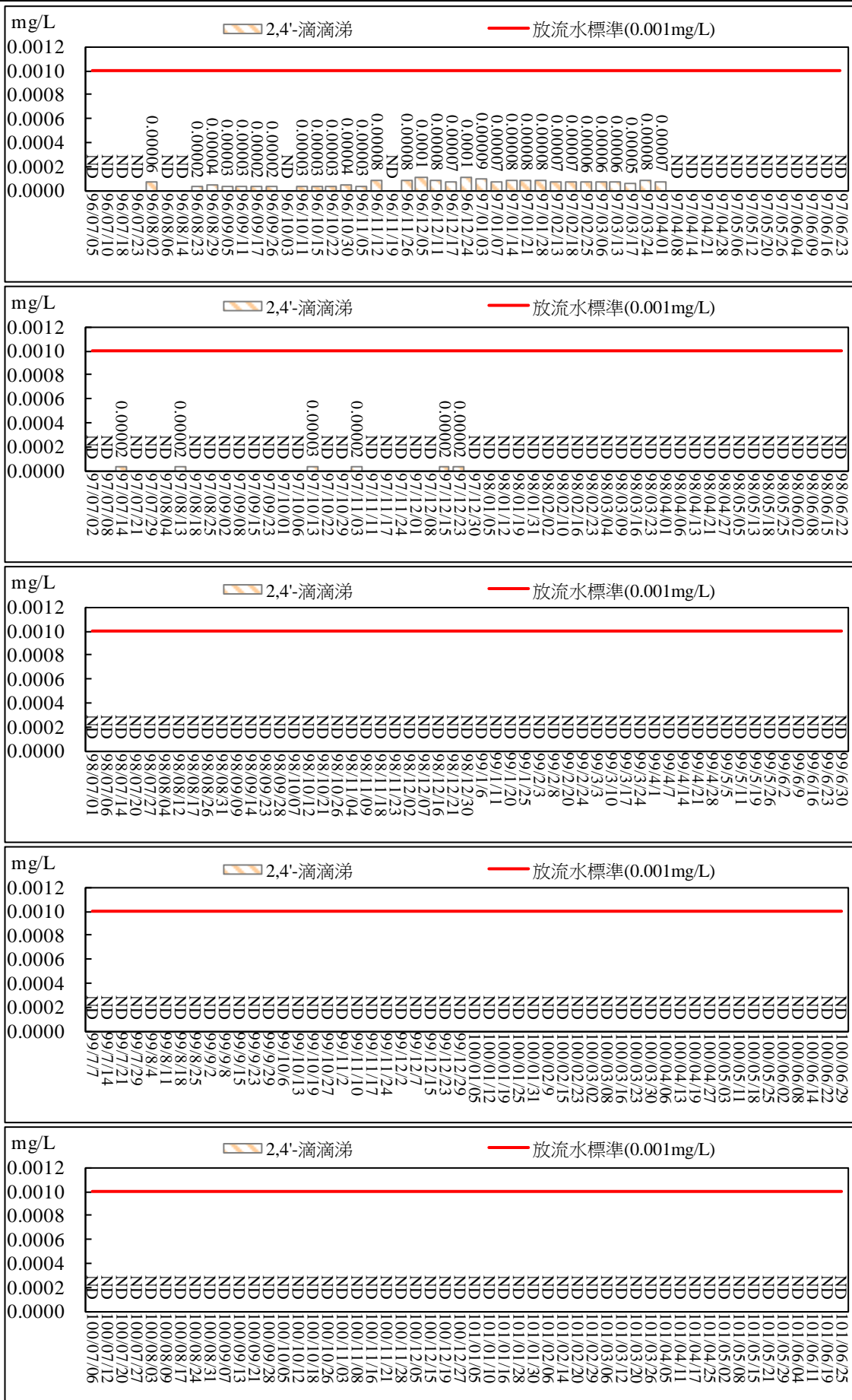
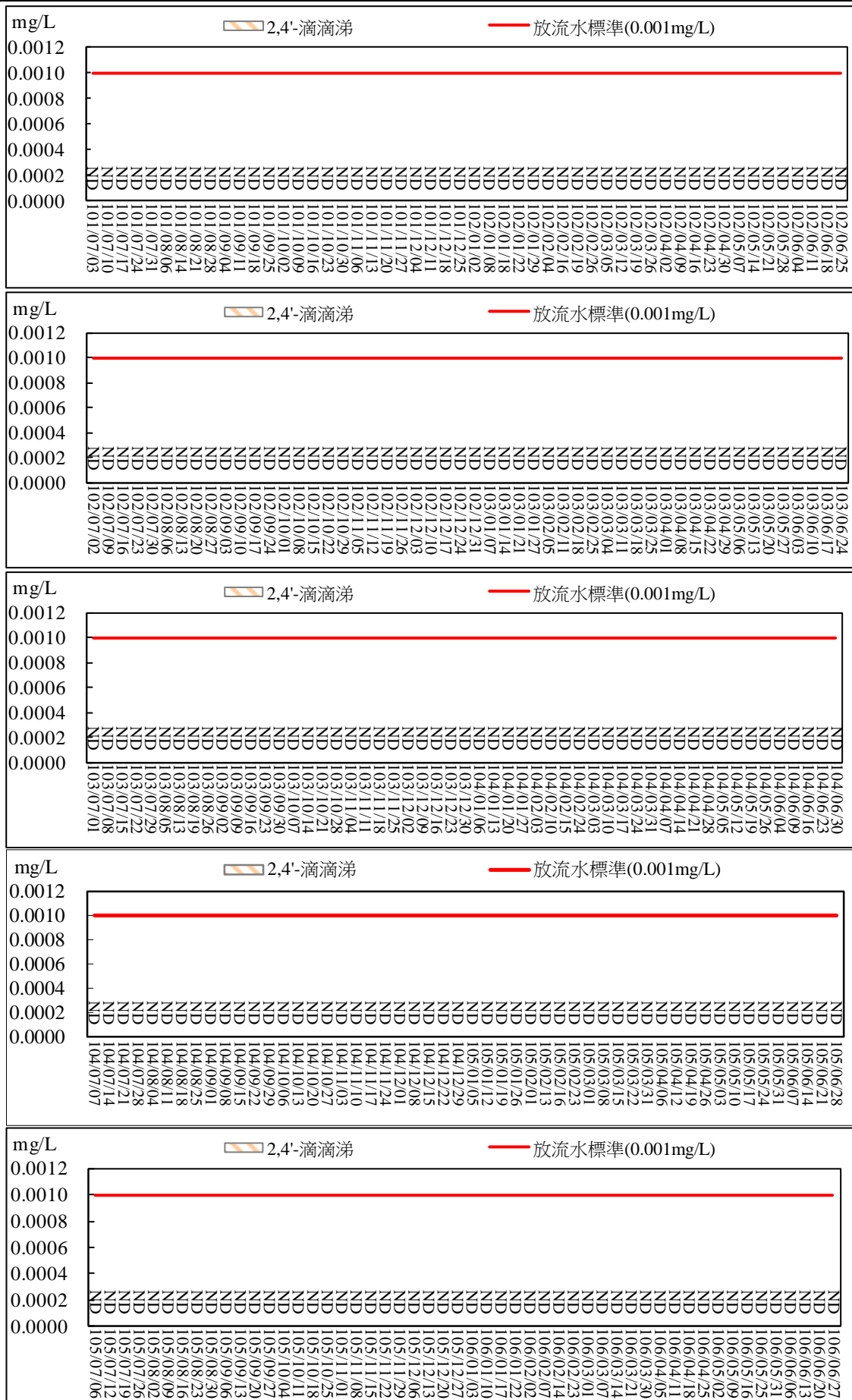


圖 2.52 污水處理廠放流口放流水質監測結果比較圖(環氧飛佈達)





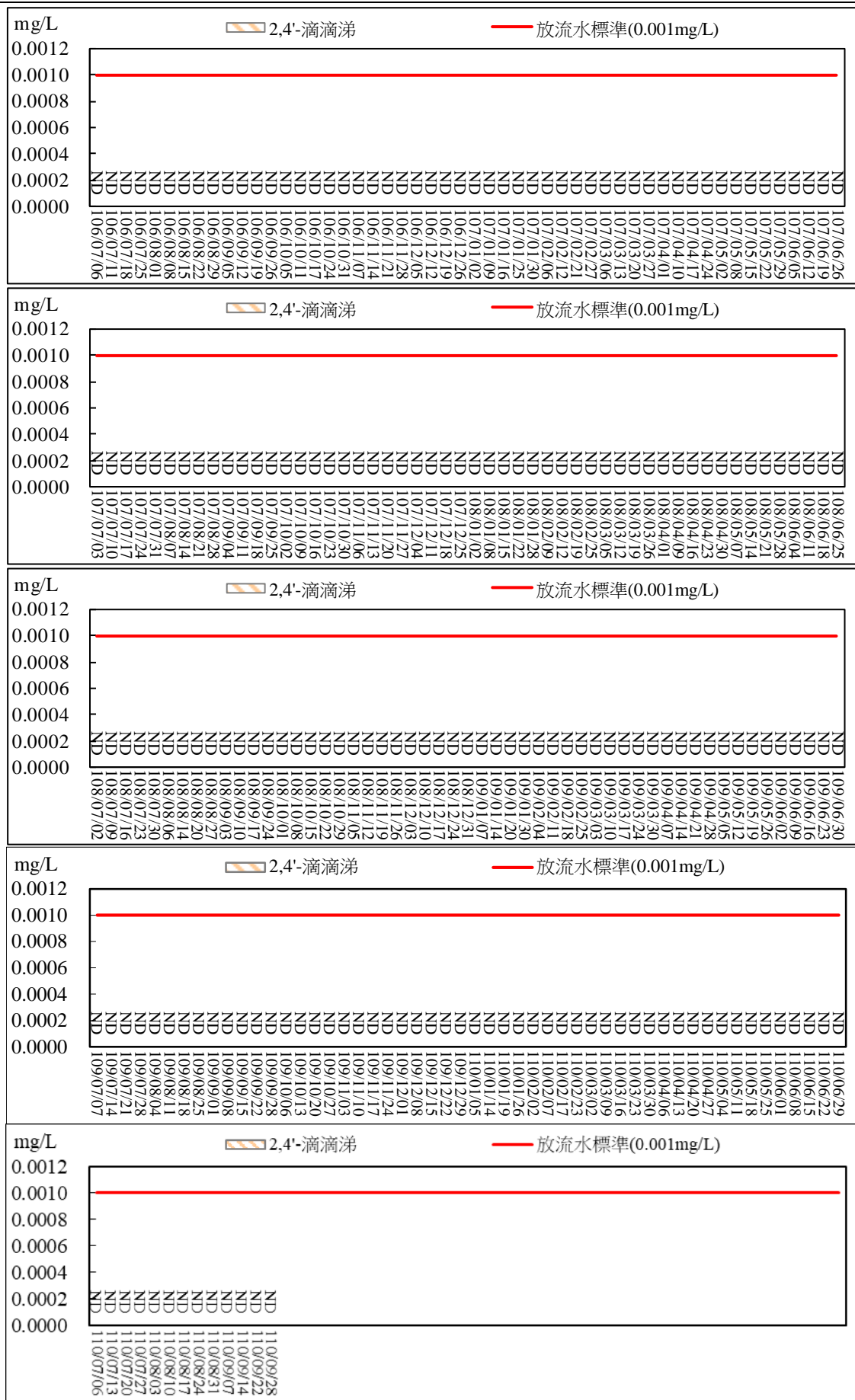
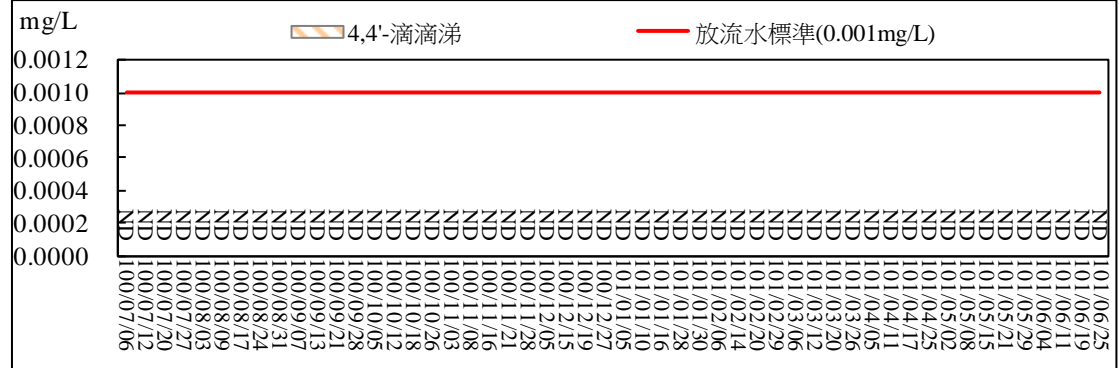
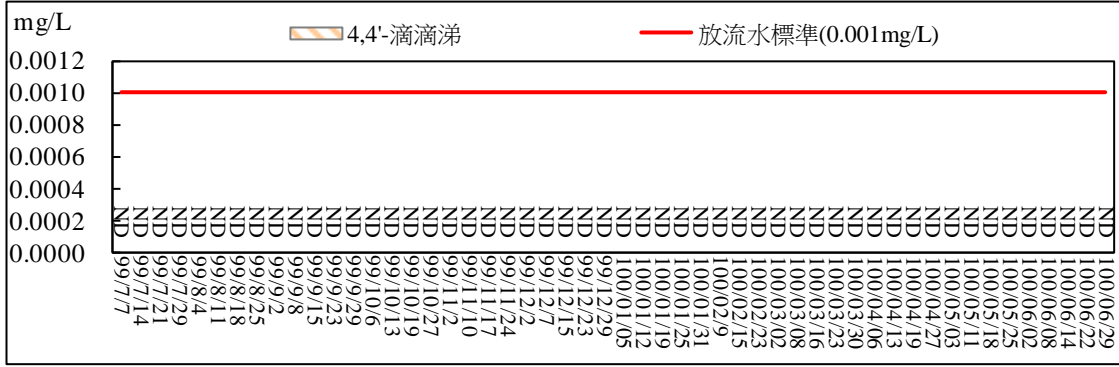
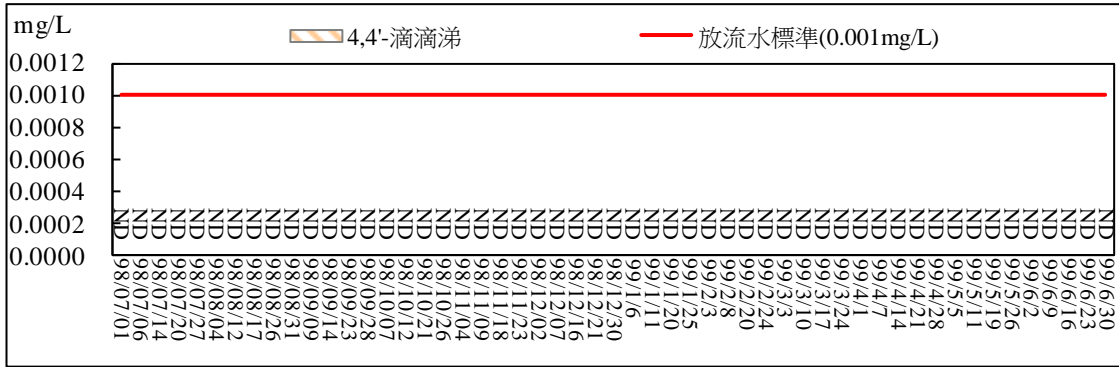
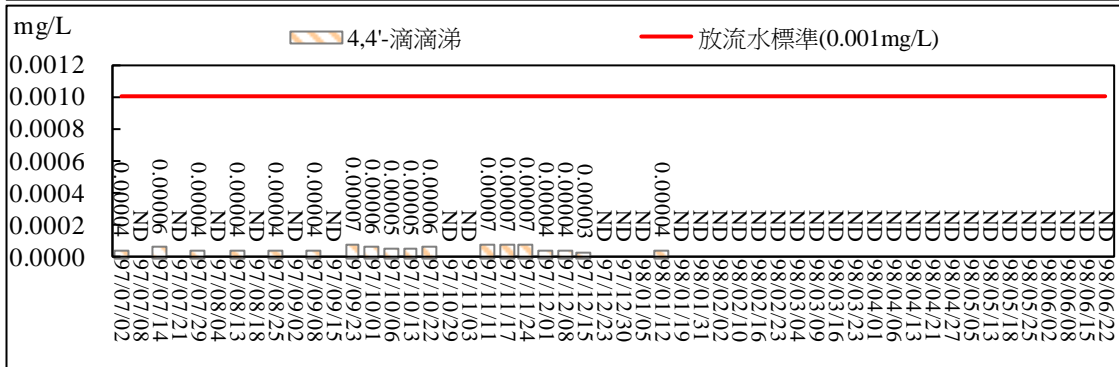
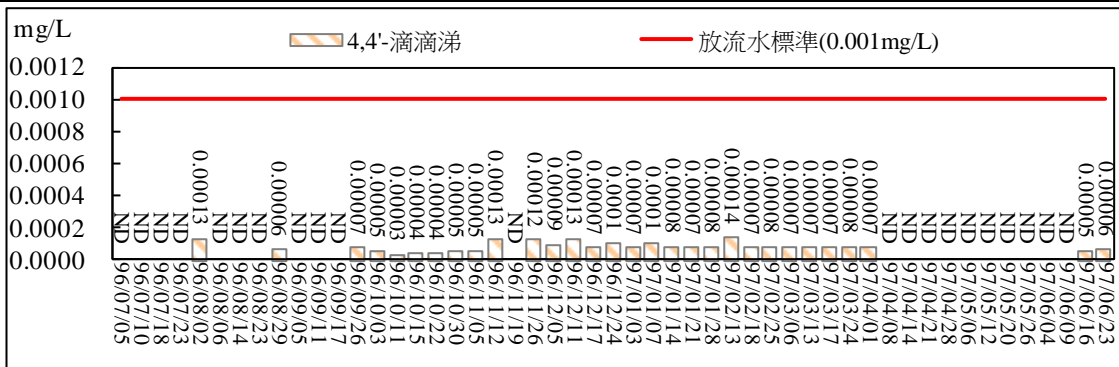
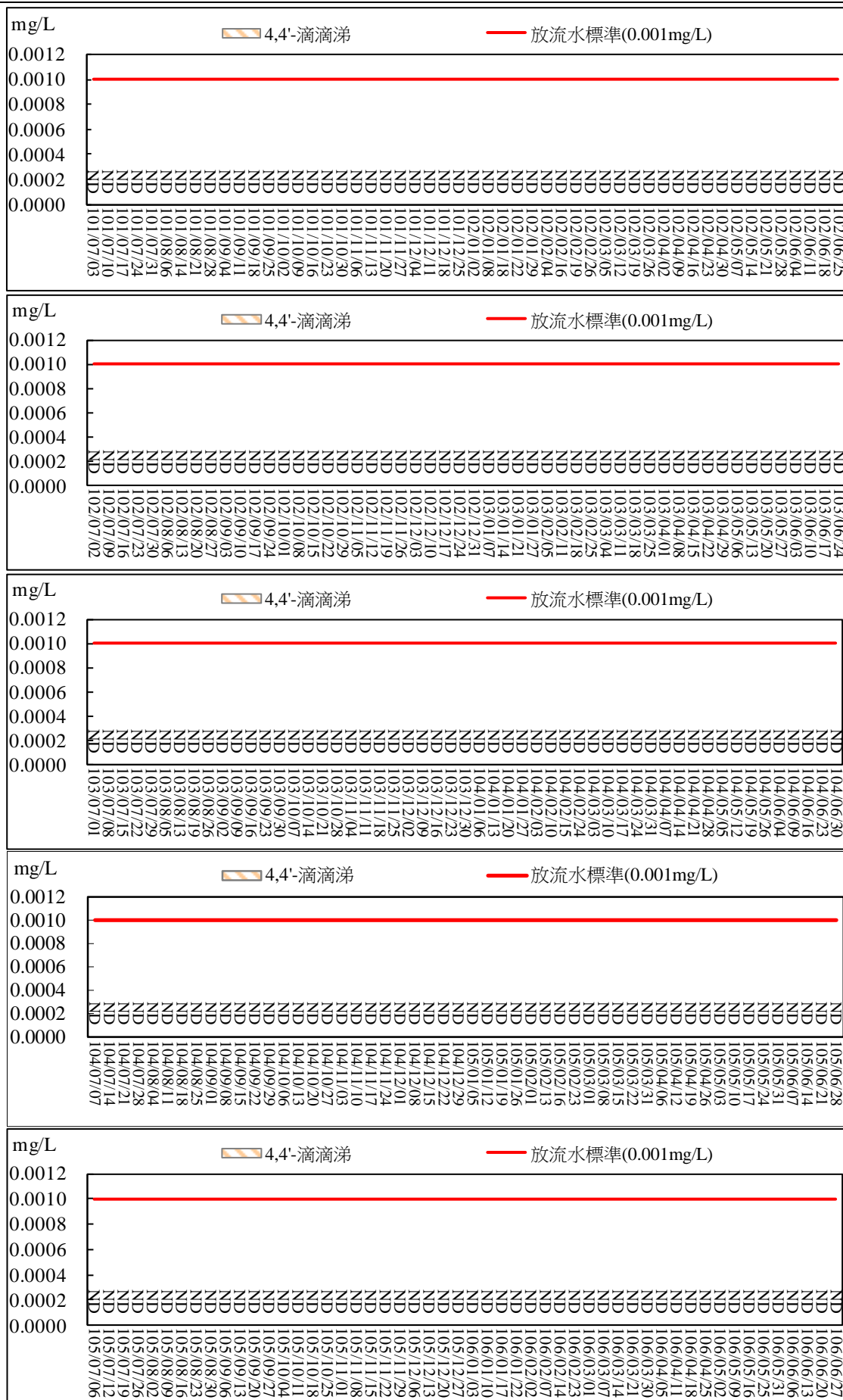


圖 2.53 污水處理廠放流口放流水質監測結果比較圖(2,4'-滴滴涕)





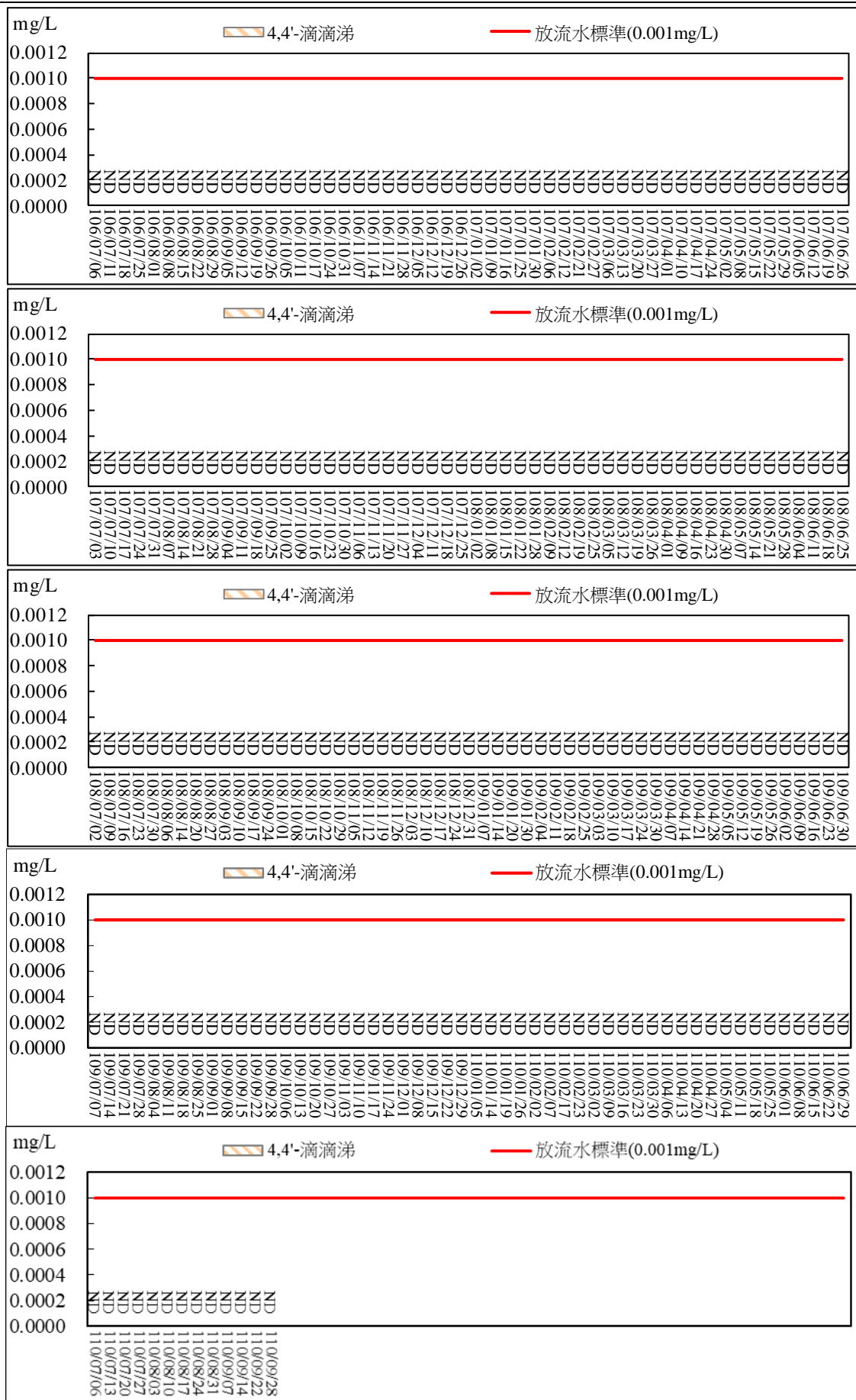
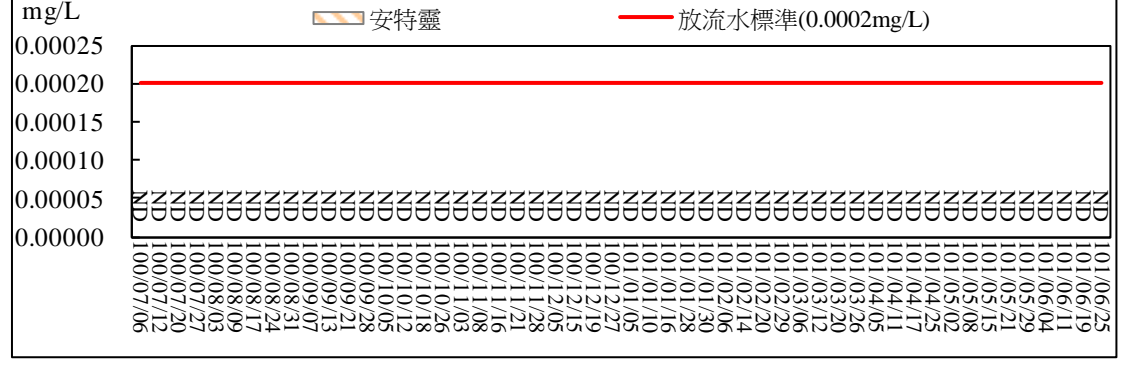
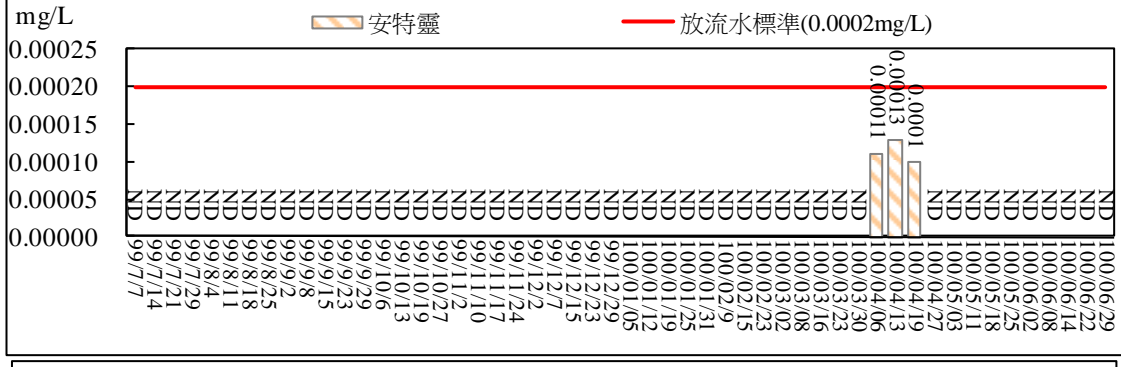
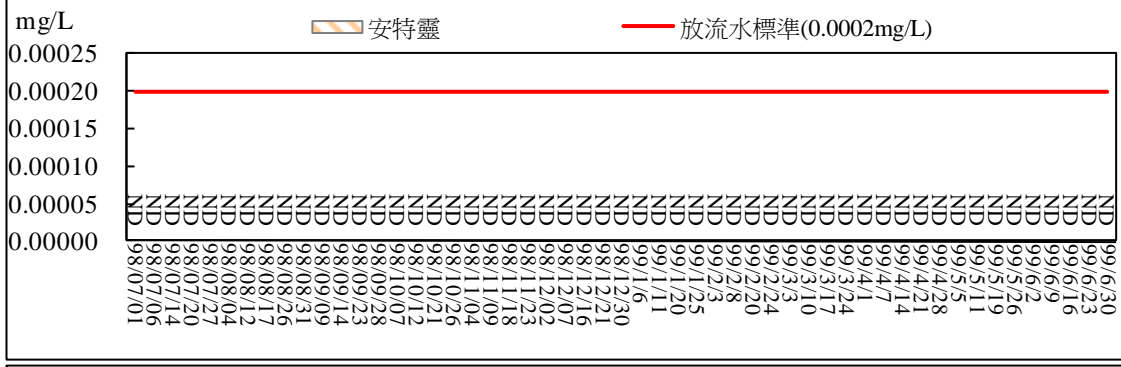
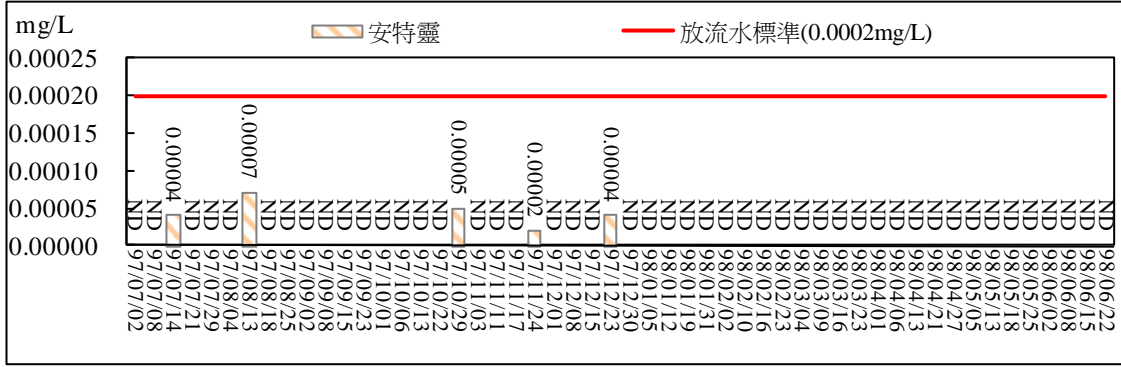
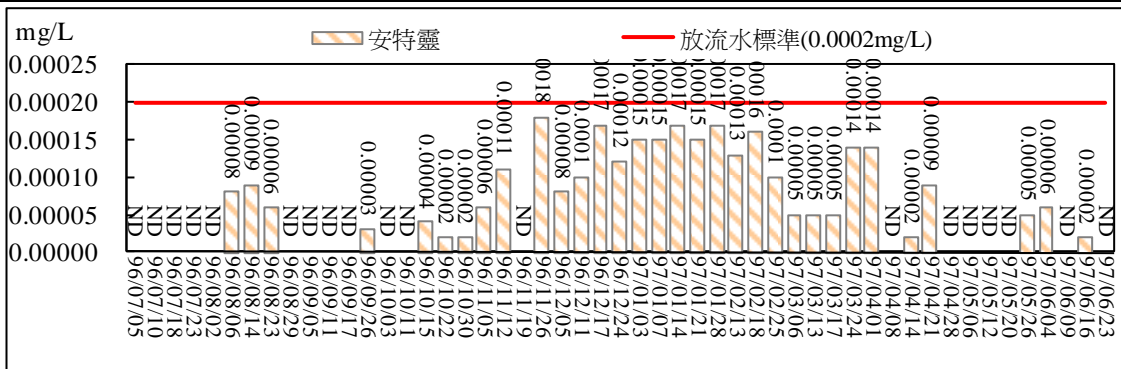
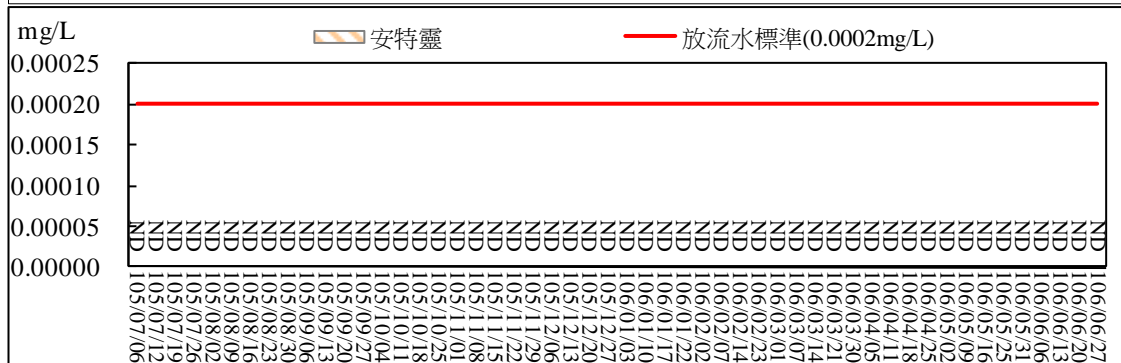
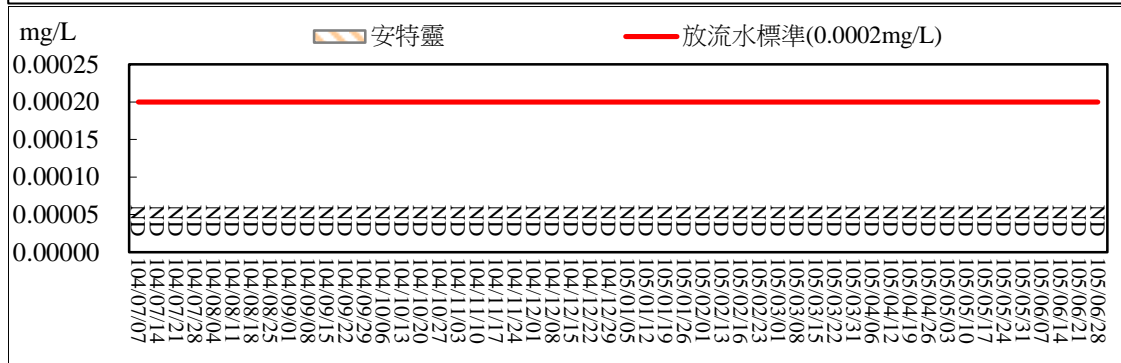
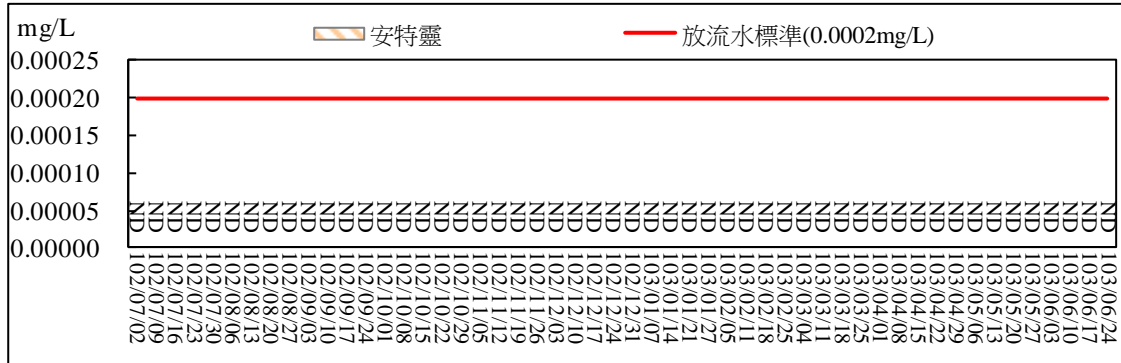
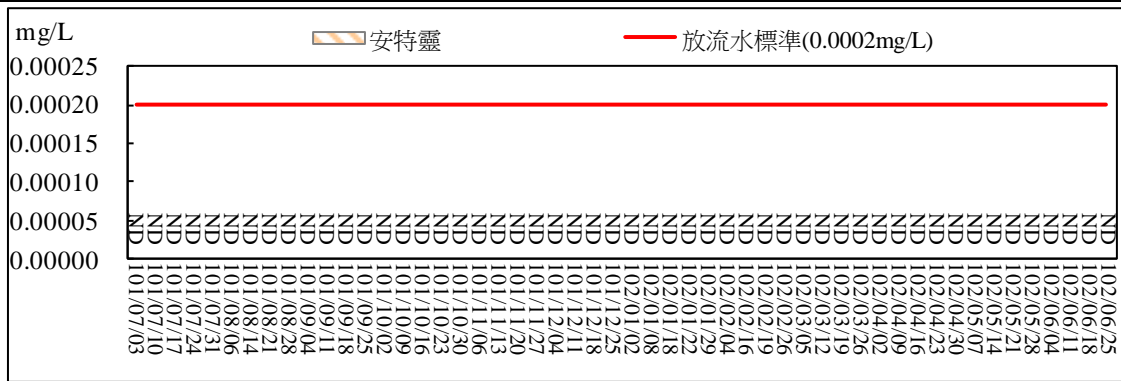


圖 2.54 污水處理廠放流口放流水質監測結果比較圖(4,4'-滴滴涕)





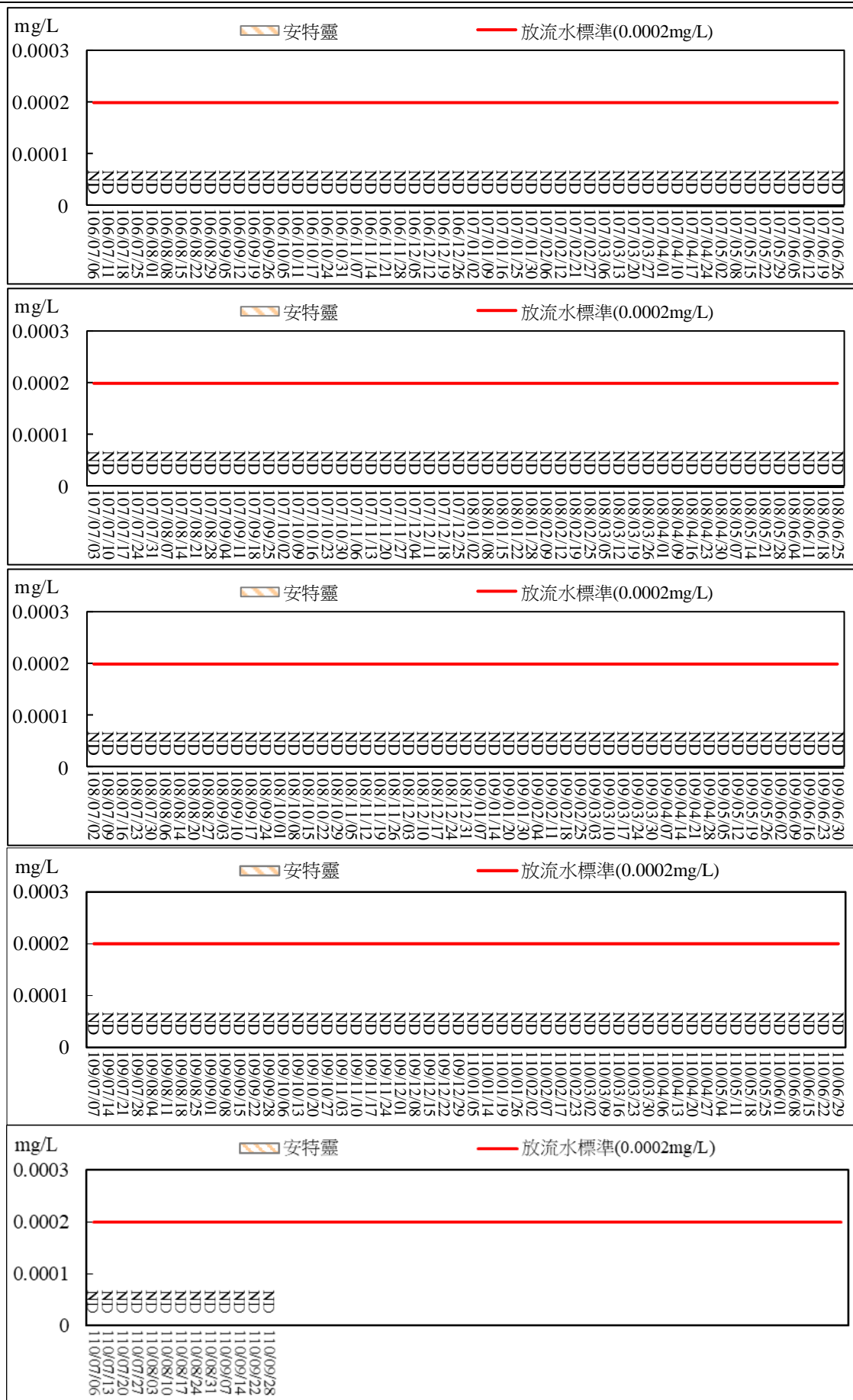
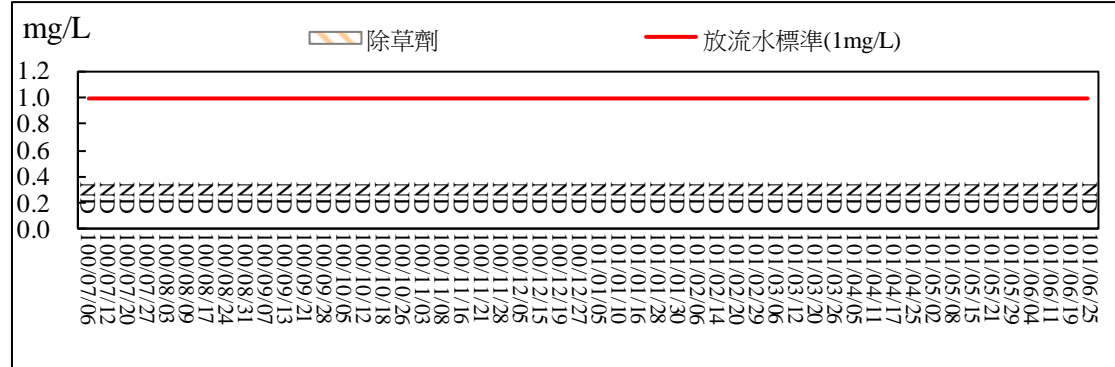
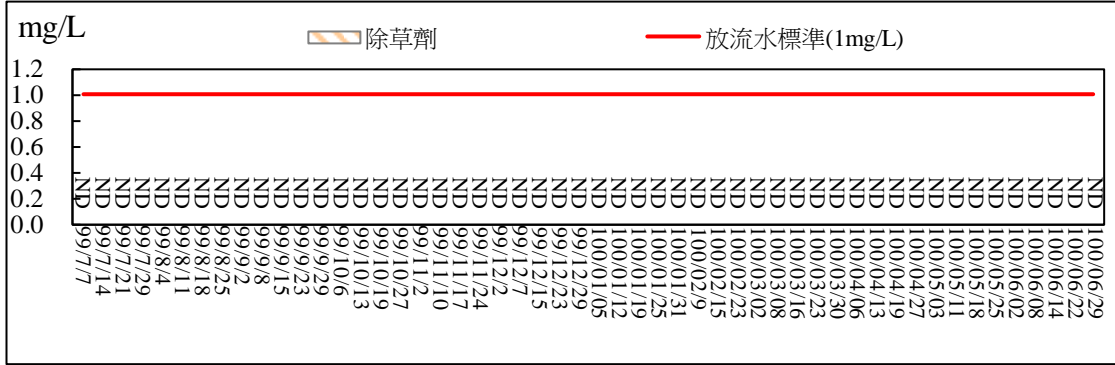
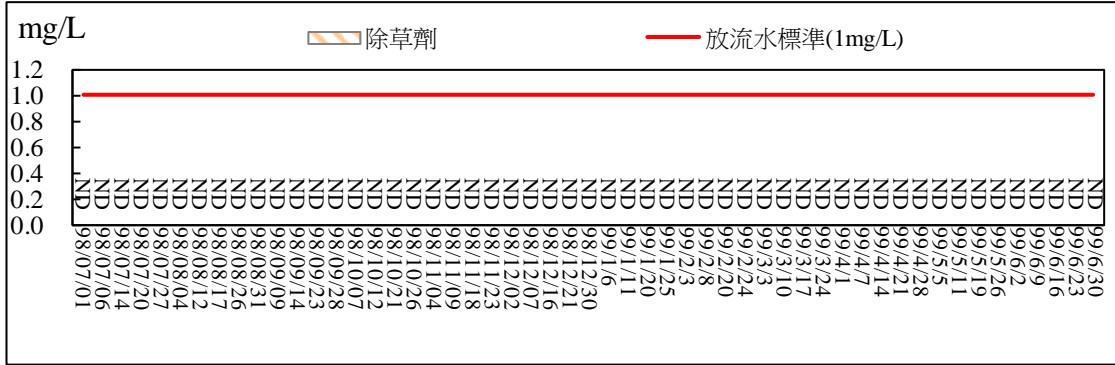
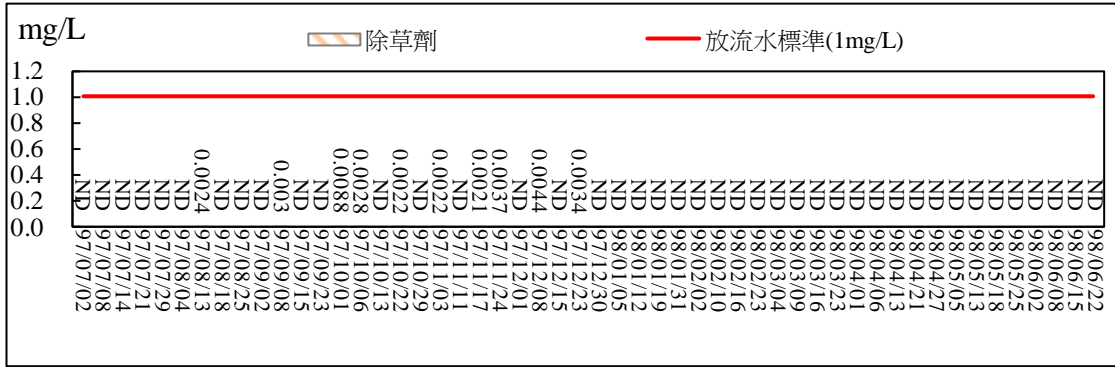
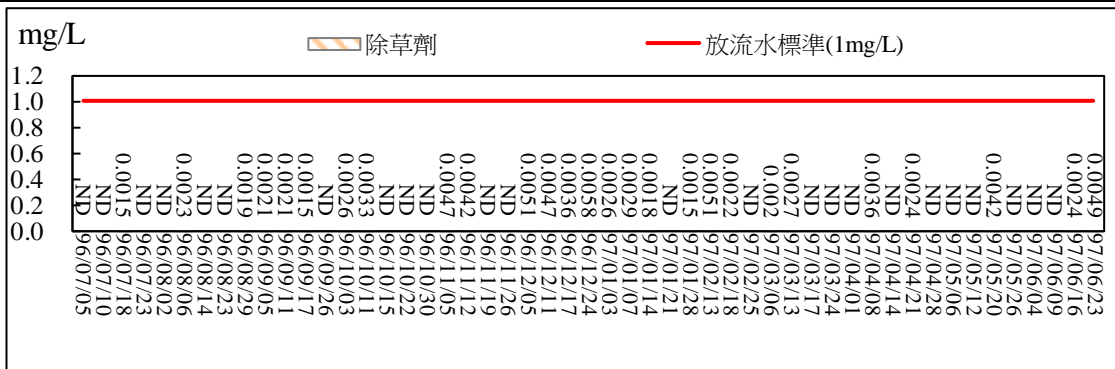
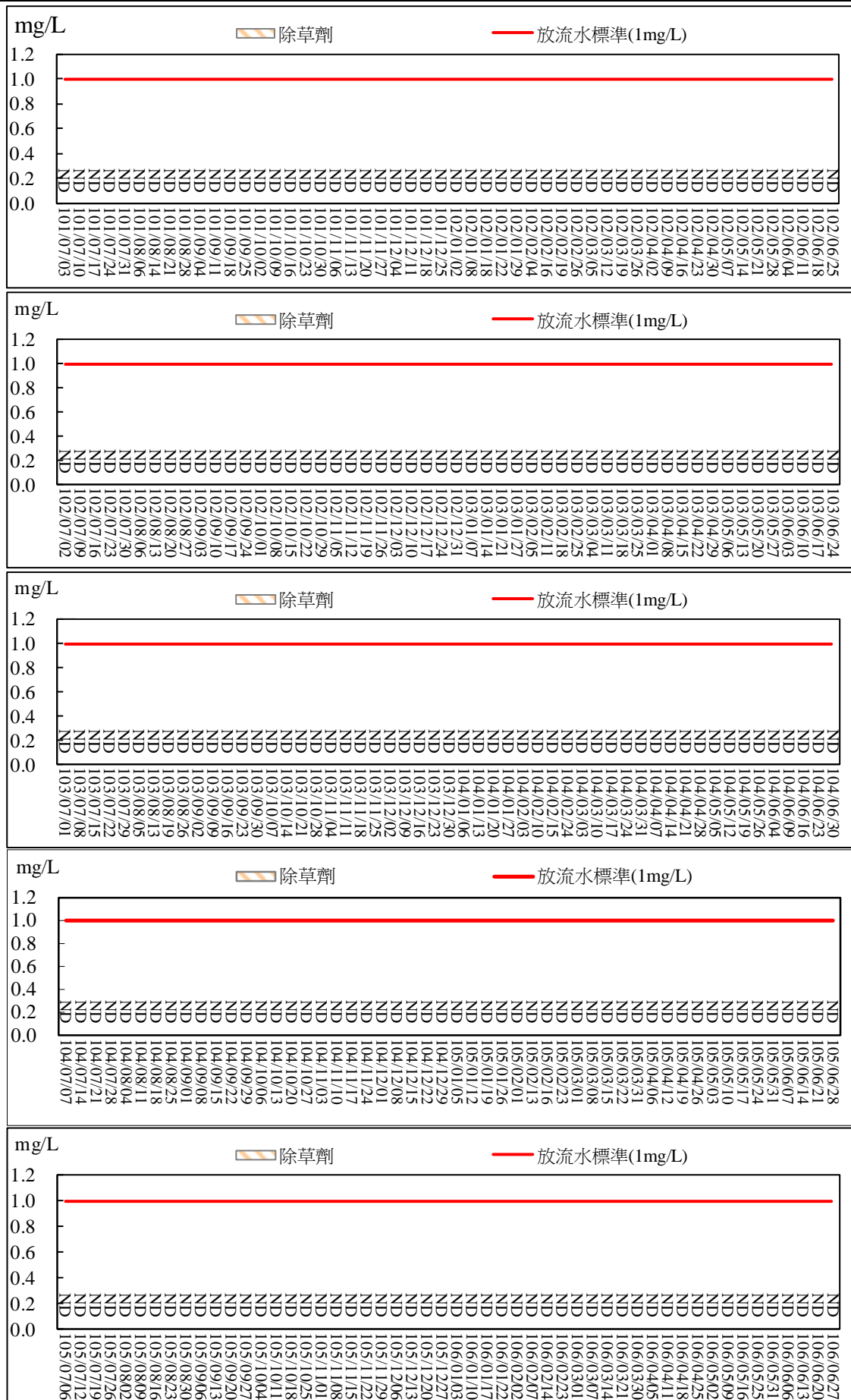


圖 2.55 污水處理廠放流口放流水質監測結果比較圖(安特靈)





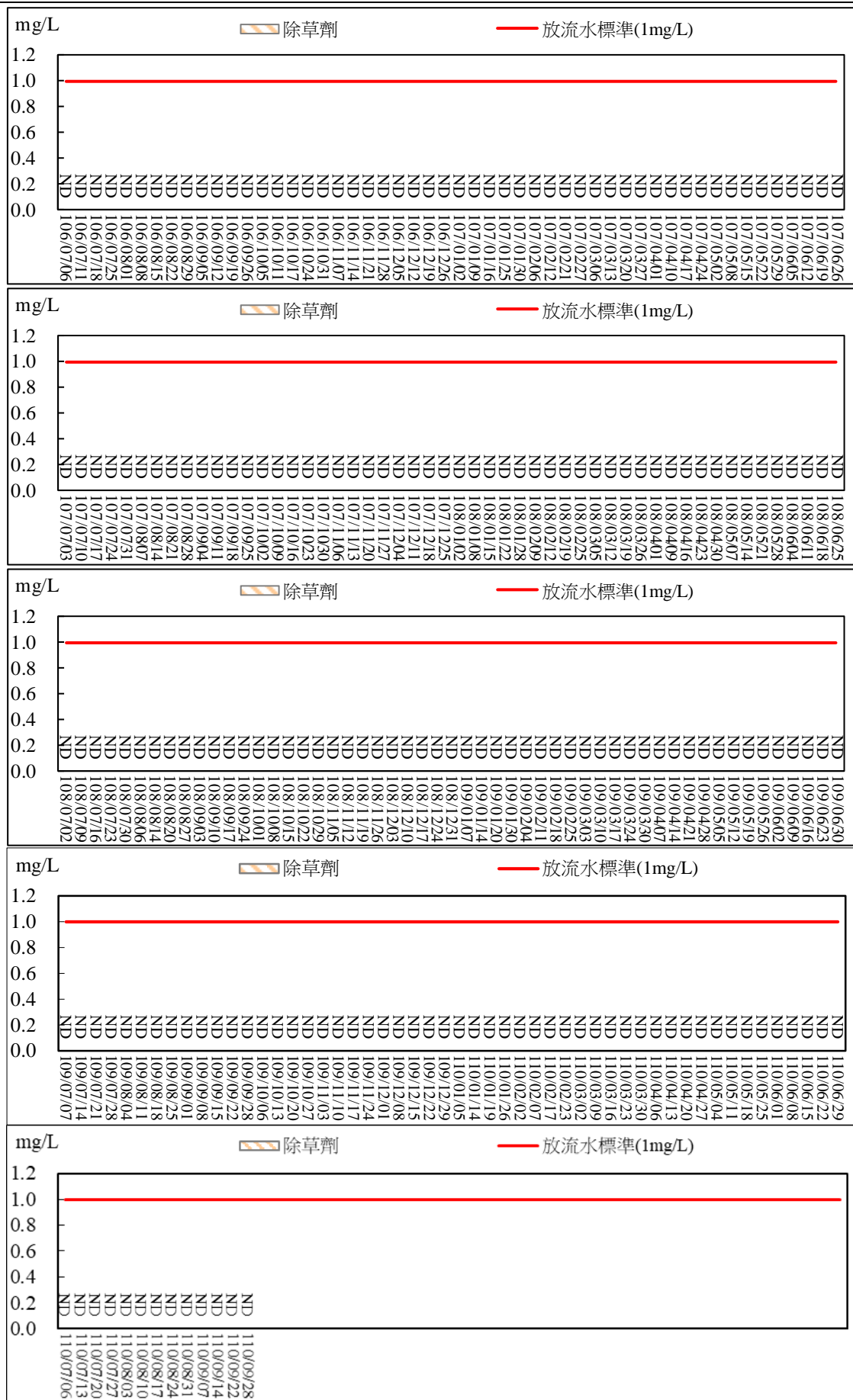
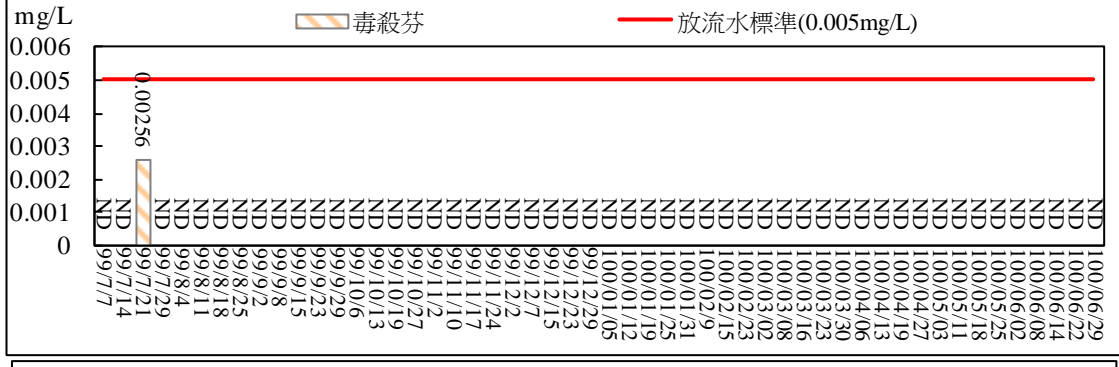
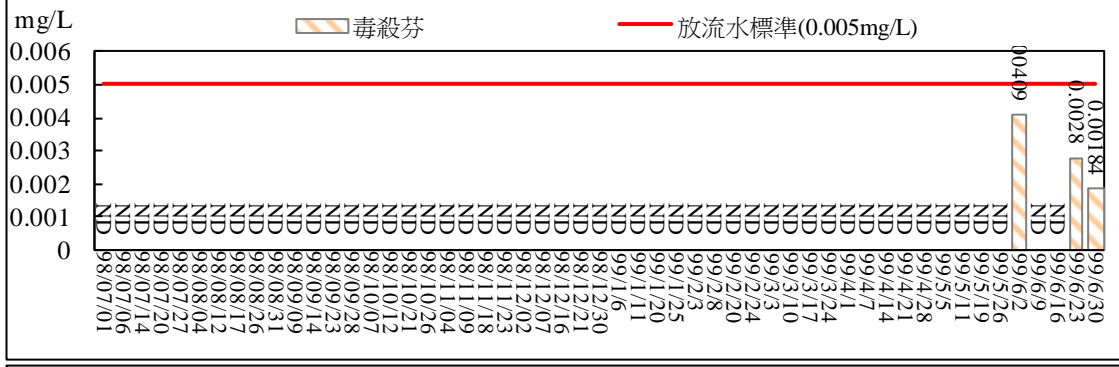
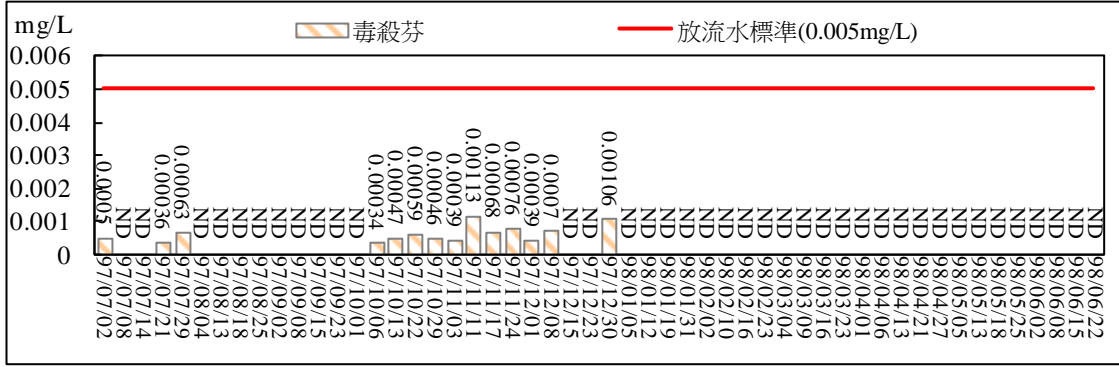
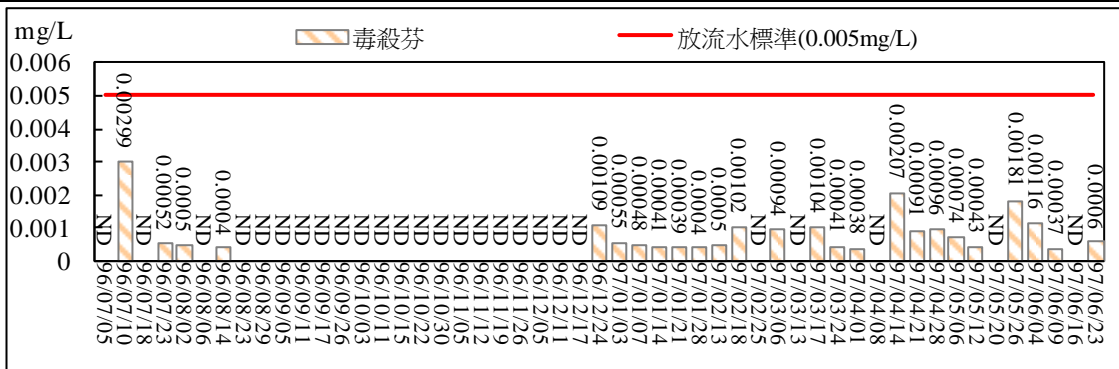


圖 2.56 污水處理廠放流口放流水質監測結果比較圖(除草劑)



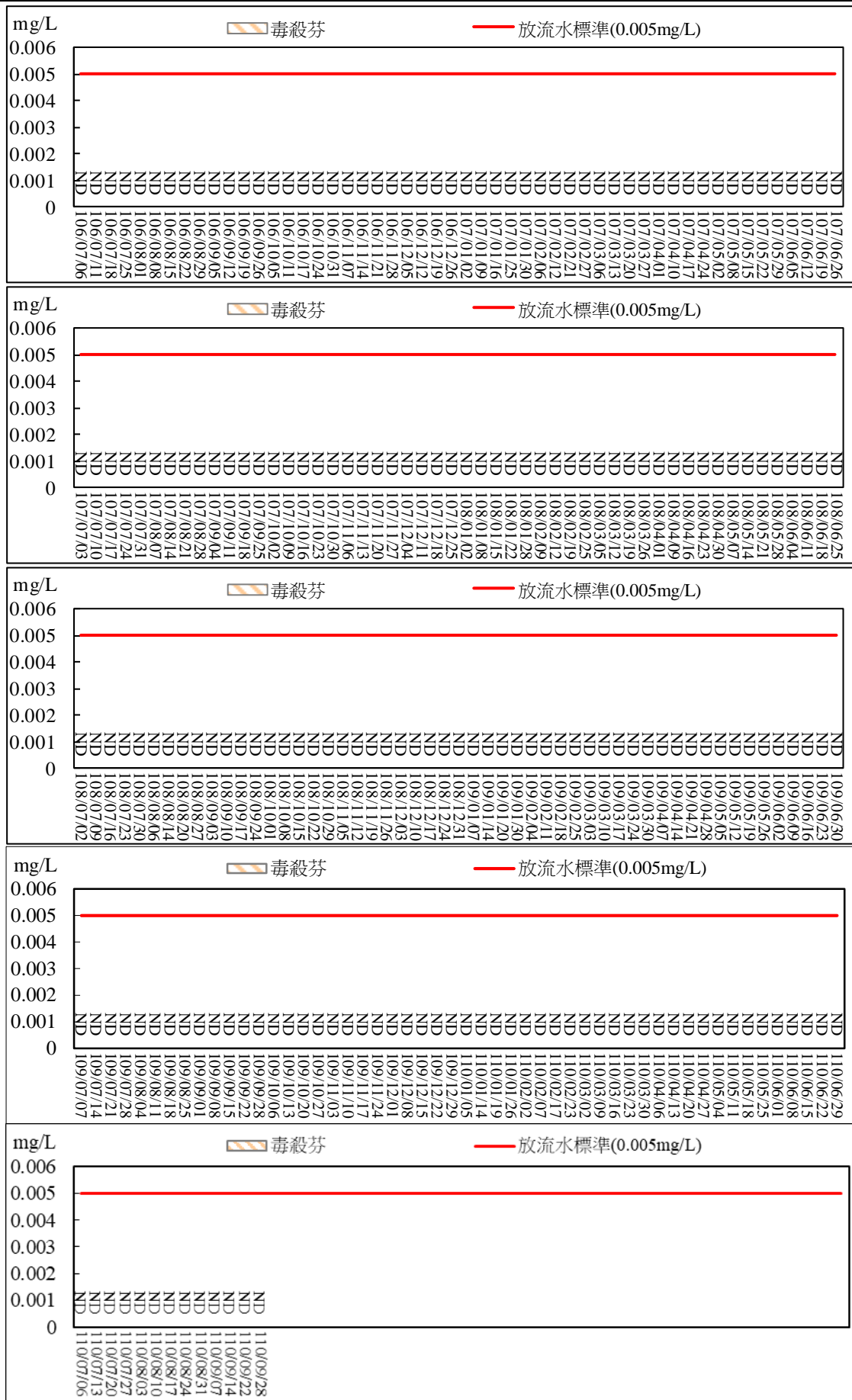
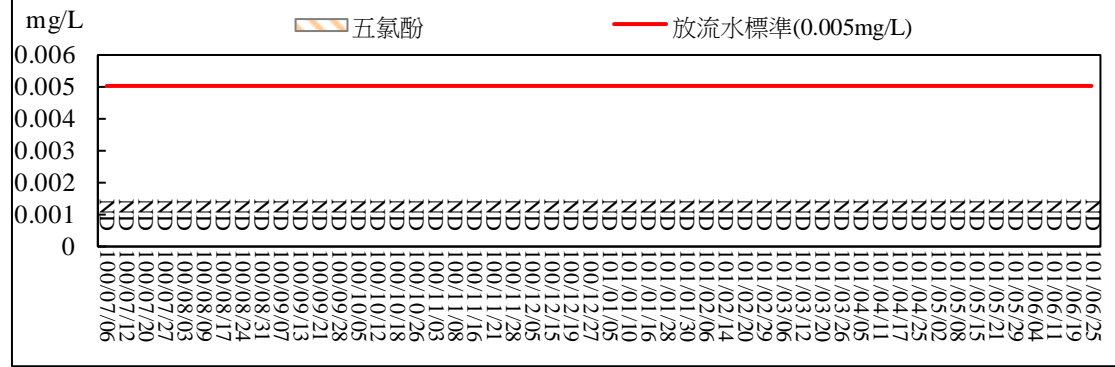
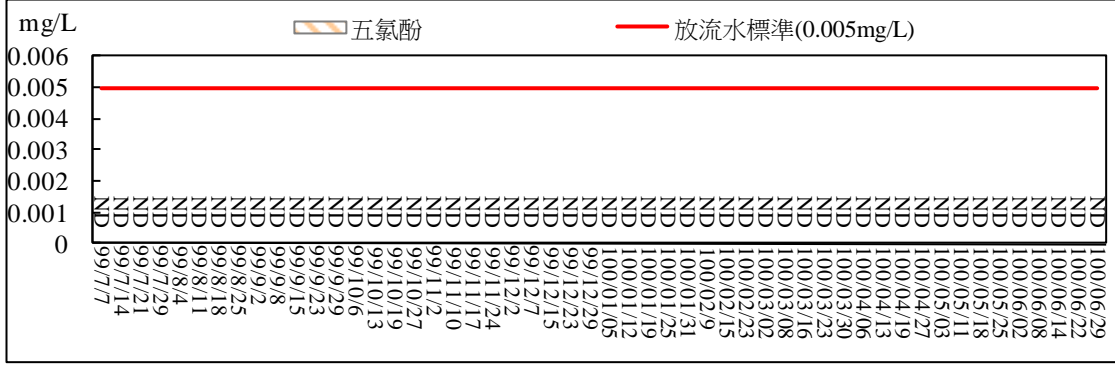
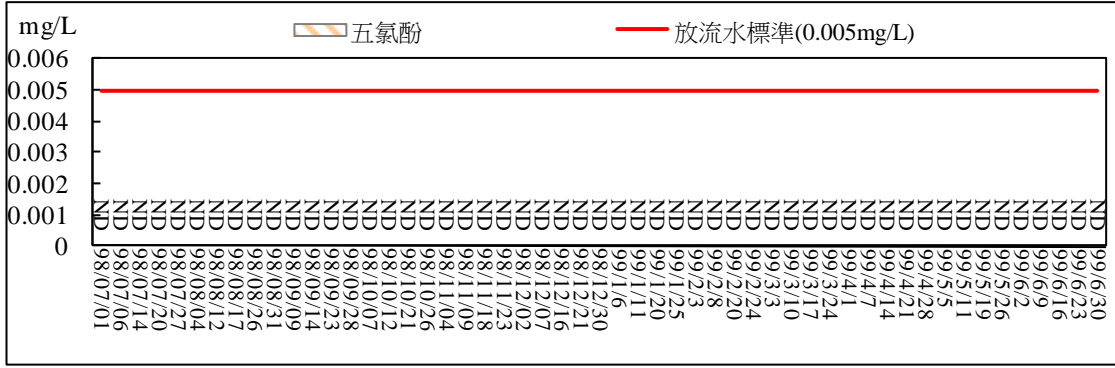
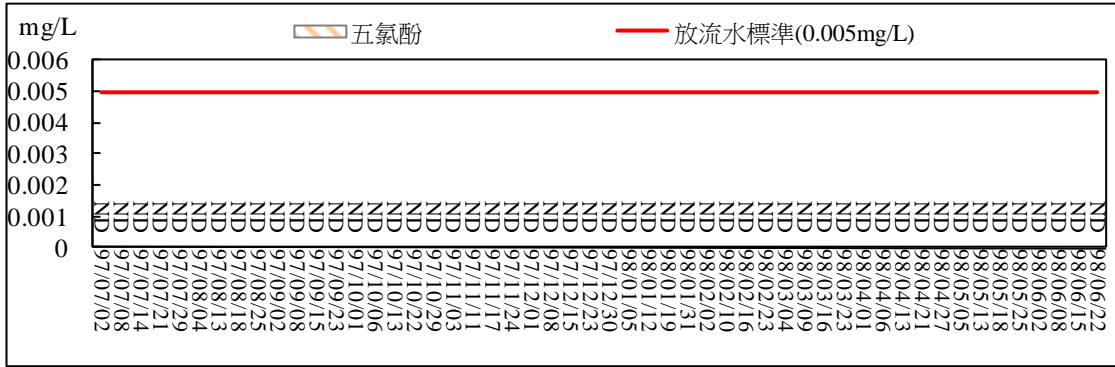
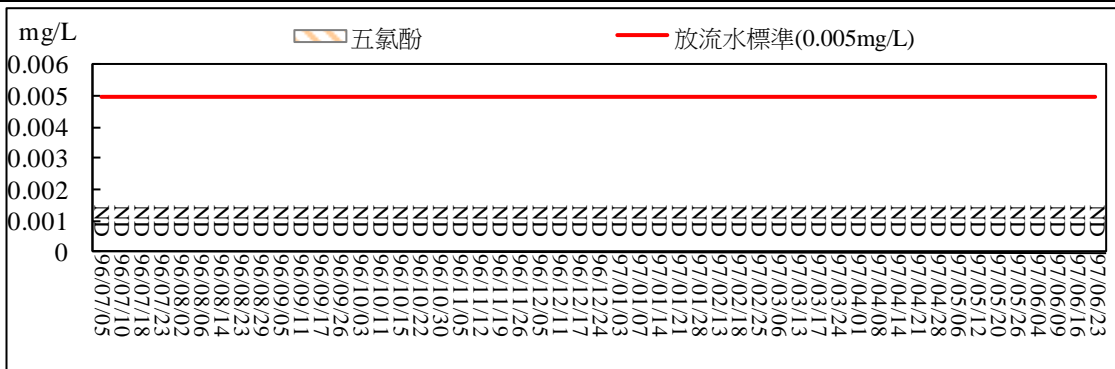


圖 2.57 污水處理廠放流口放流水質監測結果比較圖(毒殺芬)



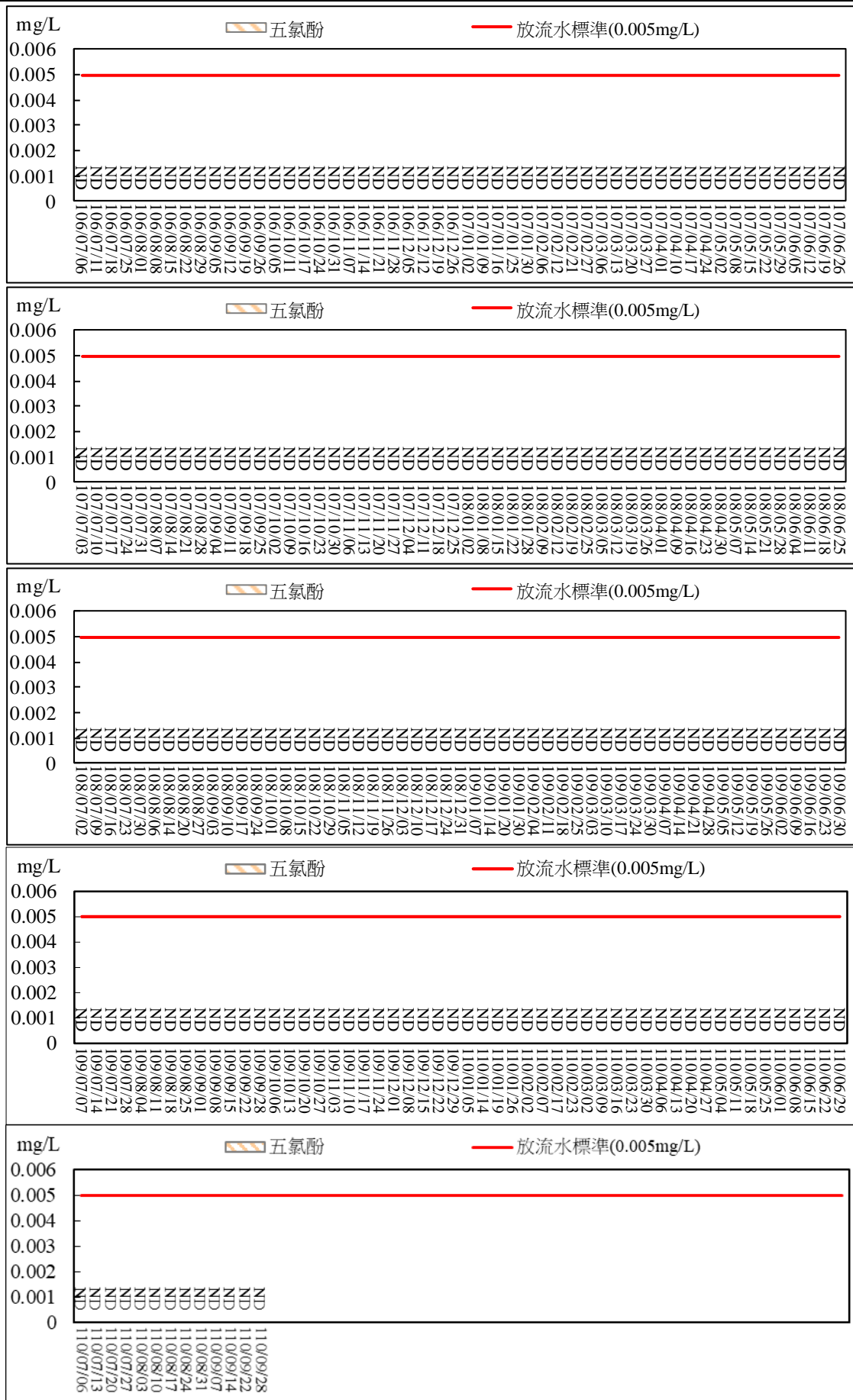
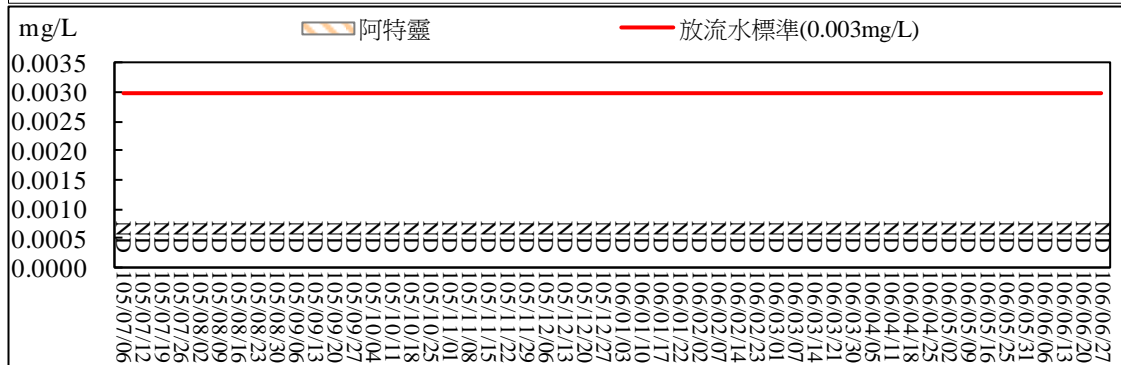
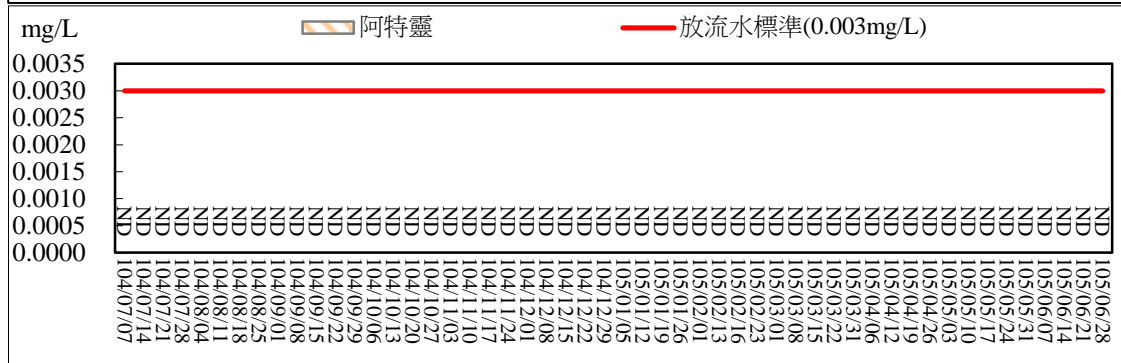
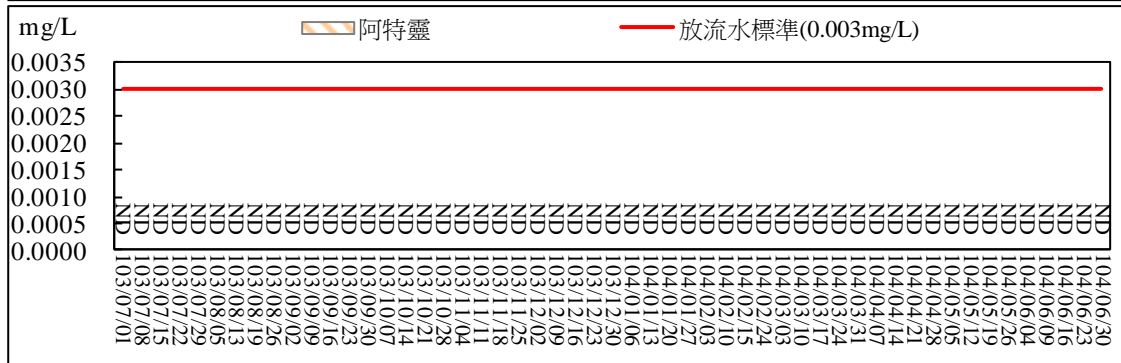
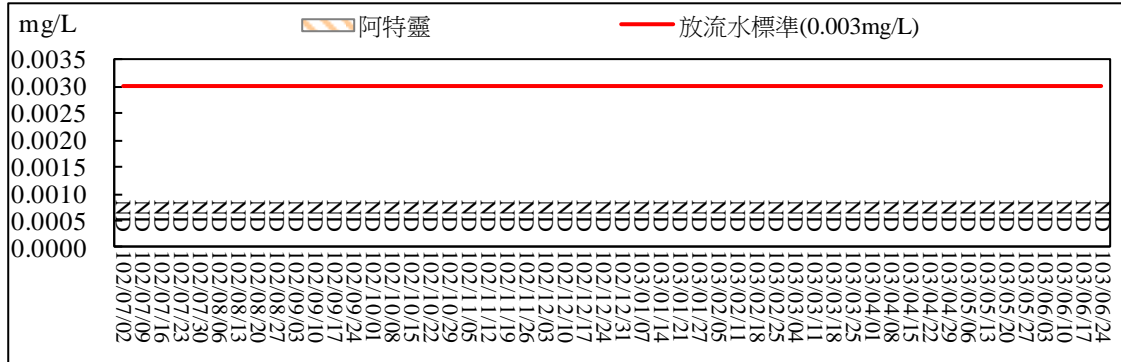
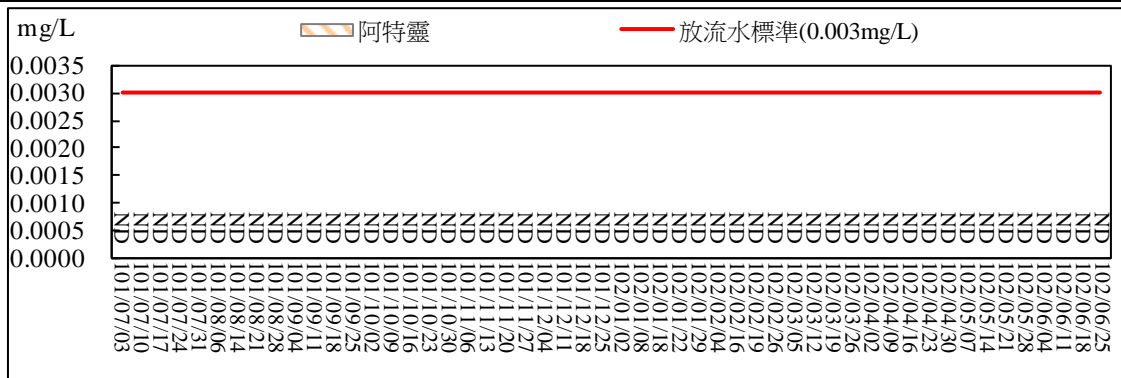


圖 2.58 污水處理廠放流口放流水質監測結果比較圖(五氯酚)



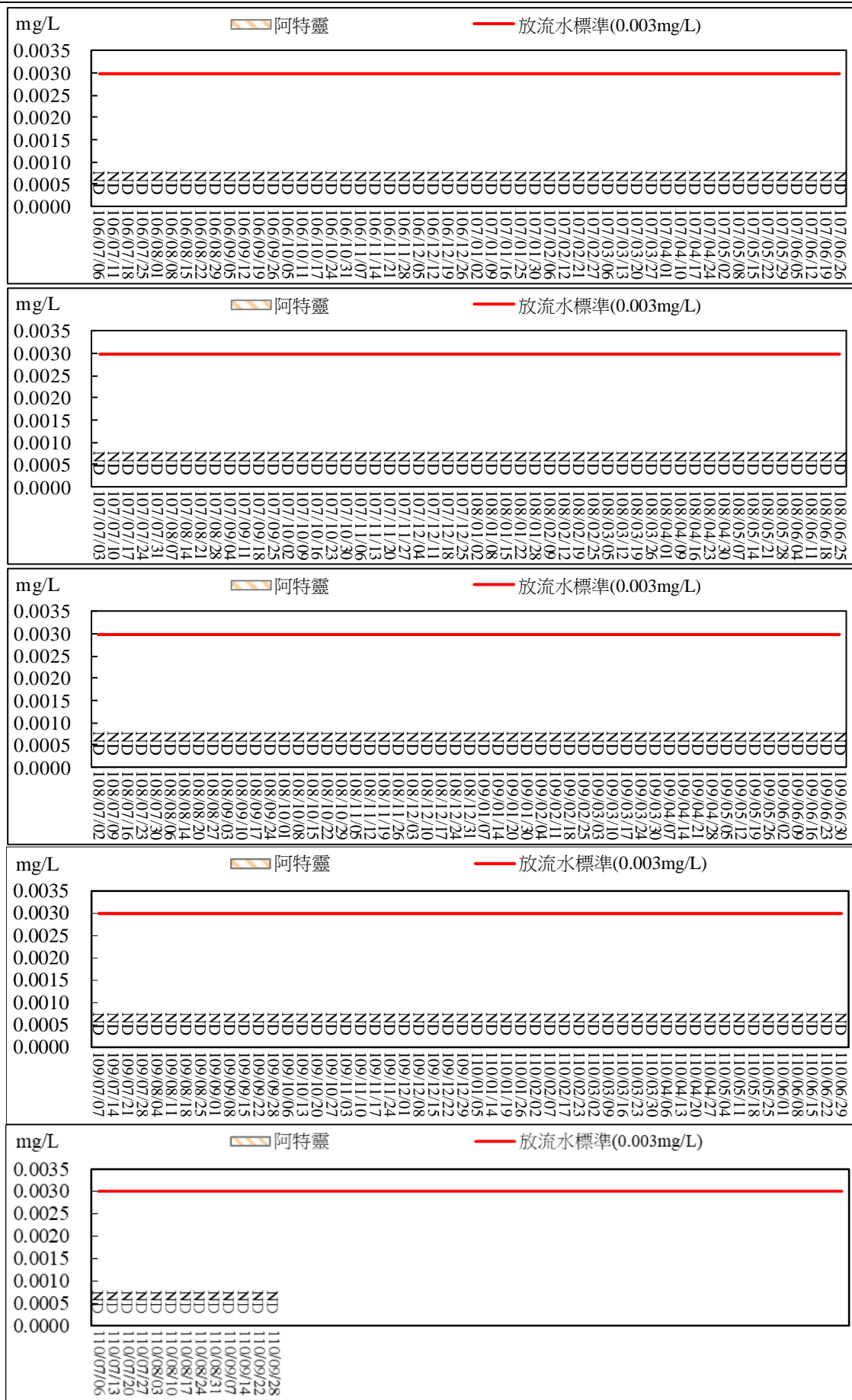
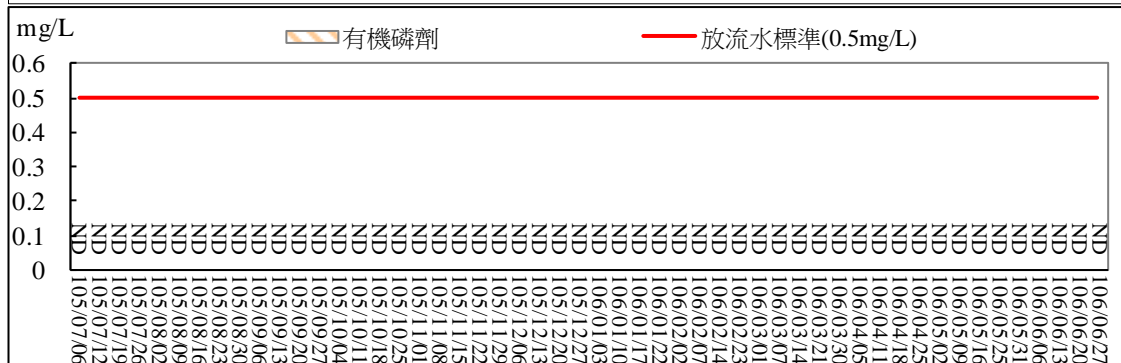
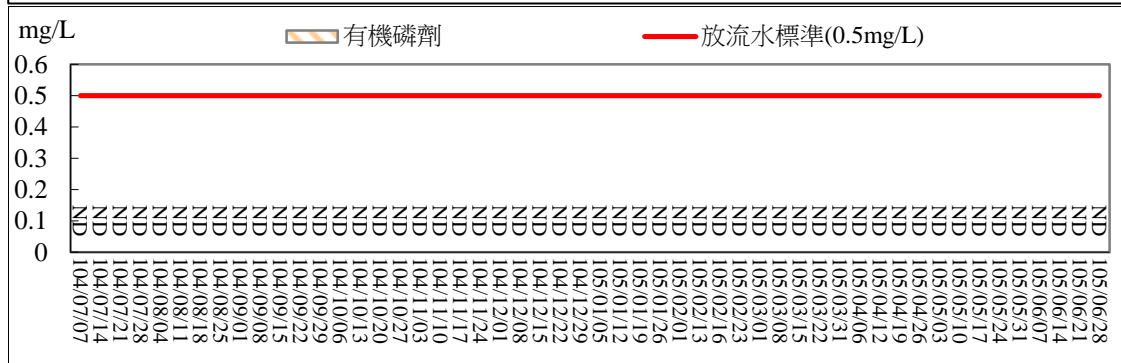
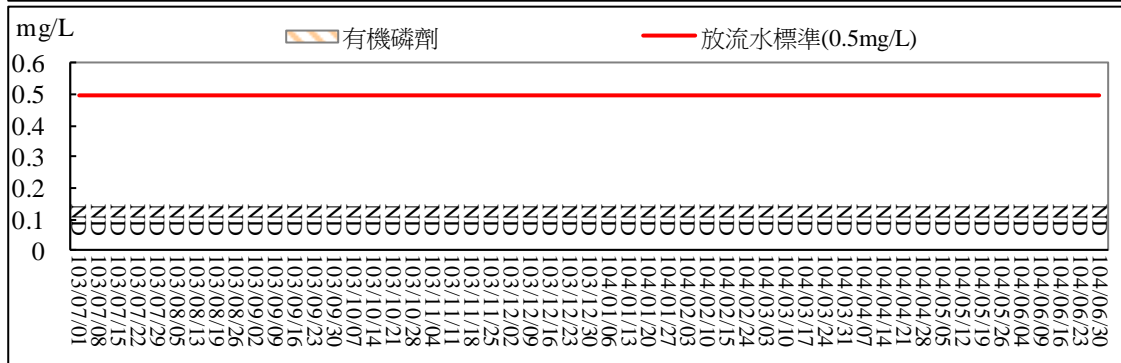
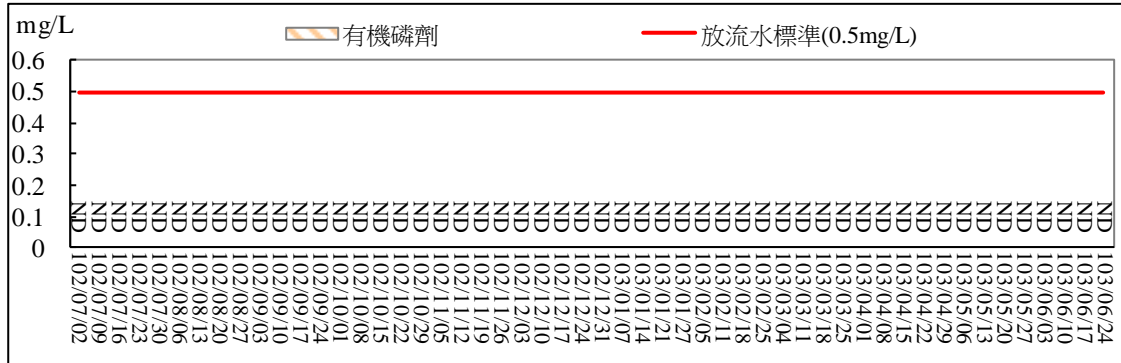
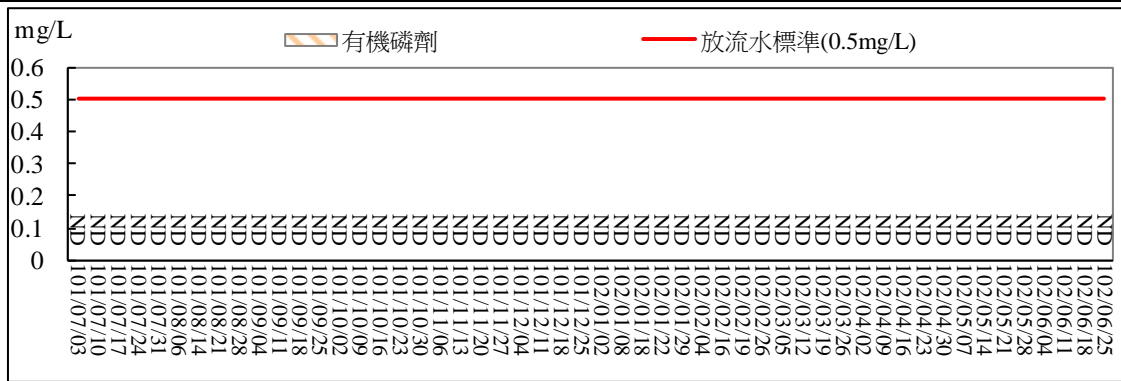


圖 2.59 污水處理廠放流口放流水質監測結果比較圖(阿特靈)



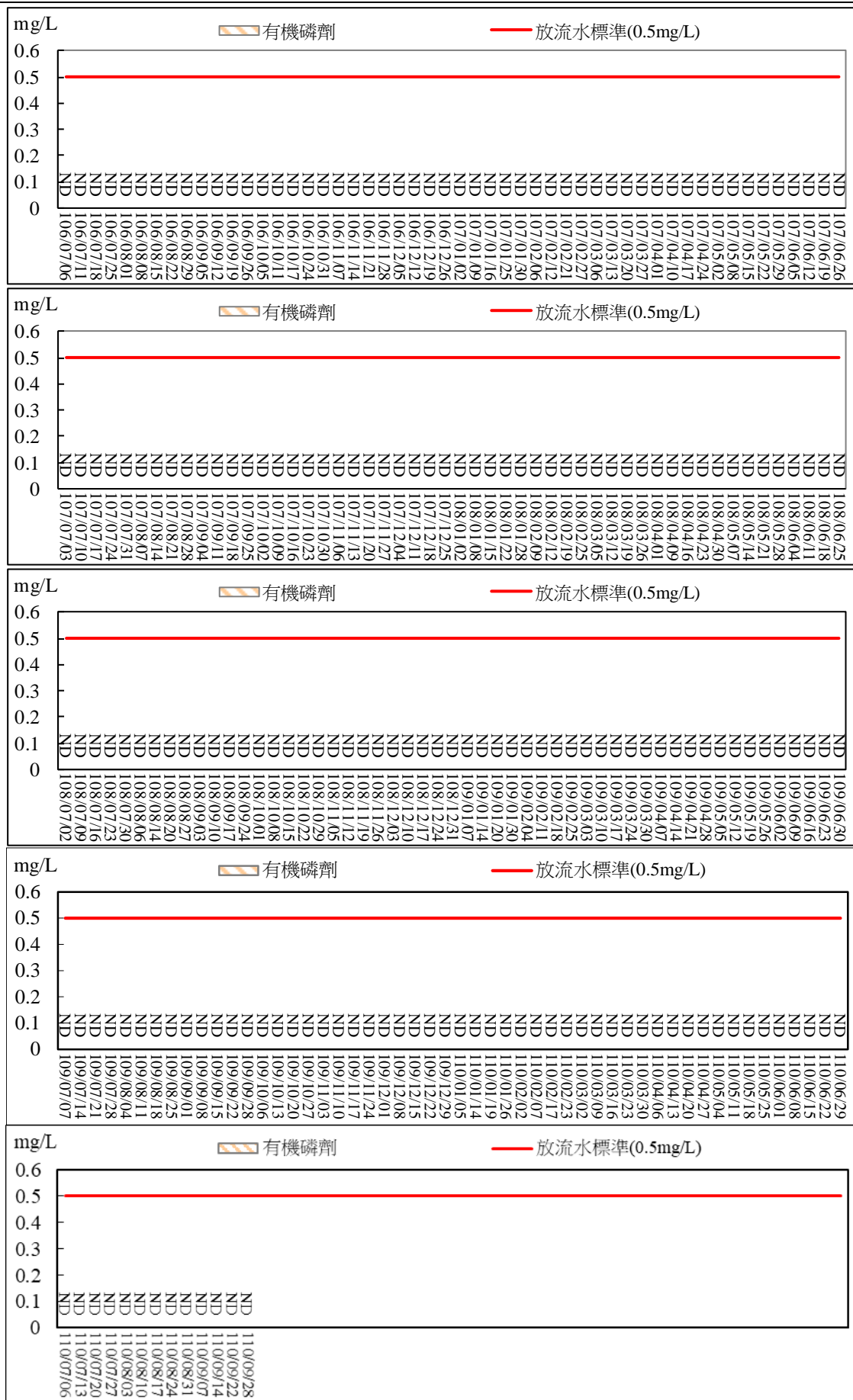


圖 2.60 污水處理廠放流口放流水質監測結果比較圖(有機磷劑)

表 3-1 本季監測結果 (續 6)

| 監測項目 | | 法規標準 | 110年第3季 | 監測結果檢討 | |
|----------|-------------|------------|------------|---|--|
| 水質 | 河川水 | 生化需氧量 | — | 2.4~3.1 | 本季地面水質測項看西排水及鹽水溪排水三號橋的錳外，其餘均符合丁類陸域地面水體環境基準，惟對照歷次監測數據顯示，鹽水溪排水三號橋之錳測值多次偏高且超過標準，未來將持續進行監測，追蹤比較測值變化情形。請參閱地表水監測結果比較圖。 |
| | | 磷酸鹽 | — | 1.02~2.74 | |
| | | 懸浮固體 | 100 mg/L | 12.6~28.6 | |
| | | 總有機碳 | — | 6.0~7.2 | |
| | | 氨氮 | — | 0.52~3.20 | |
| | | 化學需氧量 | — | 19.2~22.8 | |
| | | 大腸桿菌群 | — | $2.3 \times 10^4 \sim 2.0 \times 10^5$ | |
| | | 氟化物 | — | 1.54~7.40 | |
| | | 水溫 | — | 29.1~29.2 | |
| | | pH 值 | — | 7.3~7.5 | |
| | | 導電度 | — | 1410~3370 $\mu\text{mho/cm at } 25^\circ\text{C}$ | |
| | | 溶氧量 | 3 mg/L | 3.2~3.5 | |
| | | 流量 | — | 6.16~37.1 m^3/min | |
| | | 凱氏氮 | — | 0.08~4.74 | |
| | | 總氮 | — | 1.78~4.39 | |
| | | 總磷 | — | 1.22~3.08 | |
| | | 六價鉻 | — | ND<0.0048 | |
| | | 鋅 | 0.5 mg/L | 0.036~0.043 | |
| | | 鎘 | 0.01 mg/L | ND<0.0013 | |
| | | 鉛 | 0.1 mg/L | ND<0.0038 | |
| | | 錳 | 0.05 mg/L | 0.113~0.181 | |
| | | 銅 | 0.03 mg/L | <0.010 | |
| | | 汞 | 0.002 mg/L | ND<0.00019 | |
| | | 砷 | 0.05 mg/L | 0.0054~0.0104 | |
| | | 硒 | 0.05 mg/L | ND<0.0030 | |
| | | 銀 | 0.05 mg/L | ND<0.0024 | |
| | | 靈丹 | 0.004 mg/L | ND<0.00004 | |
| | | 安殺番 I | 0.03 mg/L | ND<0.00004 | |
| | | 安殺番 II | 0.03 mg/L | ND<0.00004 | |
| | | 飛佈達 | 0.001 mg/L | ND<0.00004 | |
| 環氧飛佈達 | 0.001 mg/L | ND<0.00004 | | | |
| 2,4'-滴滴涕 | 0.001 mg/L | ND<0.00004 | | | |
| 4,4'-滴滴涕 | 0.001 mg/L | ND<0.00003 | | | |
| 安特靈 | 0.0002 mg/L | ND<0.00004 | | | |
| 除草劑 | 1 mg/L | ND<0.00014 | | | |
| 五氯酚 | 0.005 mg/L | ND<0.00062 | | | |
| 阿特靈 | 0.003 mg/L | ND<0.00004 | | | |
| 有機磷劑 | 0.5 mg/L | ND<0.00109 | | | |

備註：地面水，99年第三季起，增加看西排水上游測站，測項加測氨氮、總氮及總磷，另看西排水及鹽水溪排水三號橋，測項加測總氮及總磷。

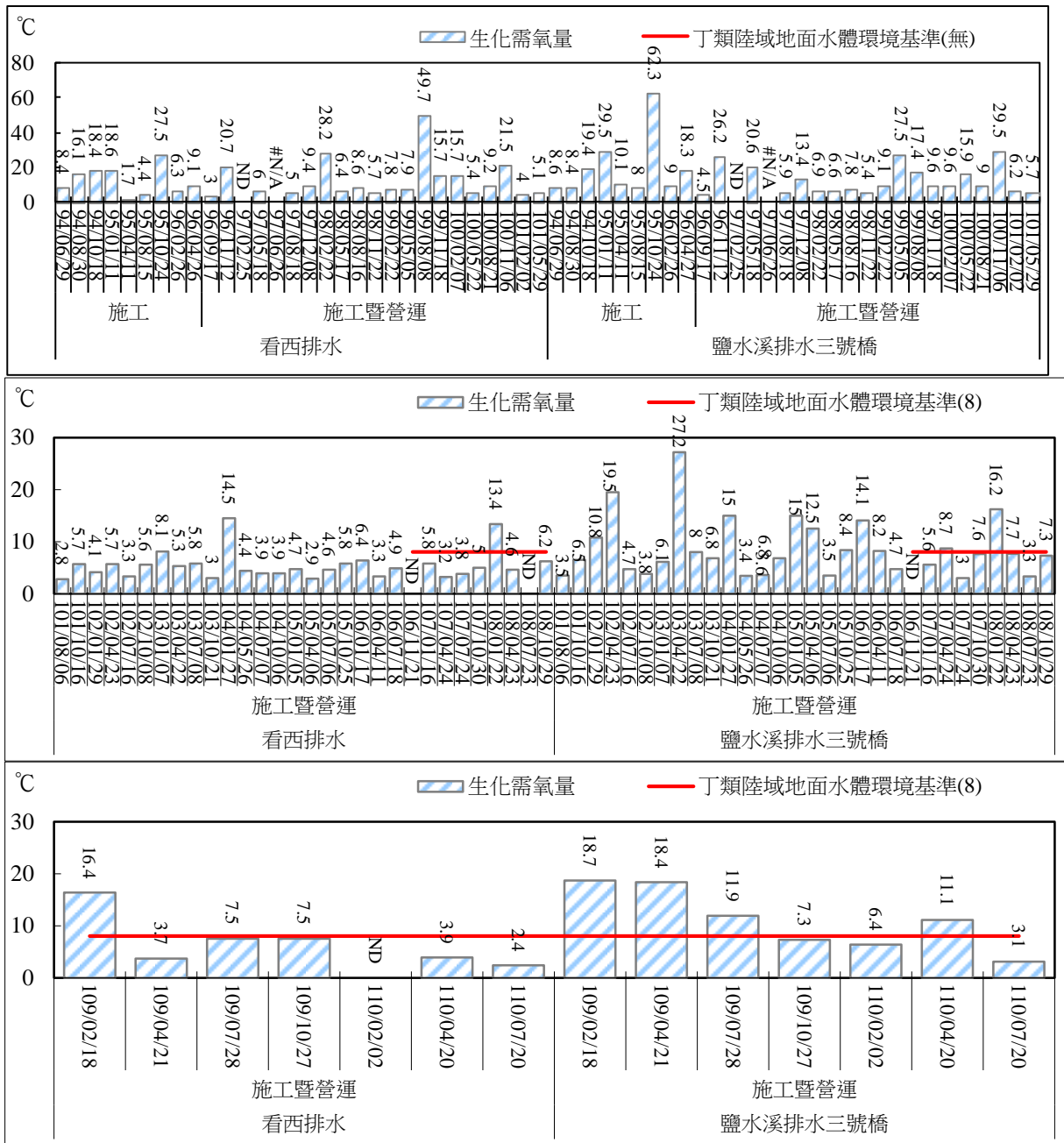


圖 2.61 地面水質監測結果比較圖(生化需氧量)

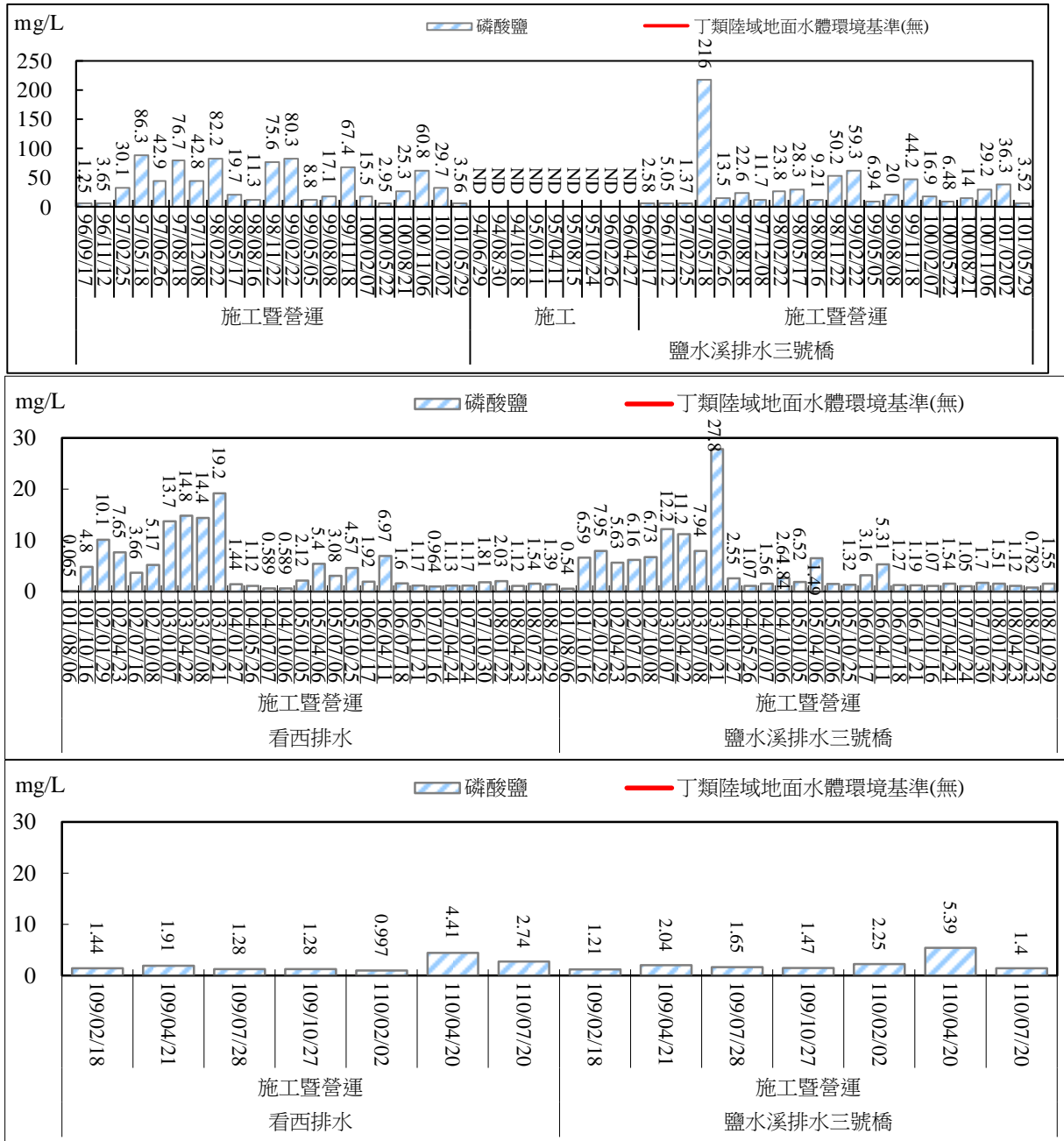


圖 2.62 地面水質監測結果比較圖(磷酸鹽)

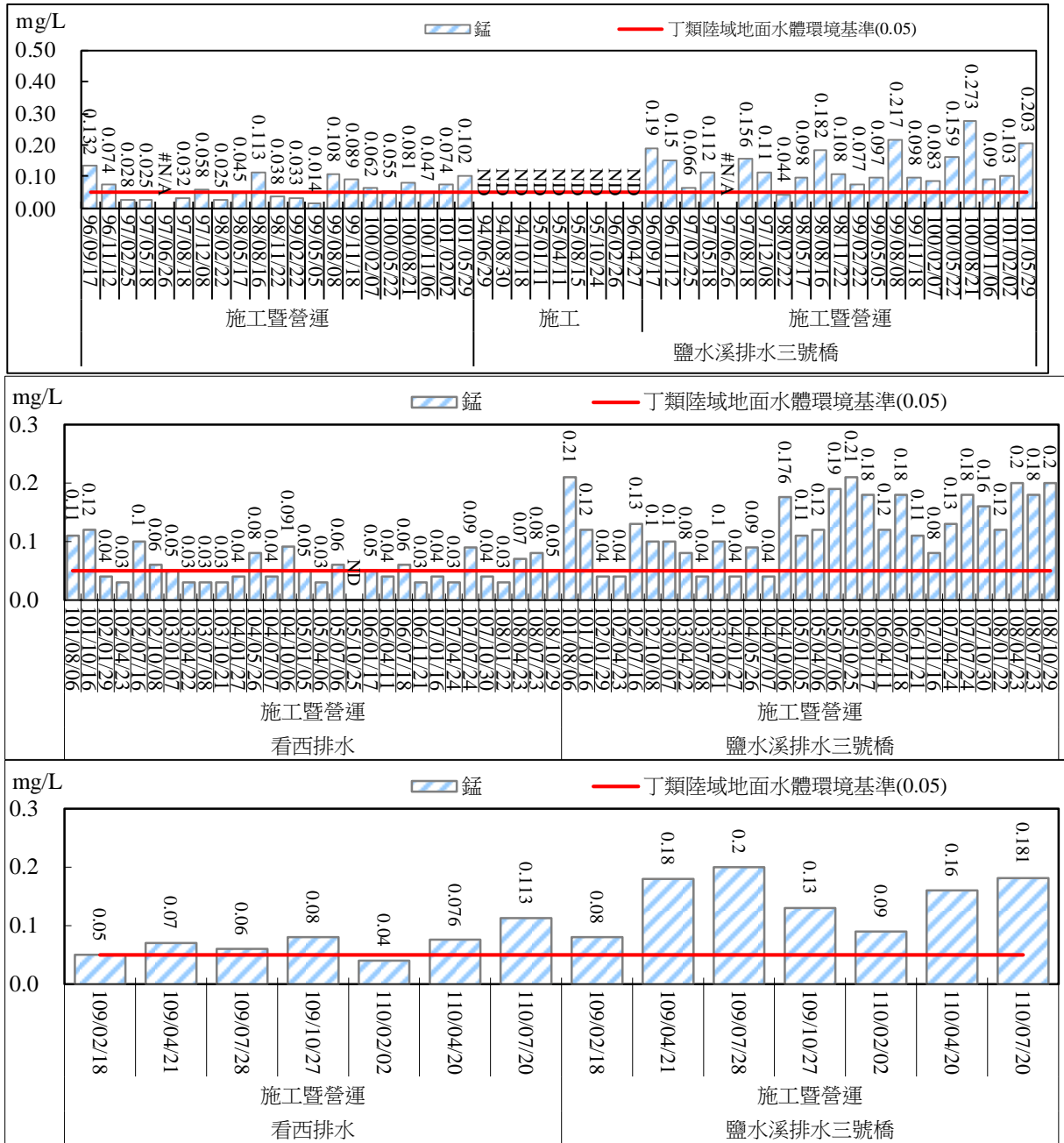


圖 2.63 地面水質監測結果比較圖(錳)

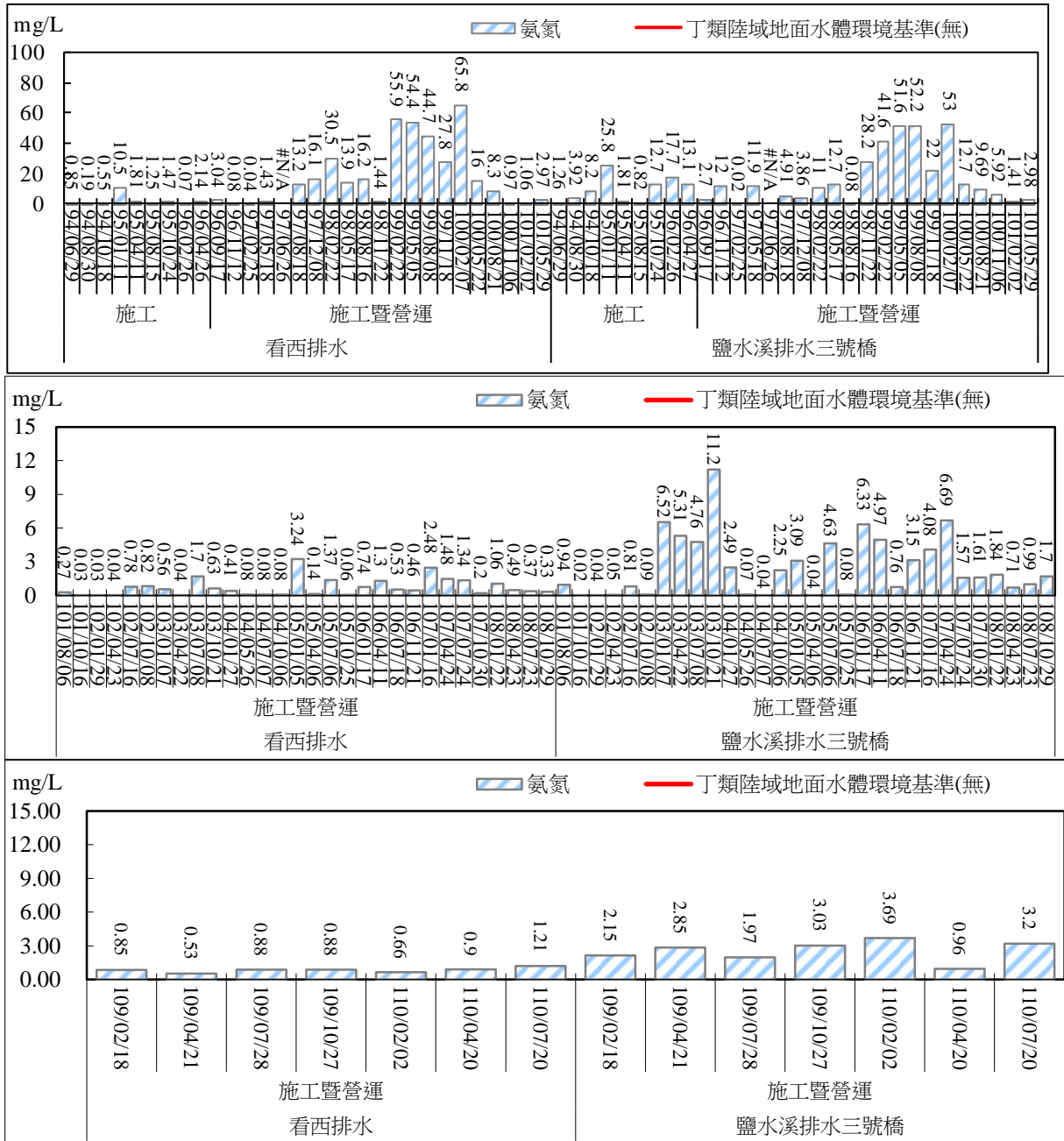


圖 2.64 地面水質監測結果比較圖(氨氮)

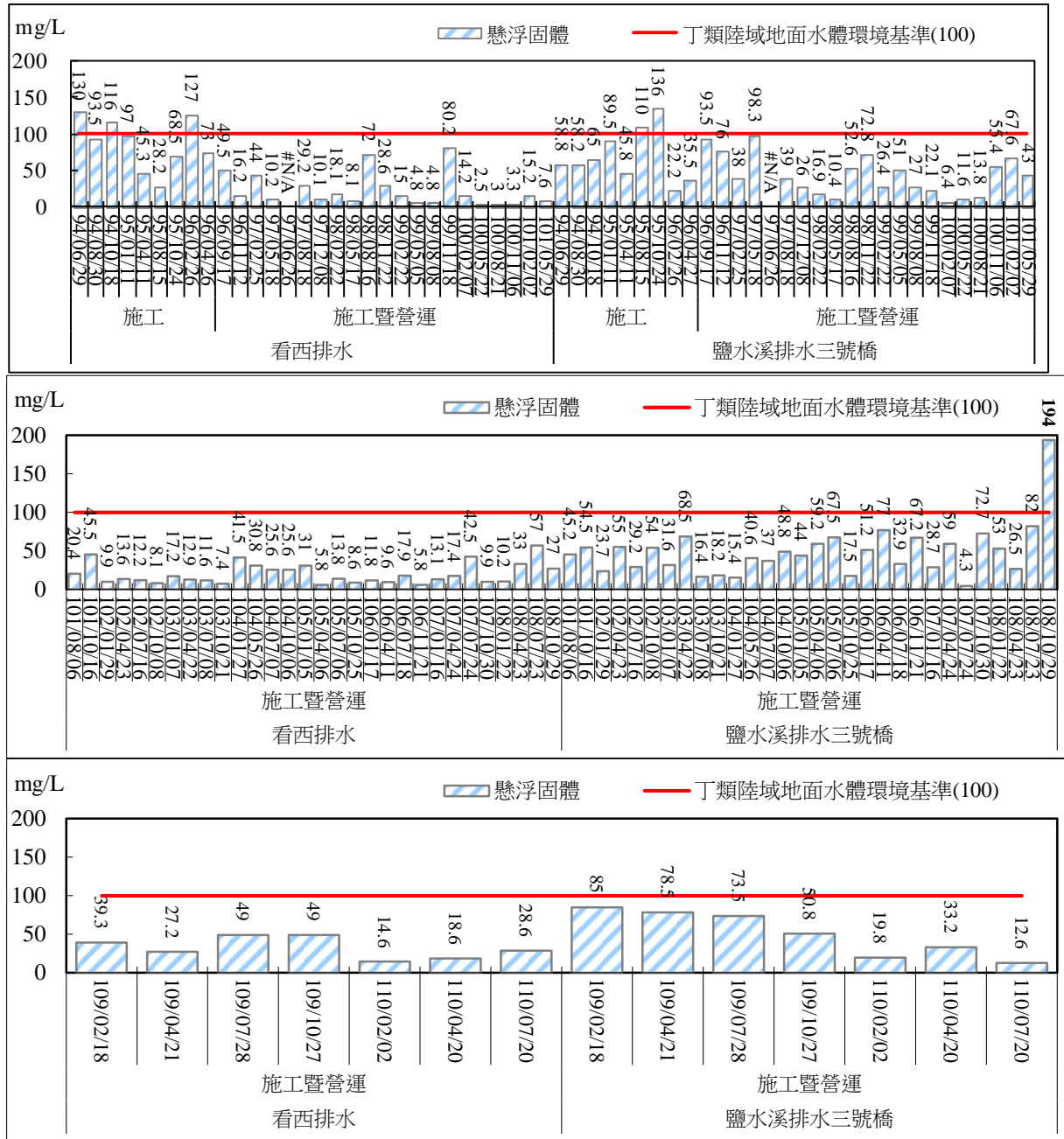


圖 2.65 地面水質監測結果比較圖(懸浮固體)

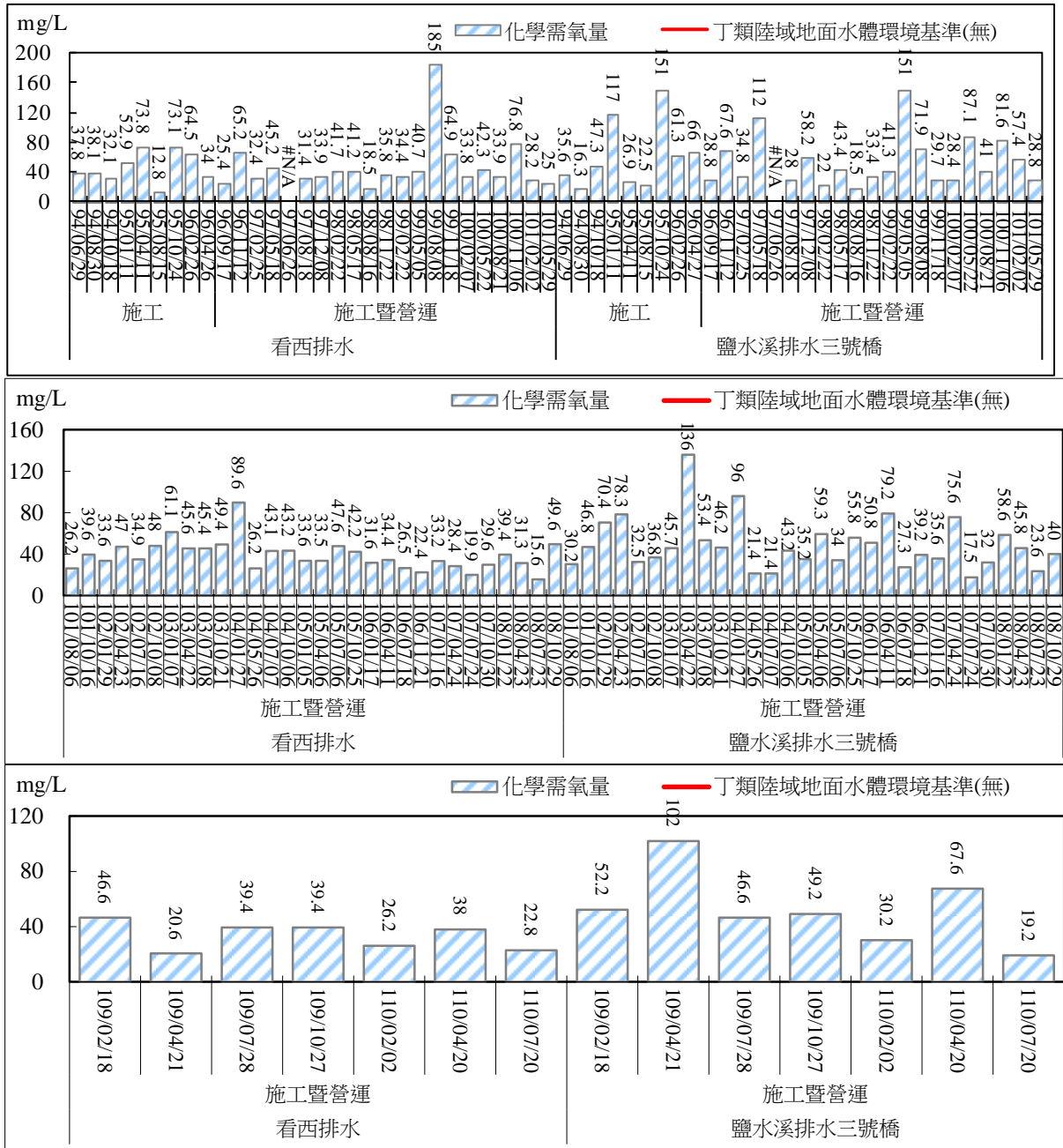


圖 2.66 地面水質監測結果比較圖(化學需氧量)

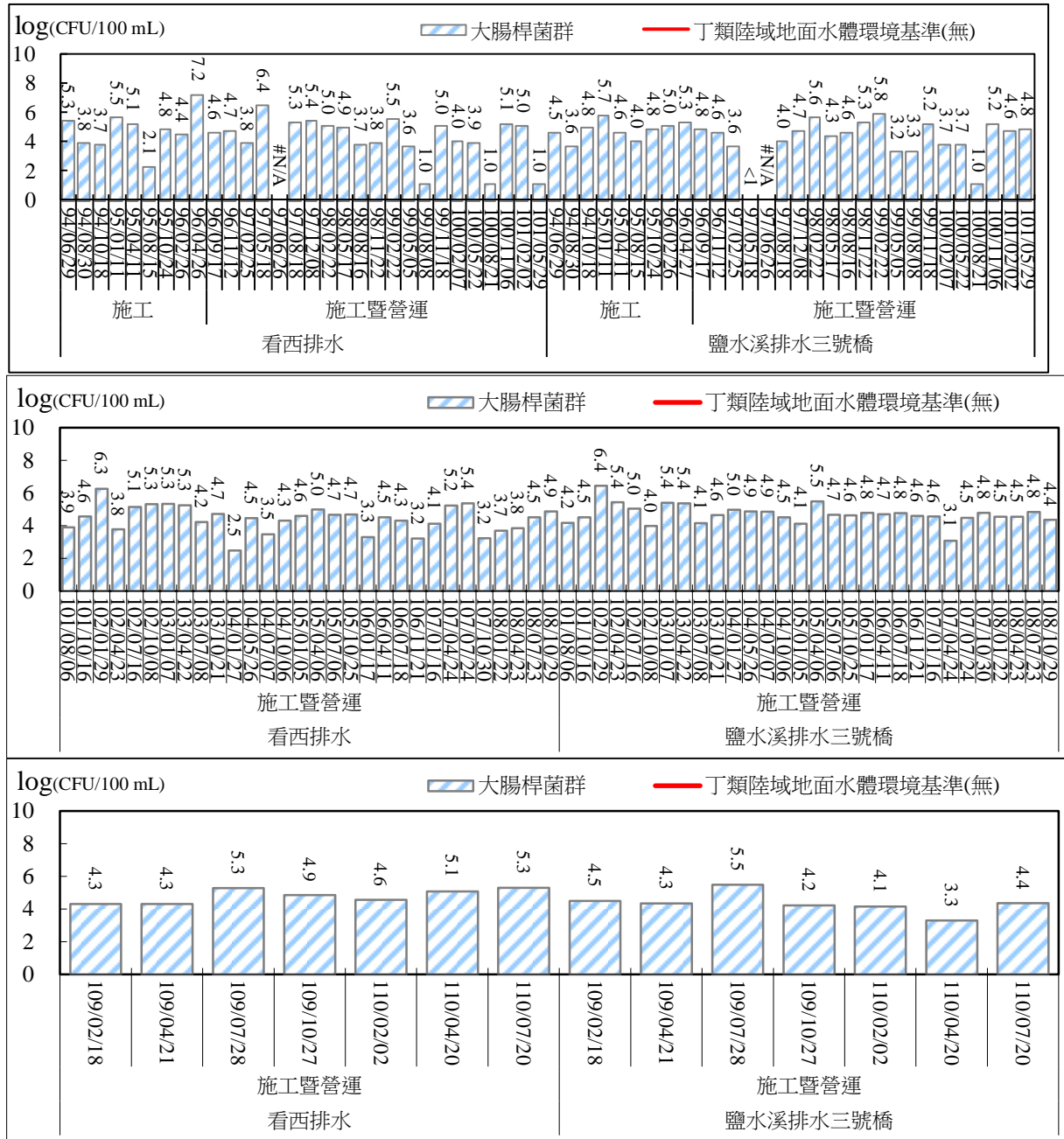


圖 2.67 地面水質監測結果比較圖(大腸桿菌群)

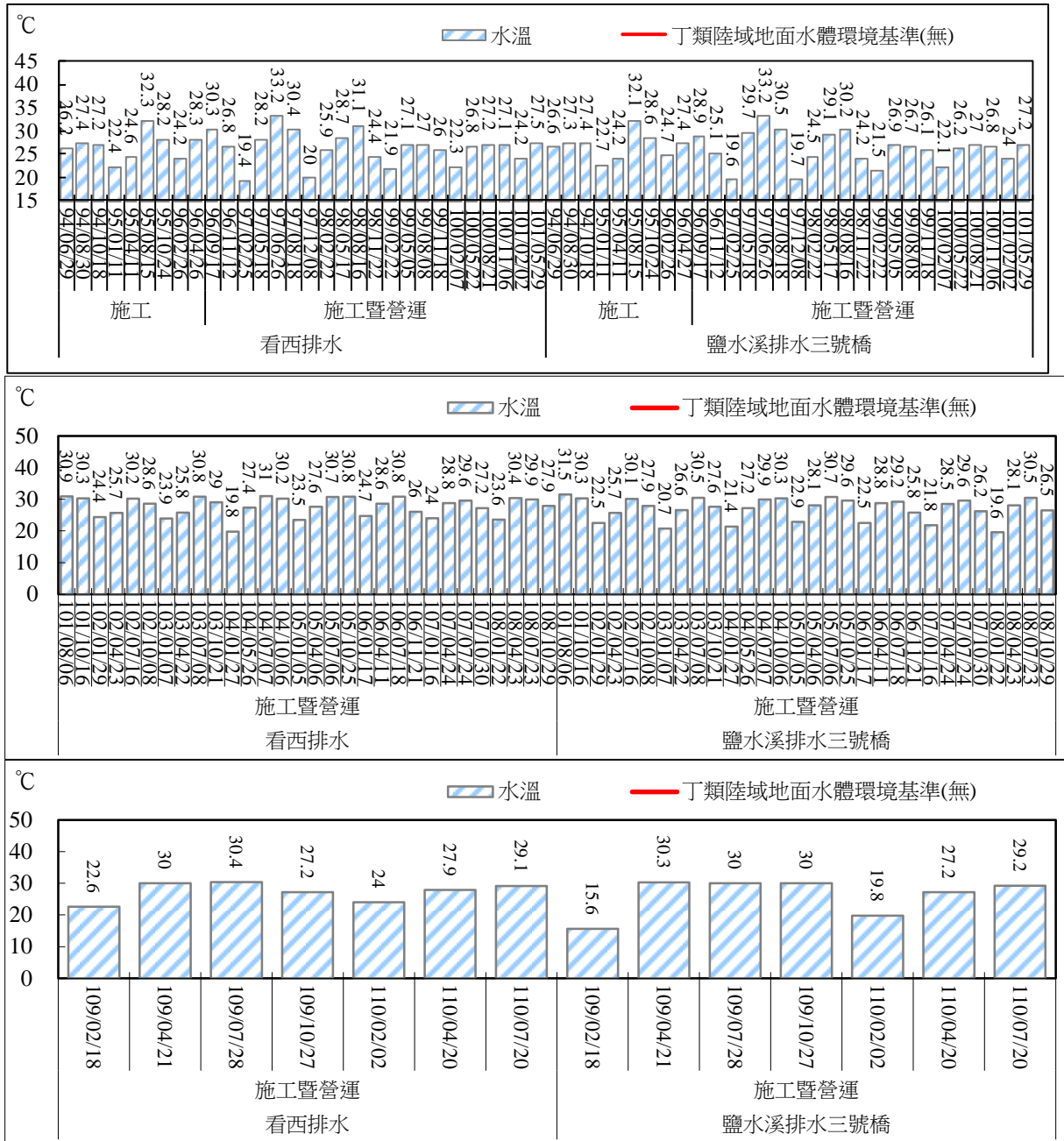


圖 2.68 地面水質監測結果比較圖(水溫)

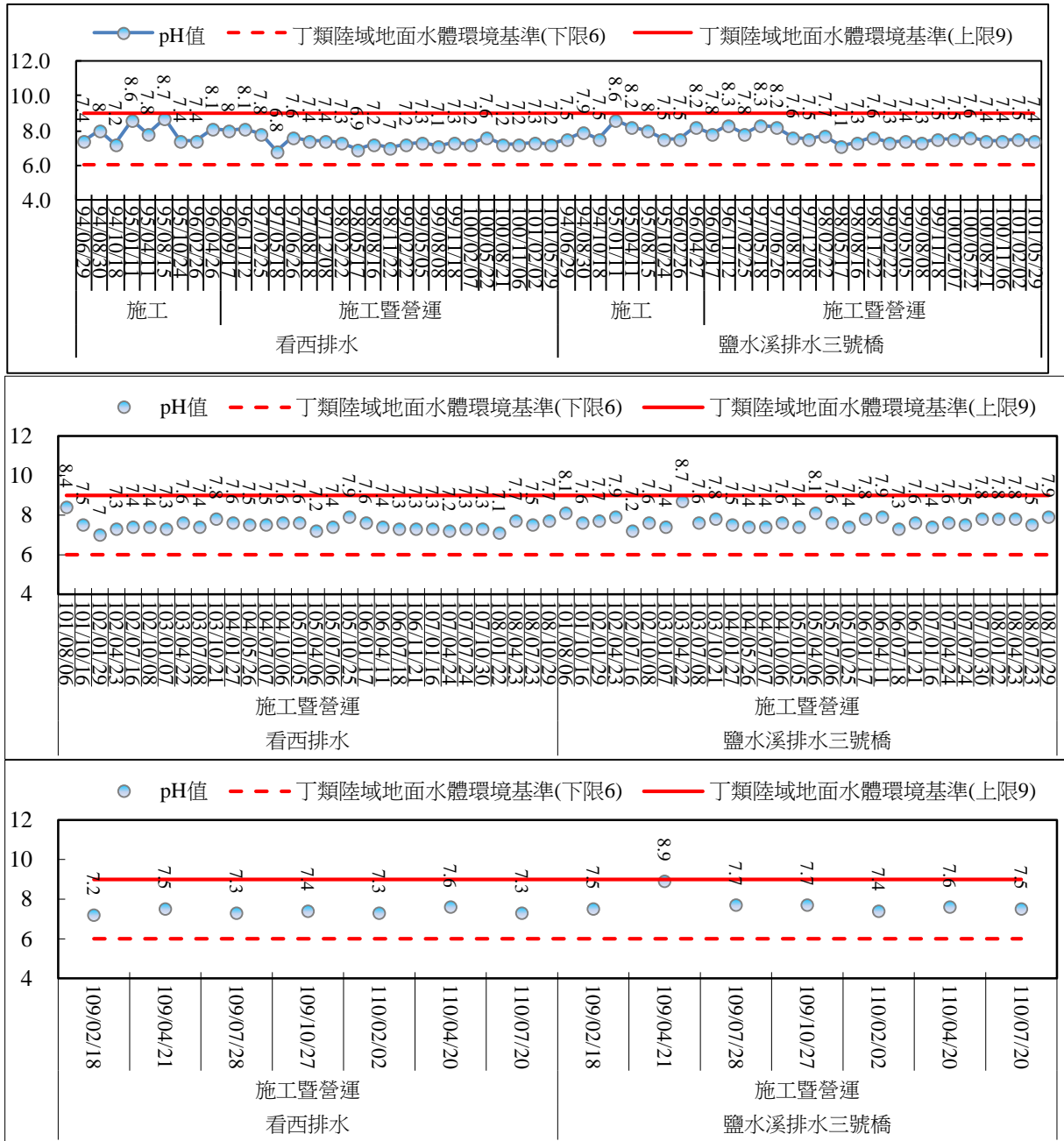


圖 2.69 地面水質監測結果比較圖(pH 值)

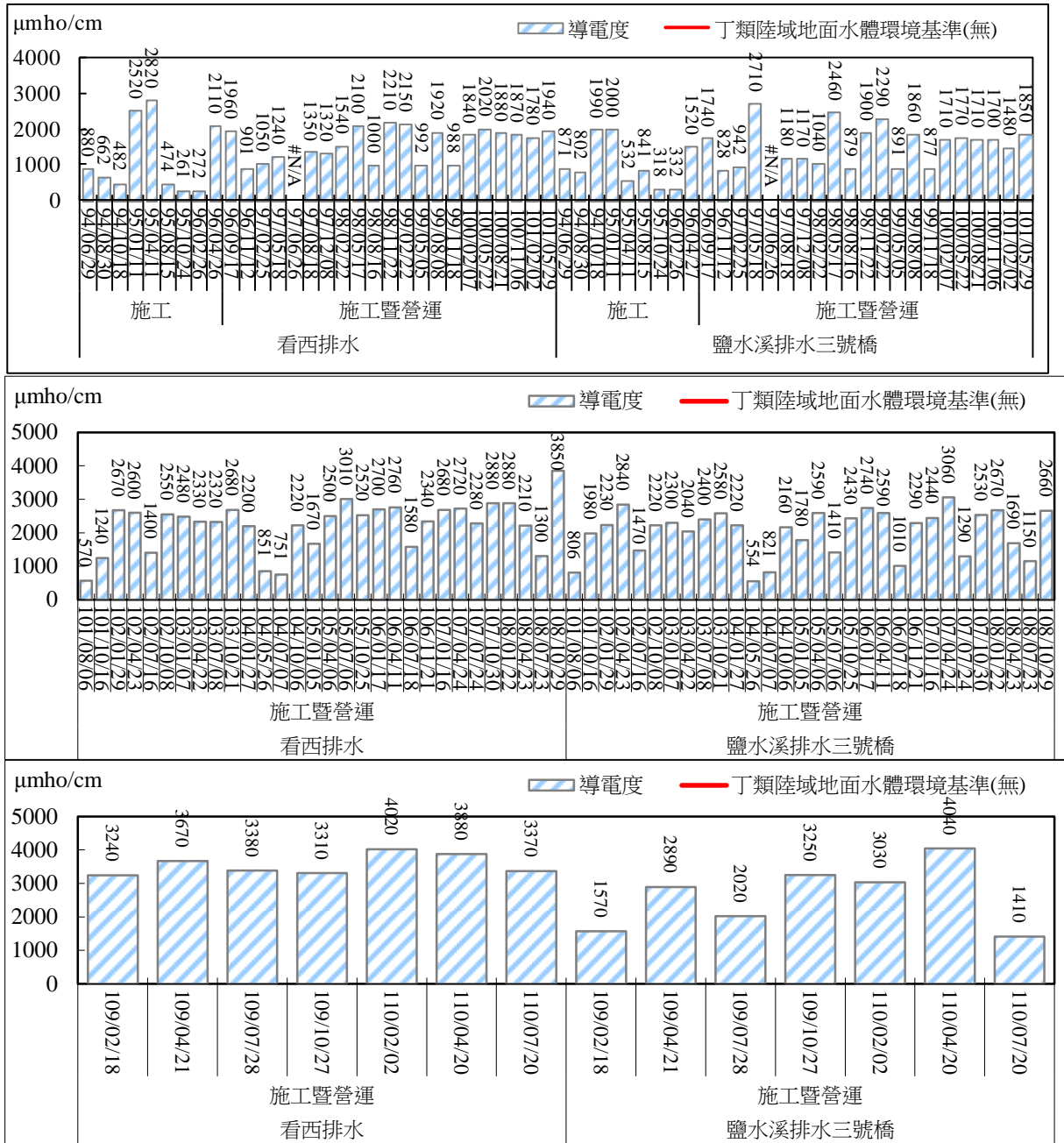


圖 2.70 地面水質監測結果比較圖(導電度)

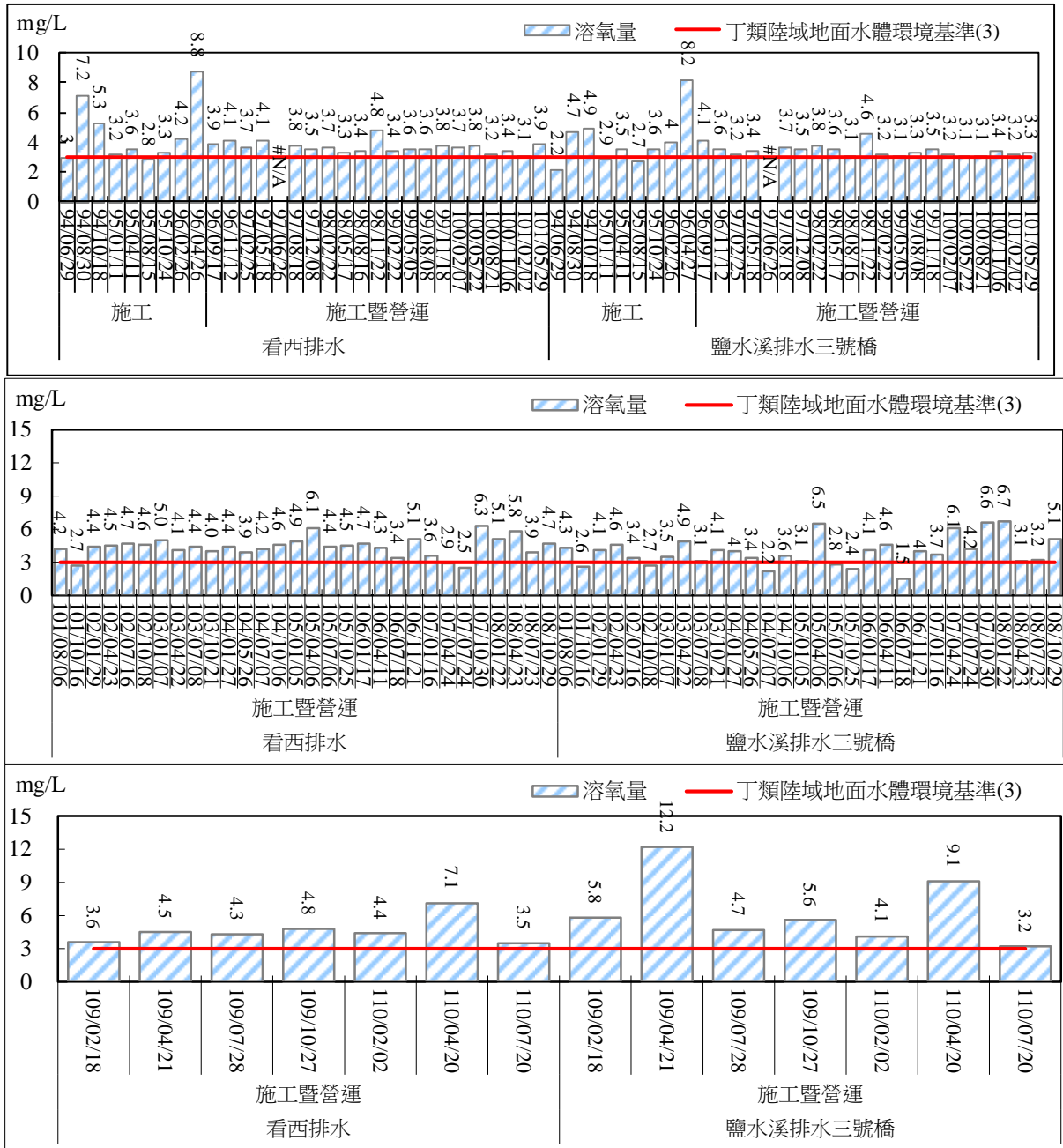
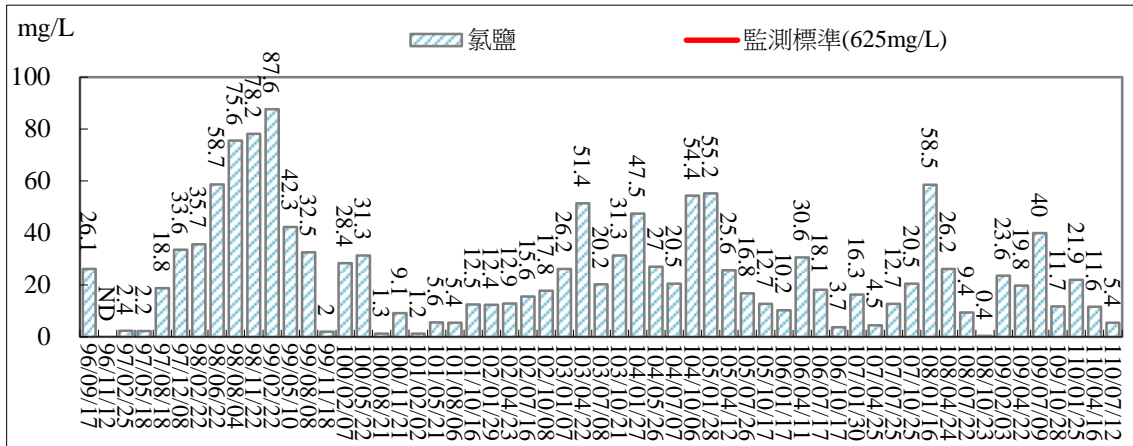
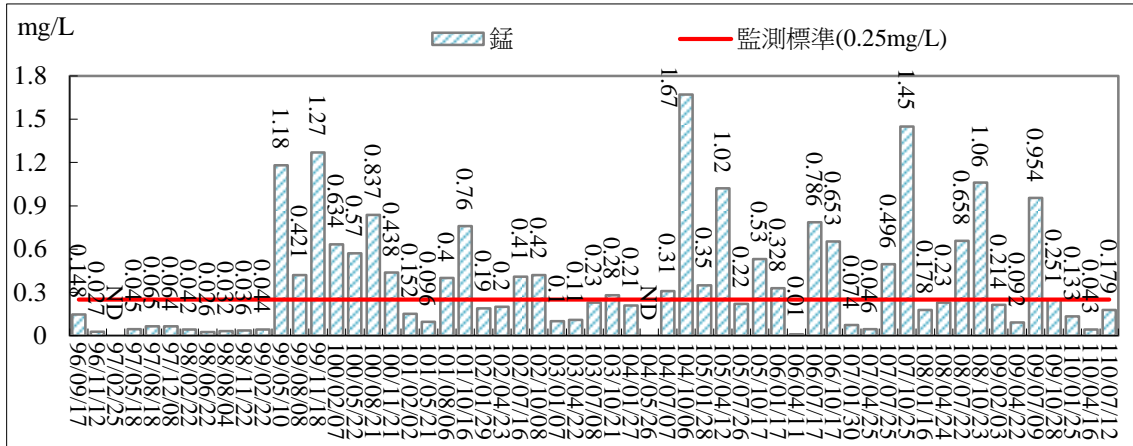
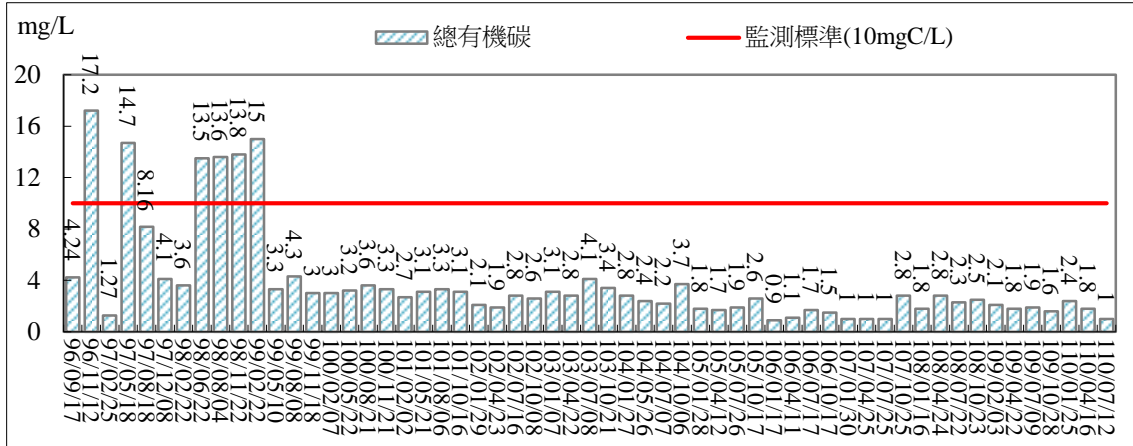
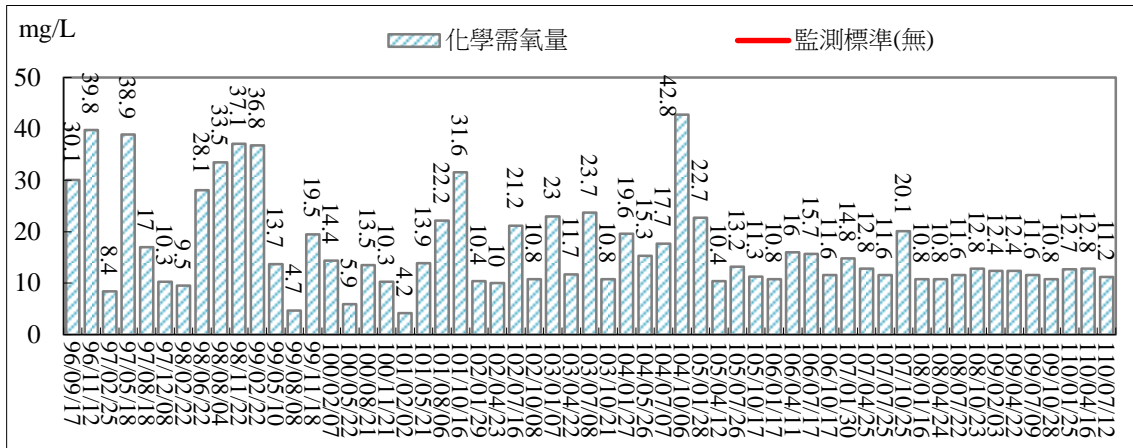


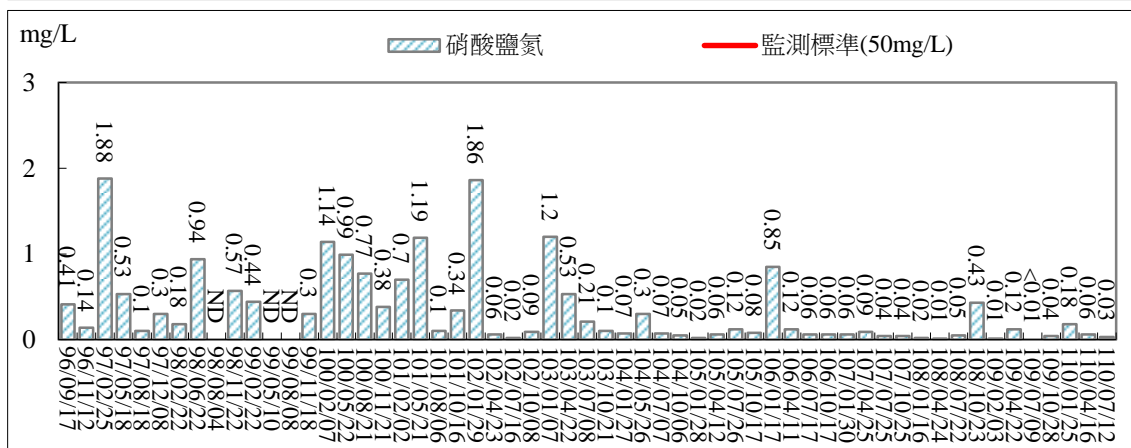
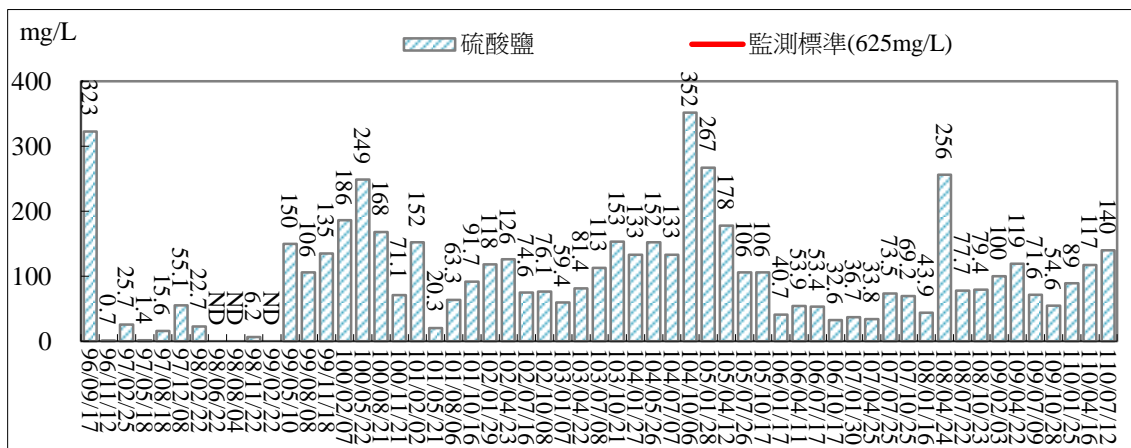
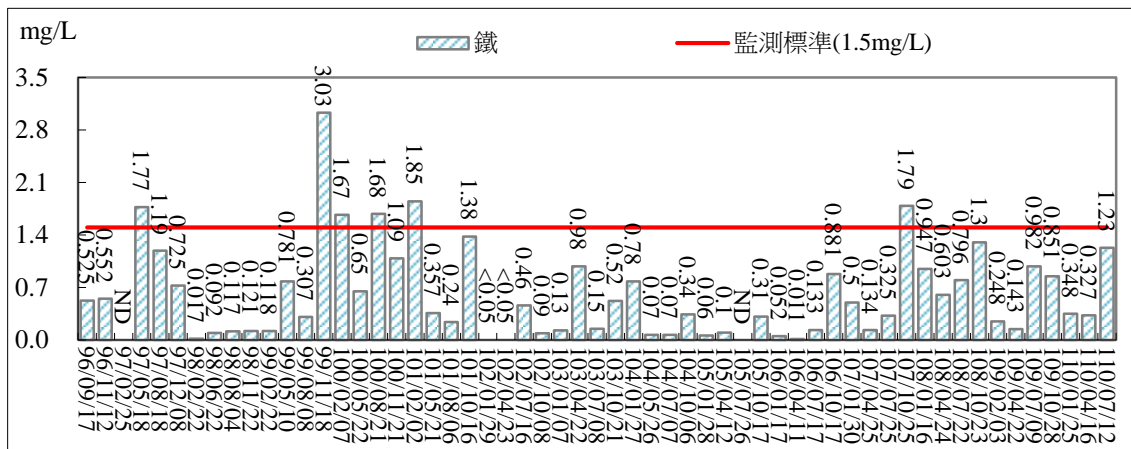
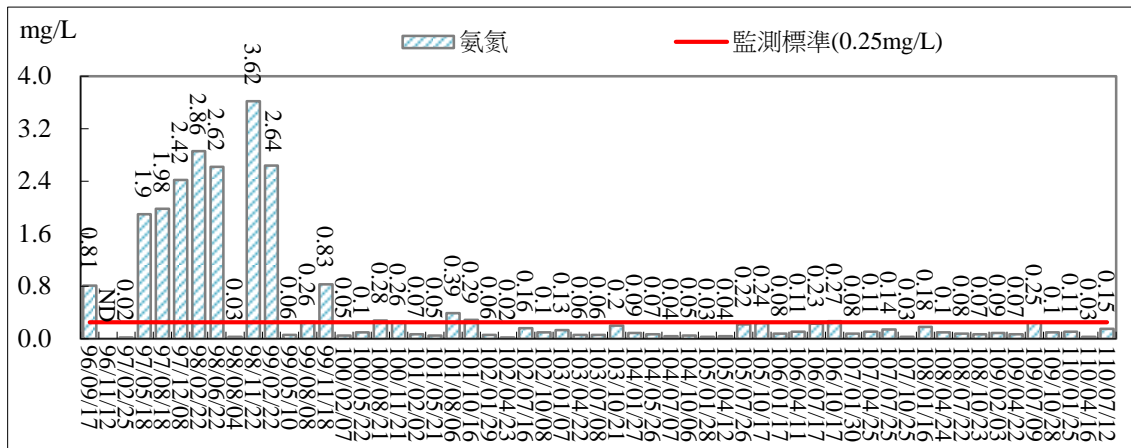
圖 2.71 地面水質監測結果比較圖(溶氧量)

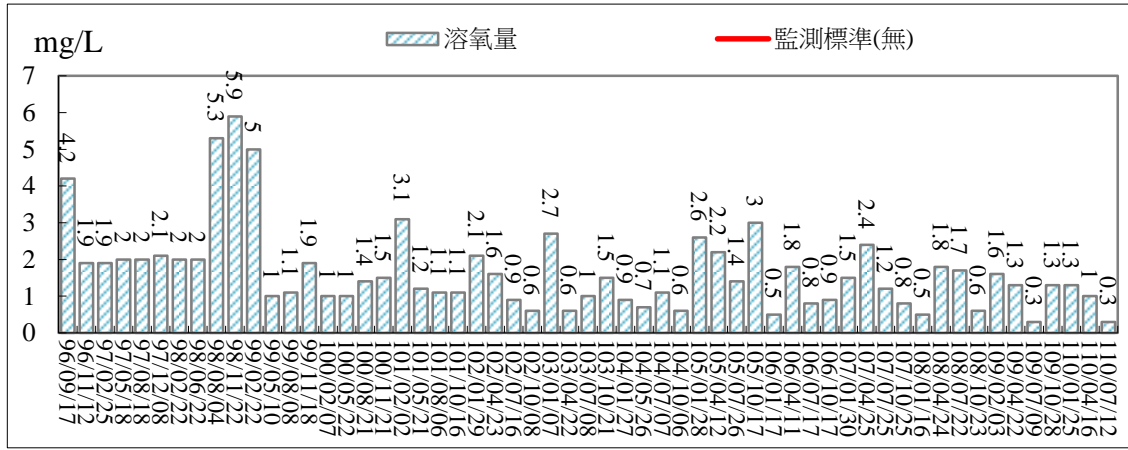
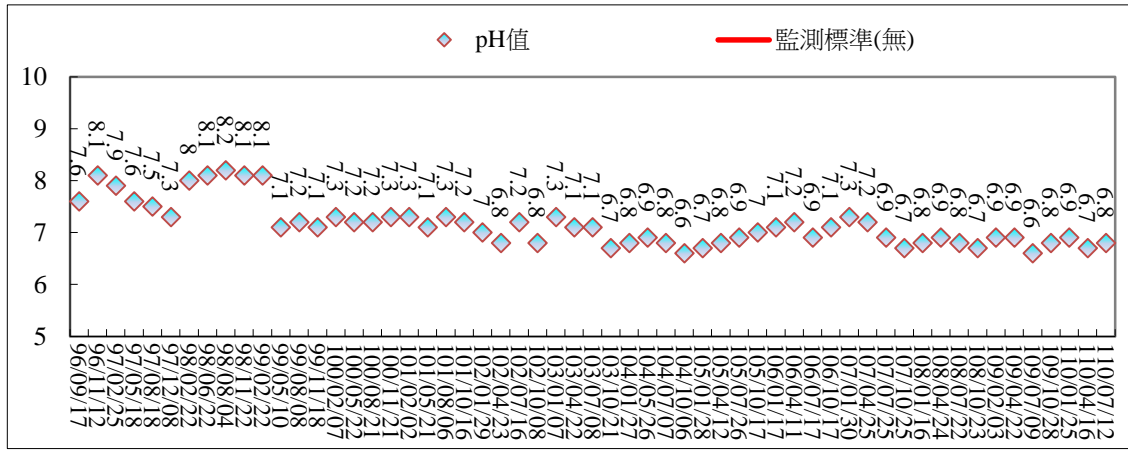
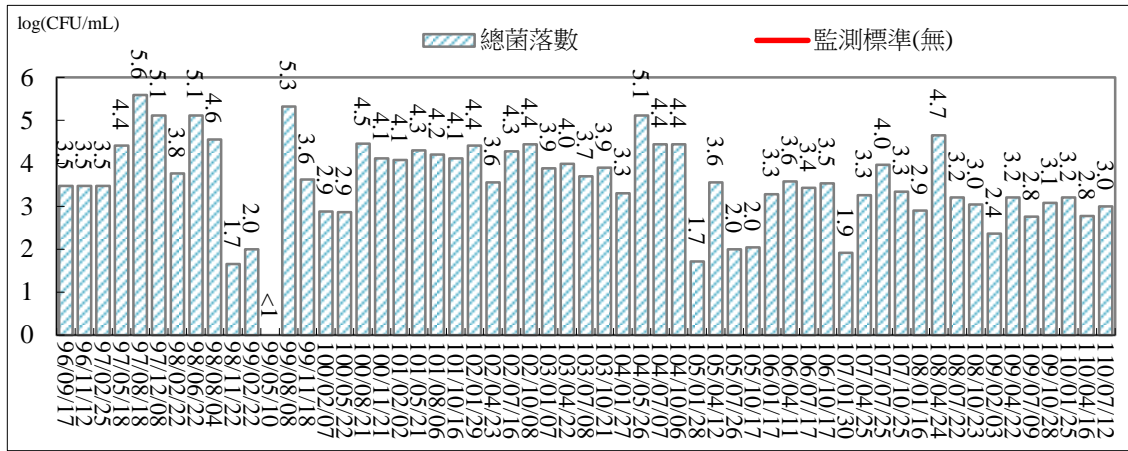
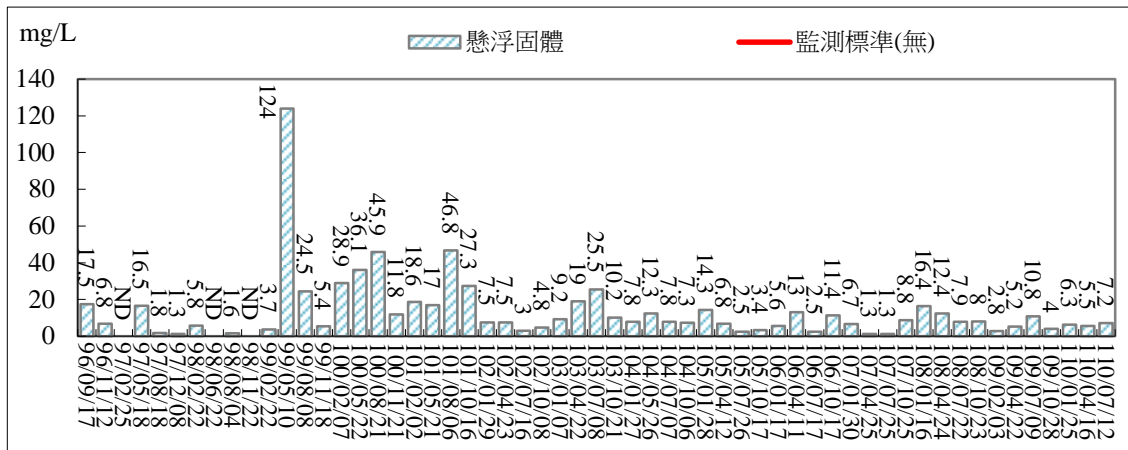
表 3-1 本季監測結果 (續 7)

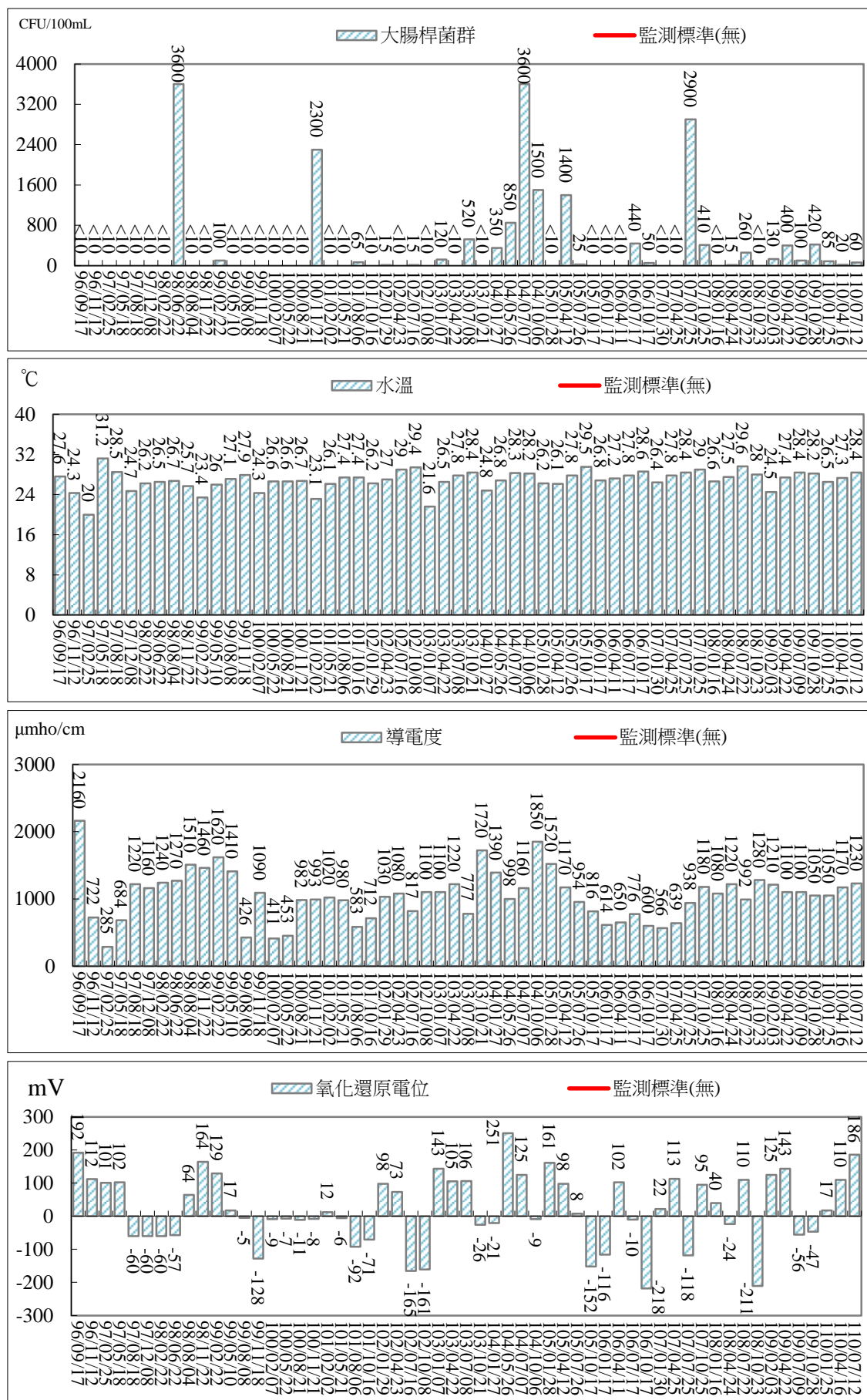
| 監測項目 | | 地下水污染 監測標準/ 管制標準 | 110年第3季 | 監測結果檢討 | |
|---------|-----------|------------------------|-----------|------------------------|--|
| 水質 | 地下水 | 化學需氧量 | — | 11.2 | 本季地下水測值,均符合相關管制標準,建議持續進行地下水之監測及調查,並追蹤比較測值變化情形。請參閱地下水監測結果比較圖。 |
| | | 氨氮 | 0.25 mg/L | 0.15 | |
| | | 總有機碳 | 10 mg/L | 1.0 | |
| | | 鐵 | 1.5 mg/L | 1.23 | |
| | | 錳 | 0.25 mg/L | 0.179 | |
| | | 硫酸鹽 | 625 mg/L | 140 | |
| | | 氯鹽 | 625 mg/L | 5.4 | |
| | | 硝酸鹽氮 | 25 mg/L | 0.03 | |
| | | 懸浮固體 | — | 7.2 | |
| | | 大腸桿菌群 | — | 60 | |
| | | 總菌落數 | — | 1.0×10 ³ | |
| | | 水溫 | — | 28.4℃ | |
| | | pH 值 | — | 6.8 | |
| | | 導電度 | — | 1230 µmho/cm at 25℃ | |
| | | 溶氧量 | — | 0.3 | |
| | | 氧化還原電位 | — | 186 | |
| | | 苯 | 0.05 mg/L | ND<0.00028 | |
| | | 甲苯 | 10 mg/L | ND<0.00025 | |
| | | 萘 | 0.4 mg/L | ND<0.00022 | |
| | | 總酚 | 0.14 mg/L | 0.0044 | |
| | | 氯甲烷 | 0.3 mg/L | ND<0.00033 | |
| | | 氯乙烯 | 0.02 mg/L | ND<0.00028 | |
| | | 1,1-二氯乙烯 | 0.07 mg/L | ND<0.00028 | |
| | | 反-1,2-二氯乙烯 | 1 mg/L | ND<0.00032 | |
| | | 1,1-二氯乙烷 | 0.05 mg/L | ND<0.00027 | |
| | | 順-1,2-二氯乙烯 | 0.7 mg/L | ND<0.00029 | |
| | | 氯仿 | 1 mg/L | ND<0.00027 | |
| | | 四氯化碳 | 0.05 mg/L | ND<0.00029 | |
| | | 1,2-二氯乙烷 | 0.05 mg/L | ND<0.00030 | |
| | | 三氯乙烯 | 0.05 mg/L | ND<0.00031 | |
| | | 四氯乙烯 | 0.05 mg/L | ND<0.00029 | |
| | | 氯苯 | 1 mg/L | ND<0.00026 | |
| 1,4-二氯苯 | 0.75 mg/L | ND<0.00026 | | | |

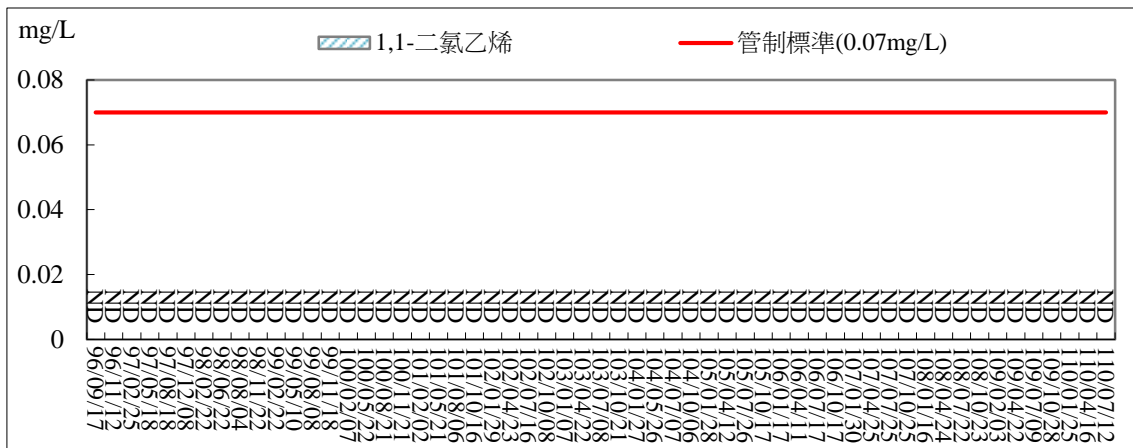
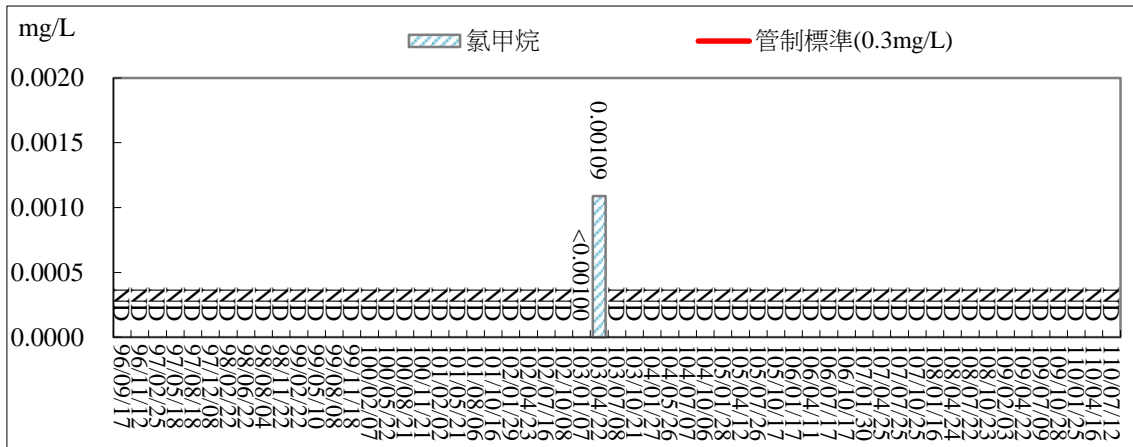
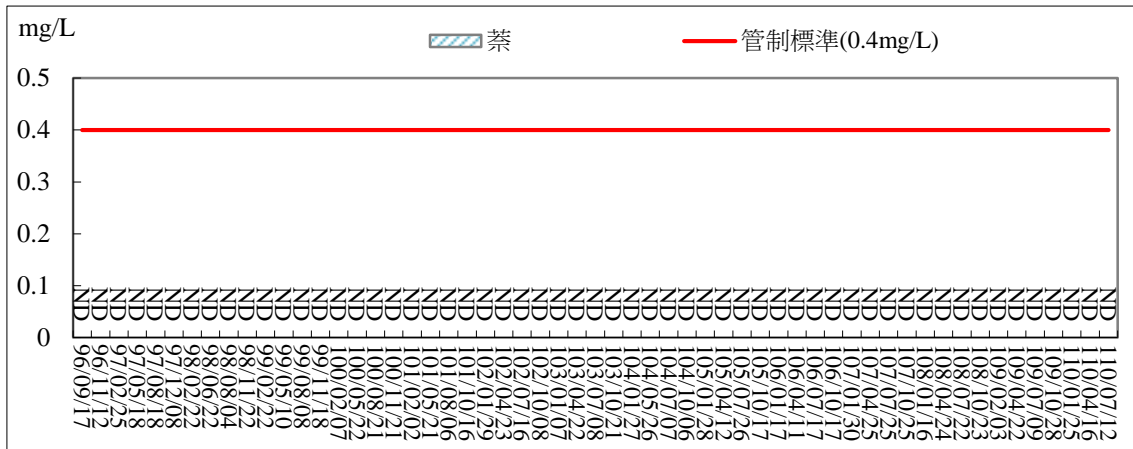
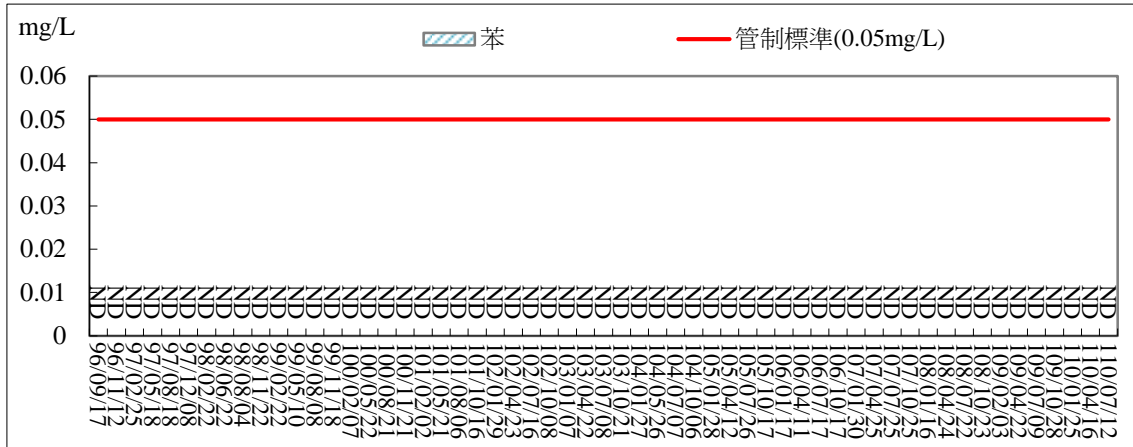
備註：氨氮、總有機碳、鐵、錳、硫酸鹽及氯鹽適用於地下水污染監測標準，其餘測項適用地下水污染管制標準。

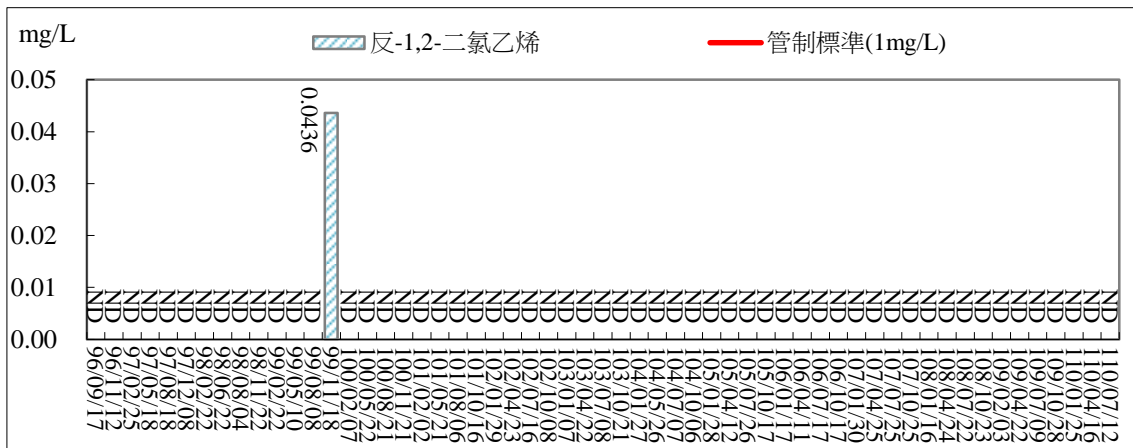
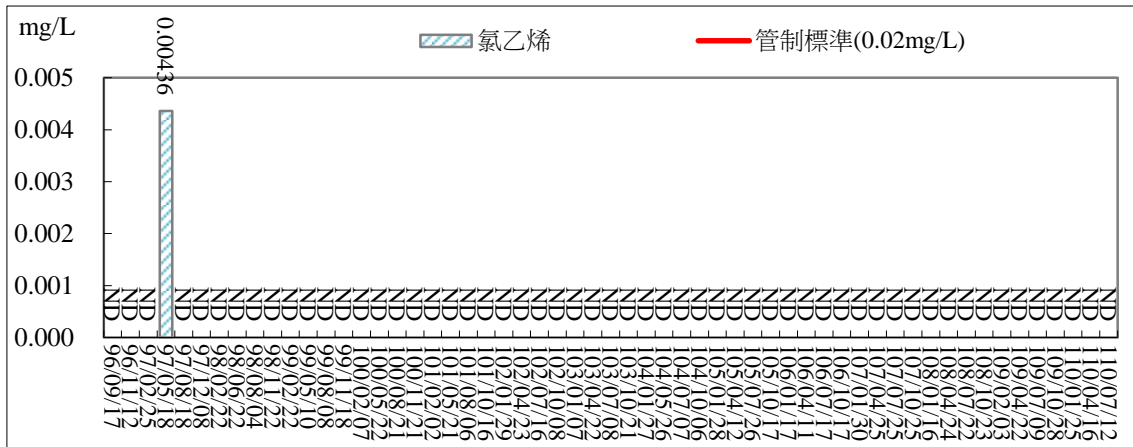
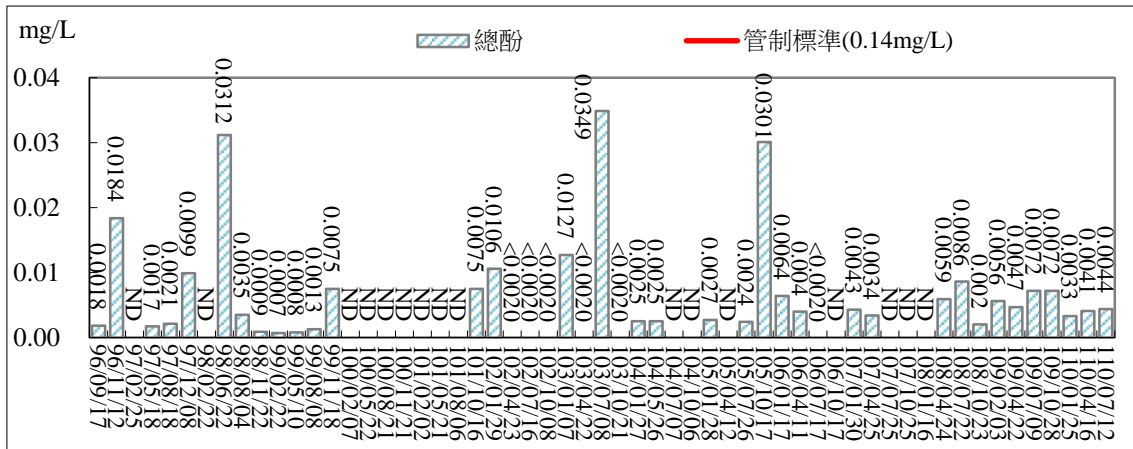
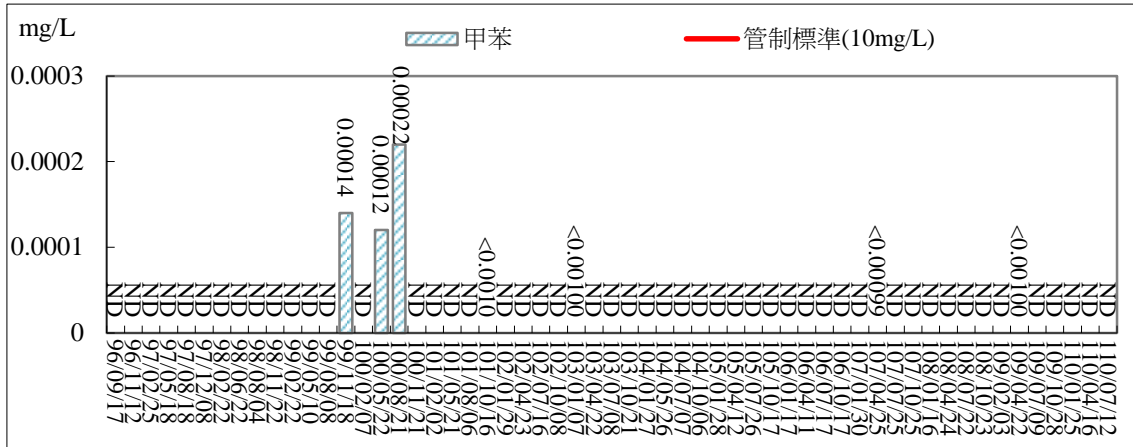


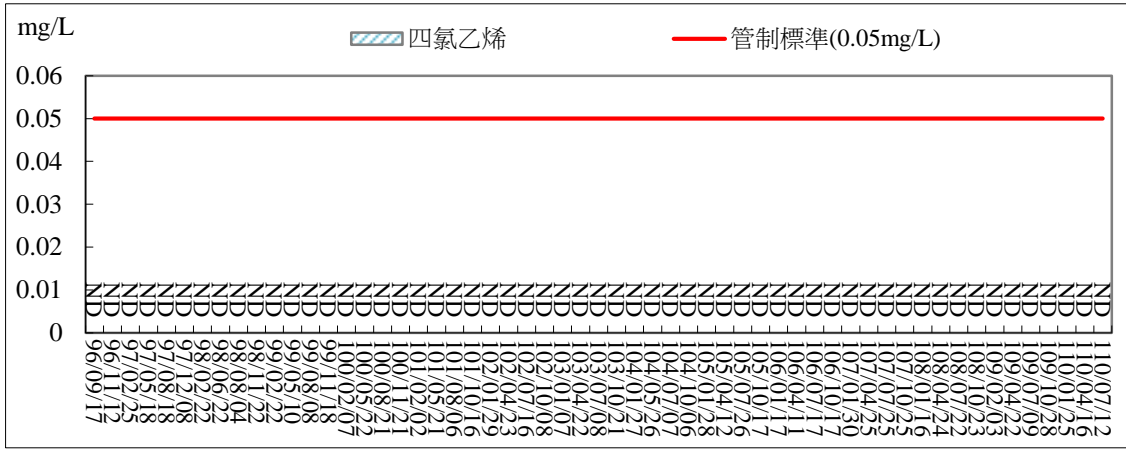
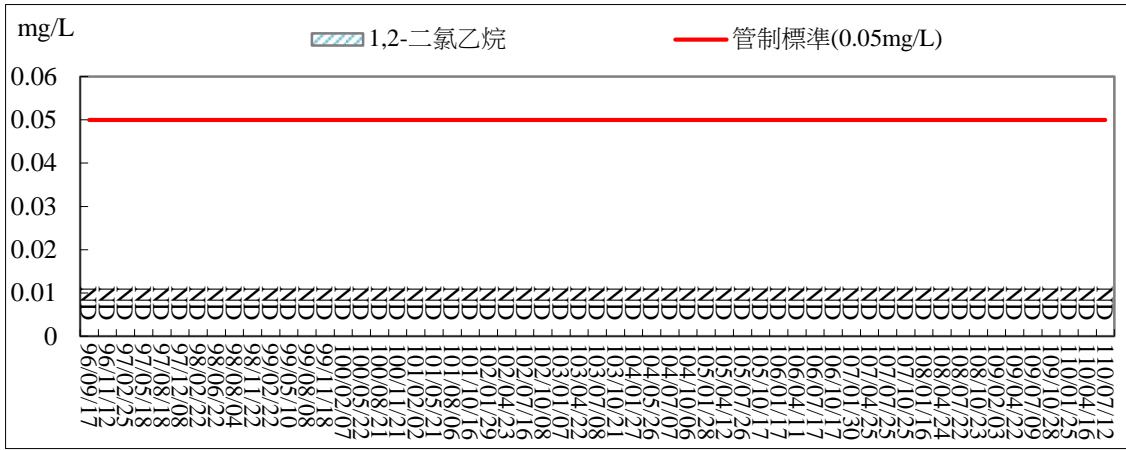
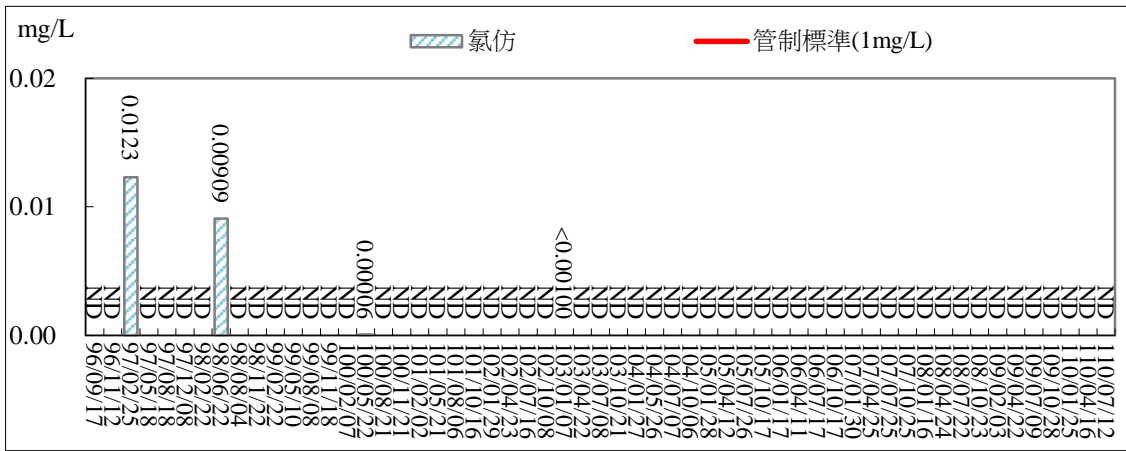
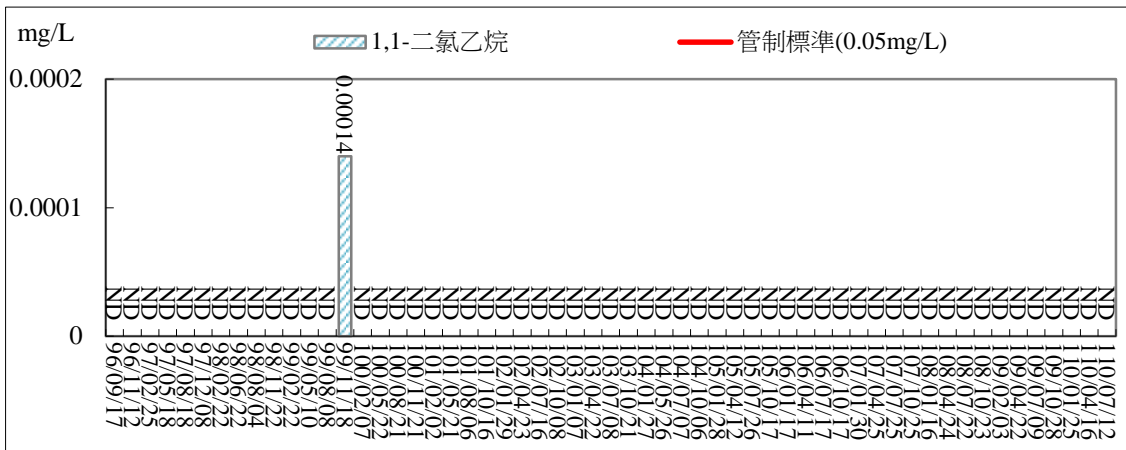


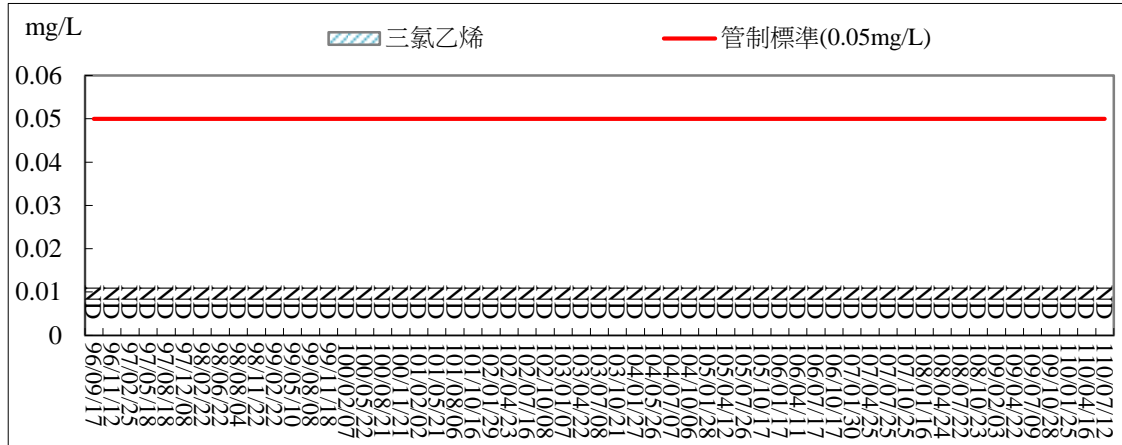
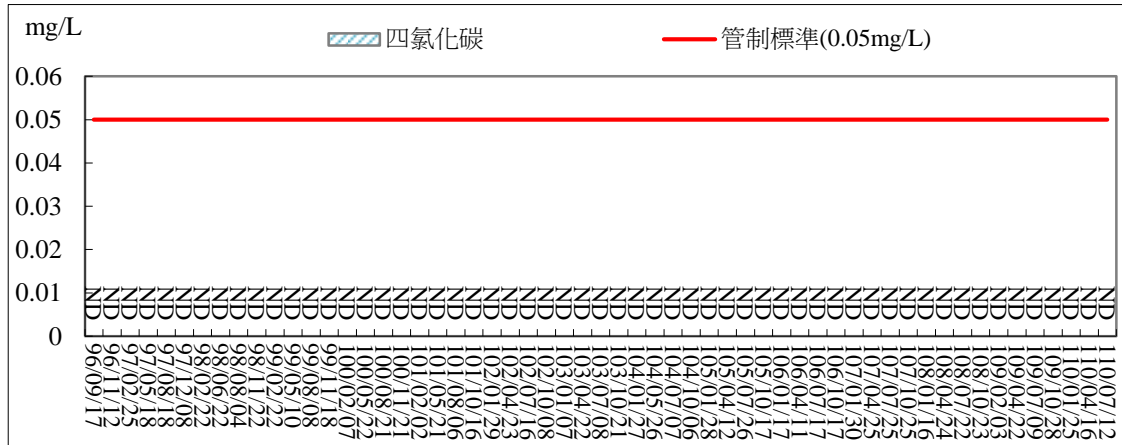
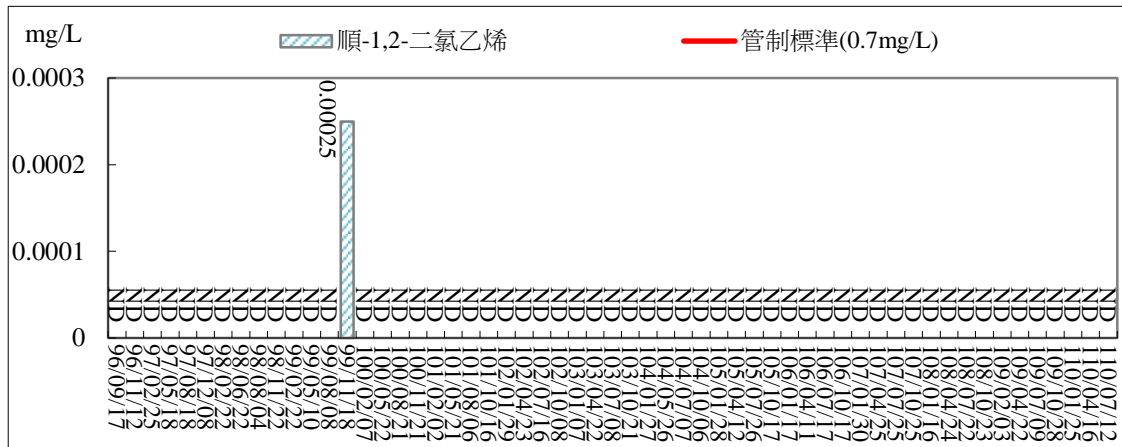
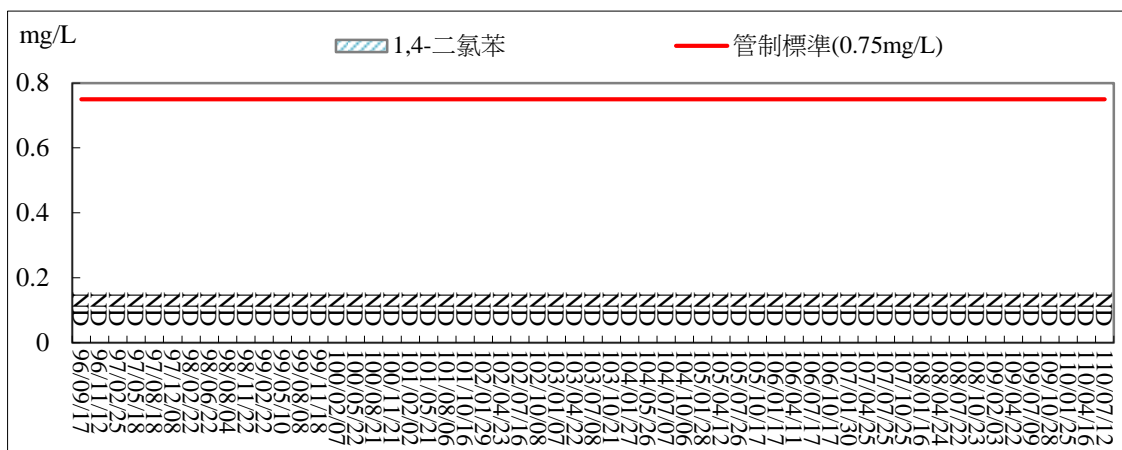












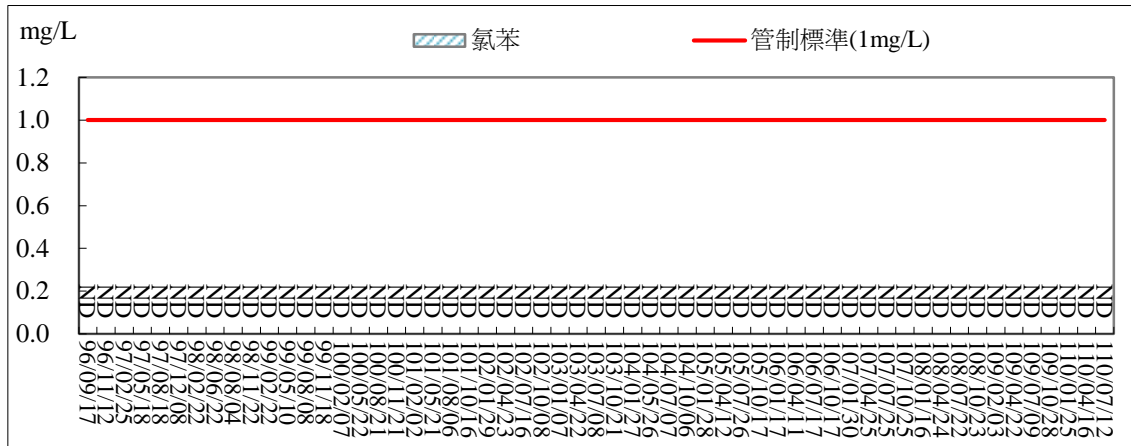


圖 2.72 地下水水質監測結果比較圖

表 3-1 本季監測結果 (續 8)

| 監測項目 | | 法規標準 | 110年第3季 | 監測結果檢討 |
|-------------|-----|----------|-----------|---|
| 噪音 (工區外) | L 日 | 74 dB(A) | 63.7~68.0 | 本季各時段均能音量測值均符合標準，現場未發現異常情況。請參閱噪音監測結果比較圖。 |
| | L 晚 | 70 dB(A) | 58.3~61.9 | |
| | L 夜 | 67 dB(A) | 59.8~60.7 | |
| 噪音 (工區內) | L 日 | 76 dB(A) | 69.3~71.5 | |
| | L 晚 | 75 dB(A) | 65.5~68.2 | |
| | L 夜 | 73 dB(A) | 60.1~70.6 | |
| 振動 (工區外) | L 日 | 65 dB | 35.5~39.1 | 國內目前尚未訂定振動管制標準，本次監測未發現異常現象，且測值皆低於日本振動規制法施行細則之標準。請參閱振動監測結果比較圖。 |
| | L 夜 | 60 dB | 30.5~32.3 | |
| 振動 (工區內) | L 日 | 70 dB | 30.8~39.6 | |
| | L 夜 | 65 dB | 30.0~30.7 | |

備註：噪音振動(工區外)為南 133 縣道與 60 m 道路(樹谷大道)路口
 噪音振動(工區內)為堤塘聚落及看西聚落

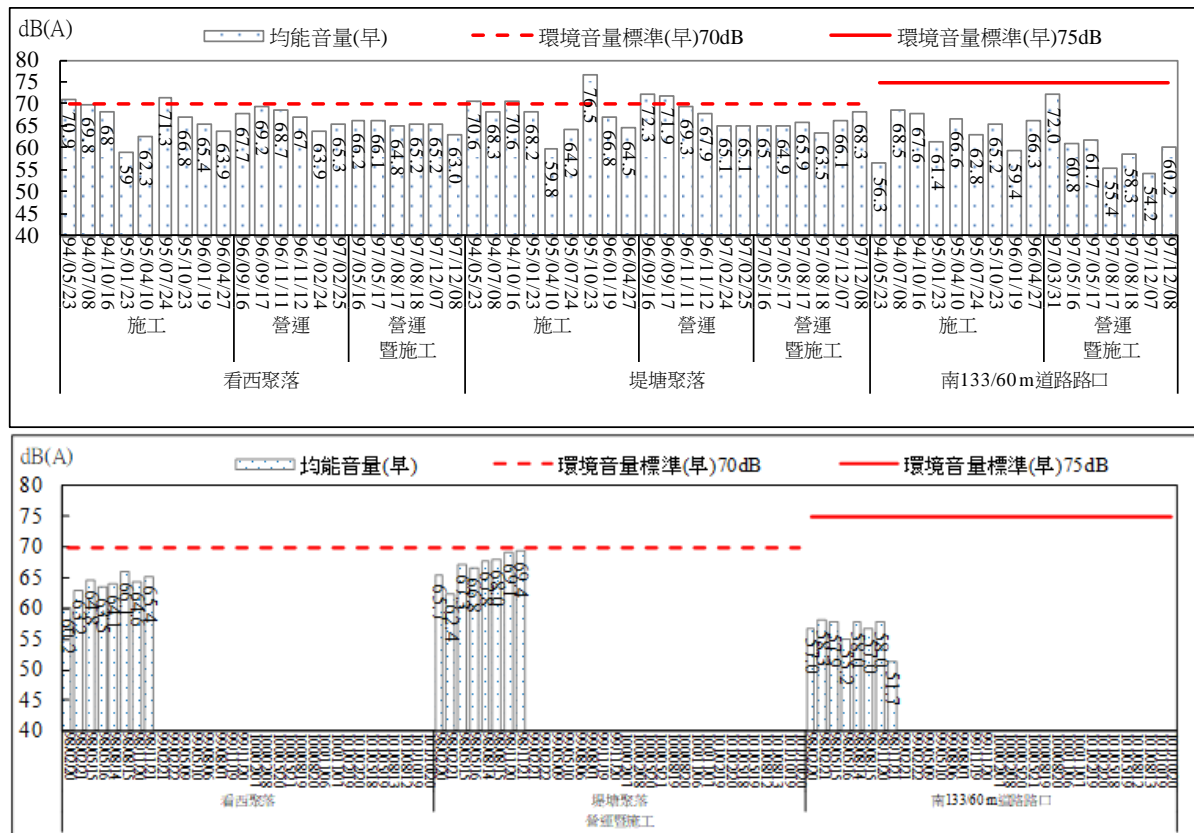
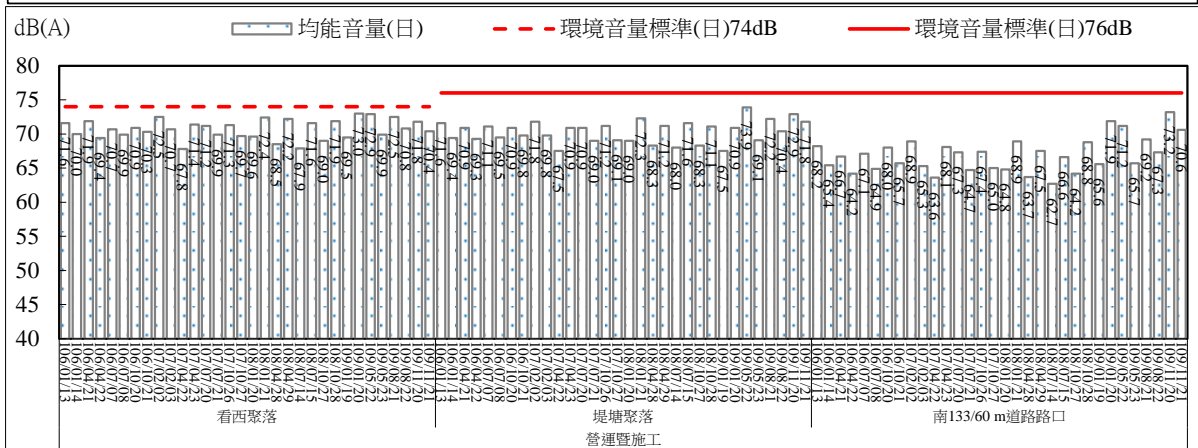
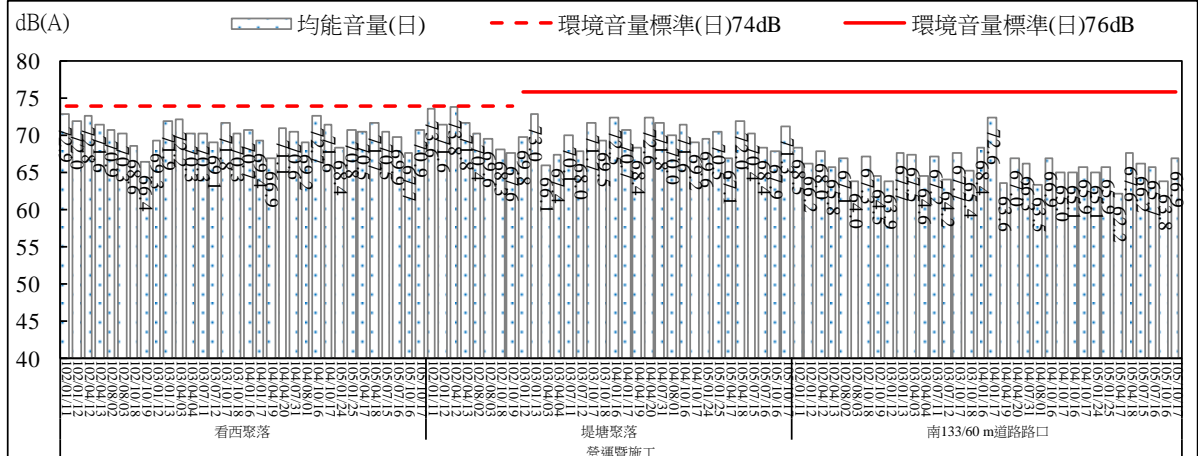
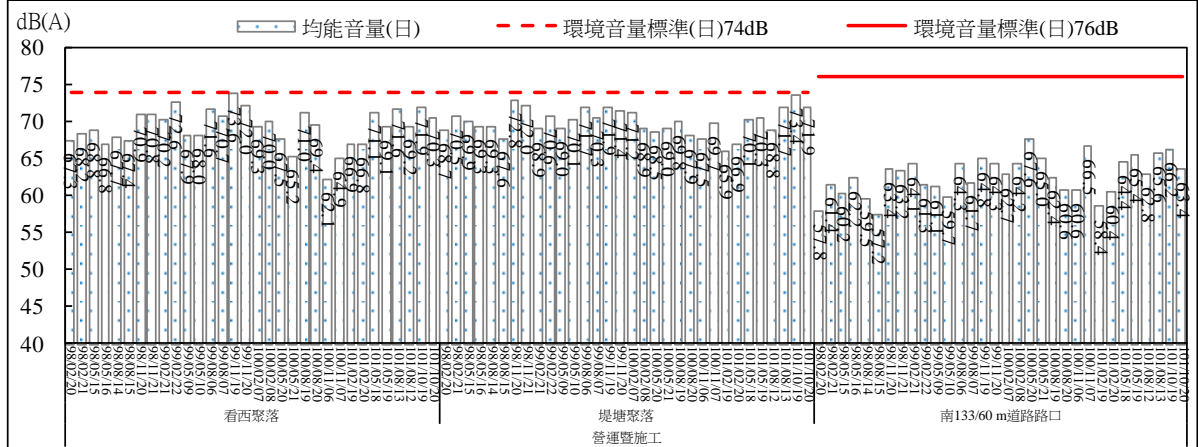
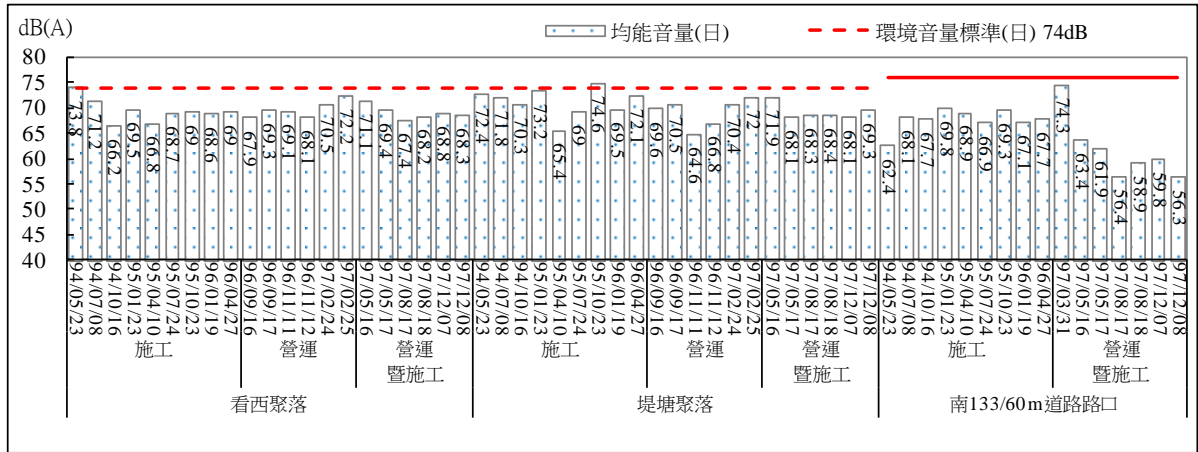


圖 2.73 環境噪音監測結果比較圖(早間)



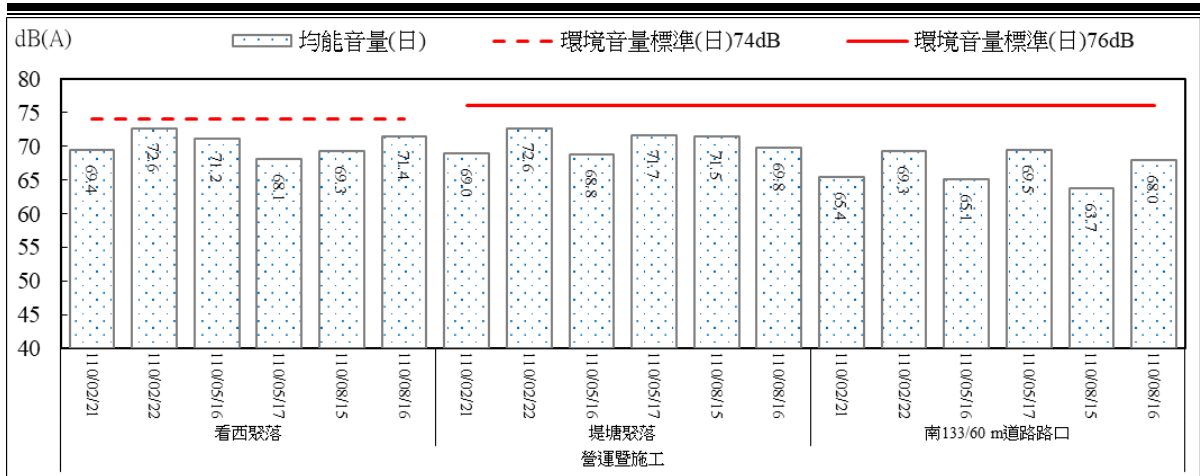
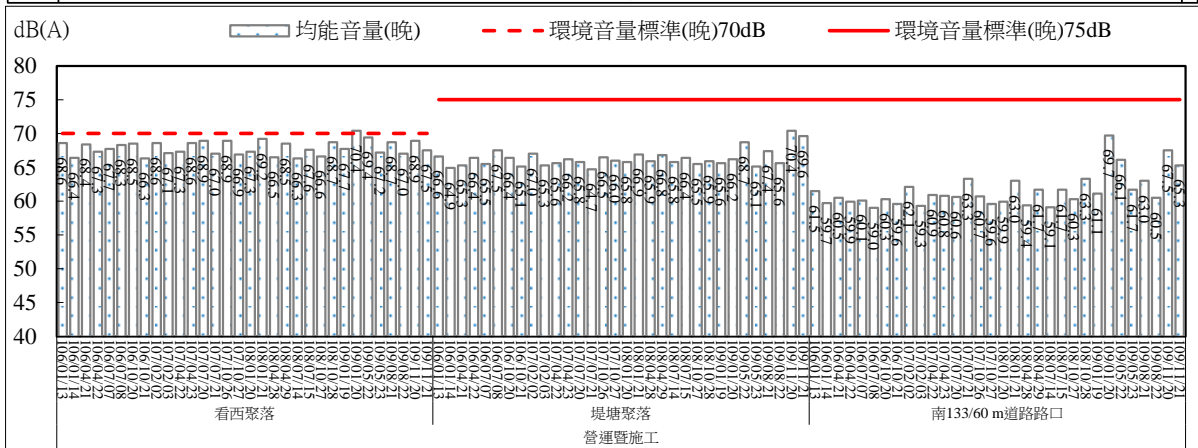
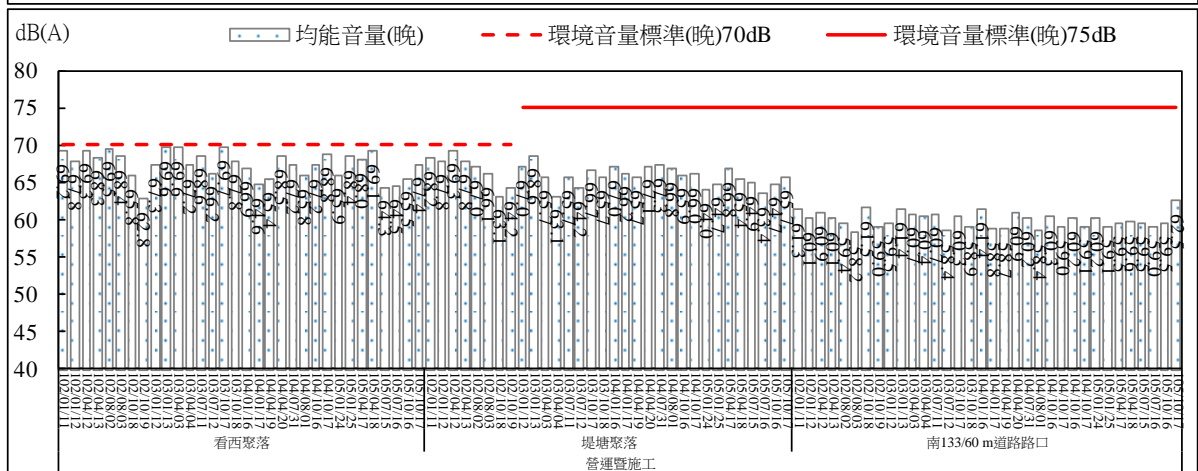
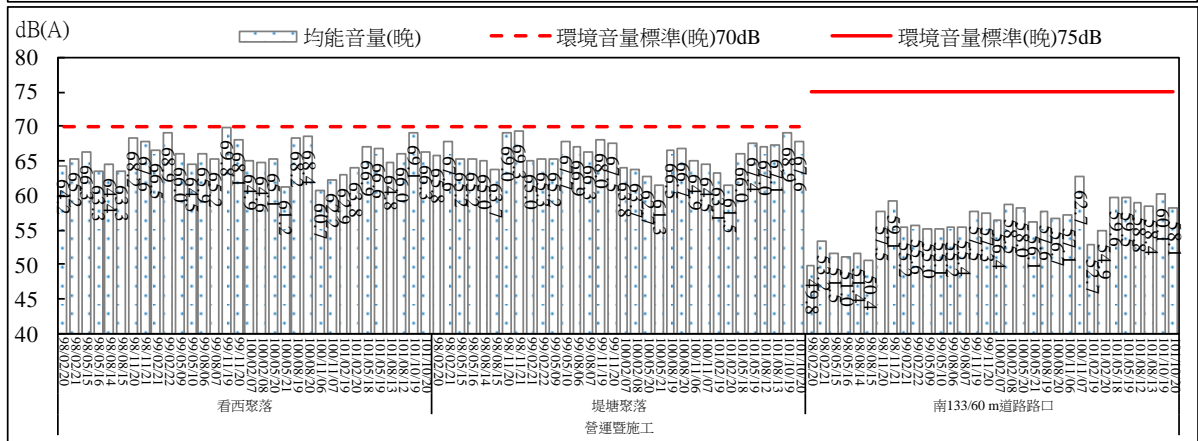
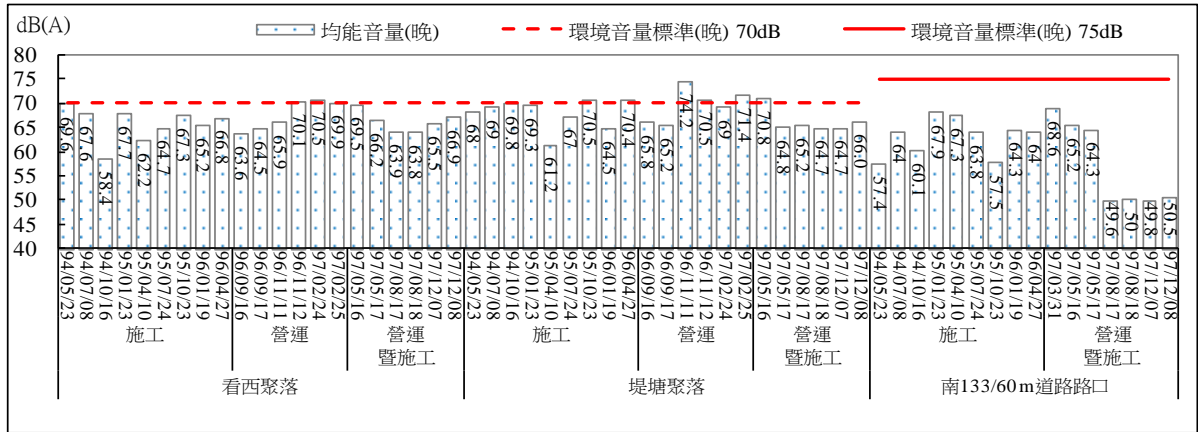


圖 2.74 環境噪音監測結果比較圖(日間)



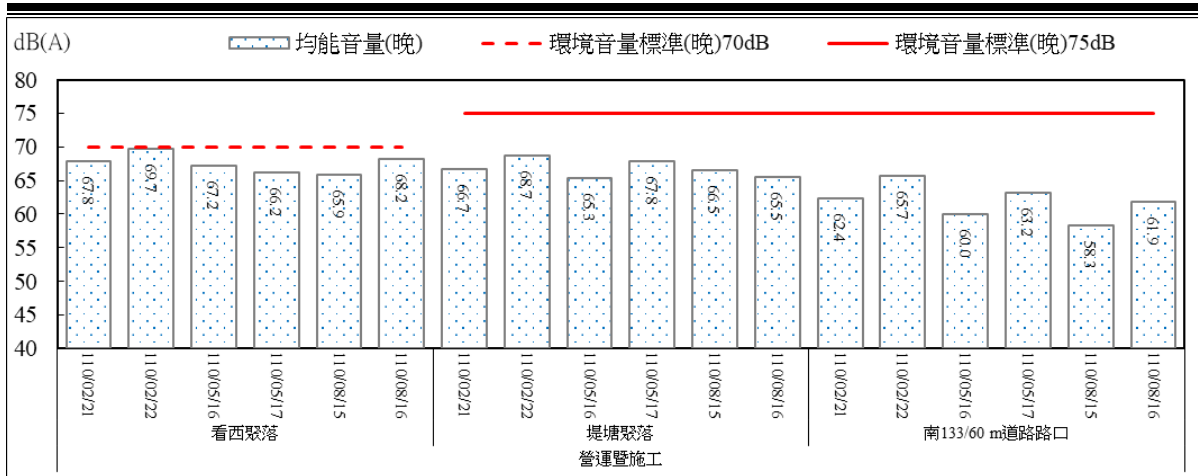
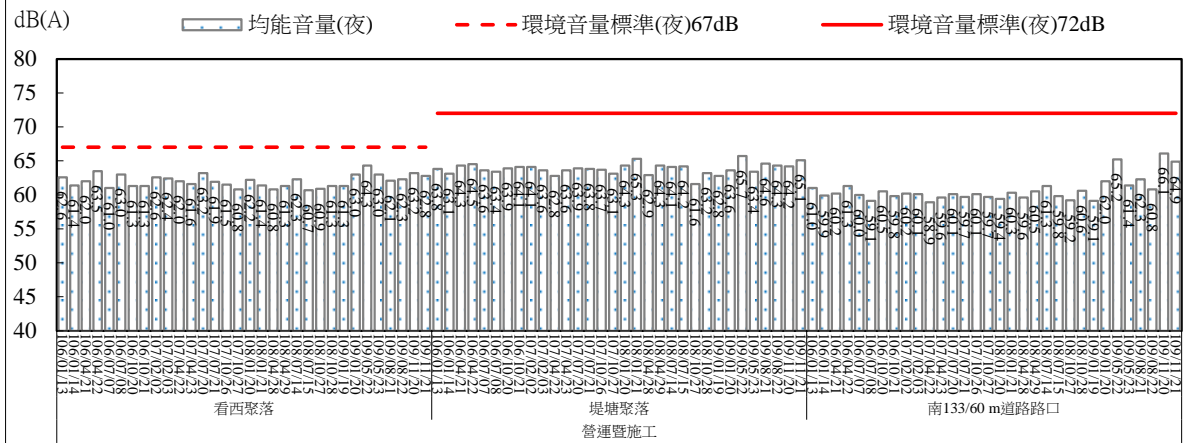
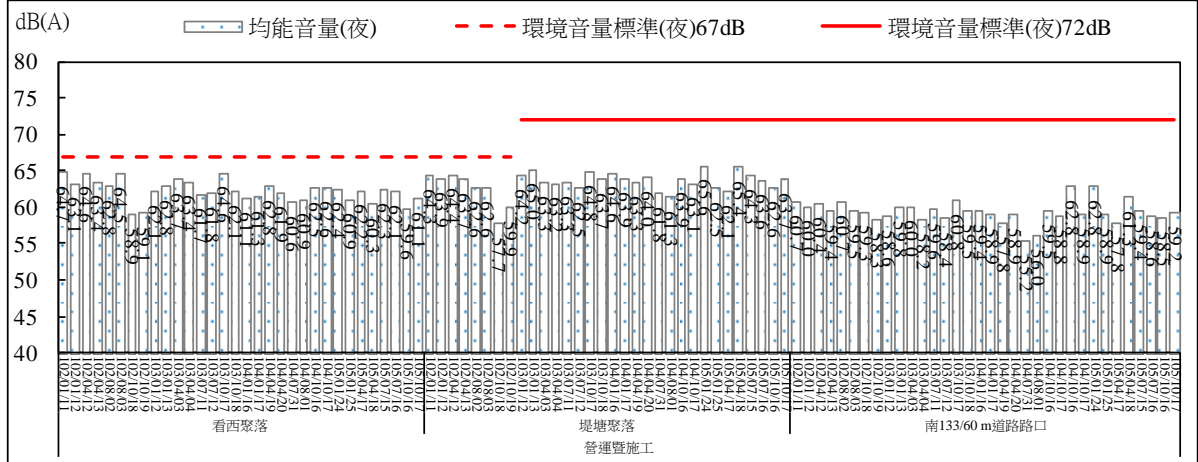
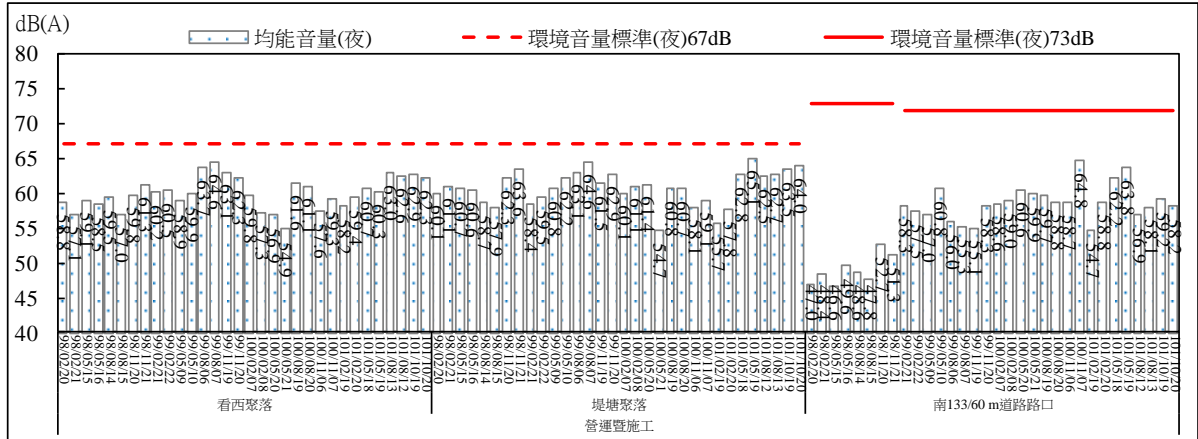
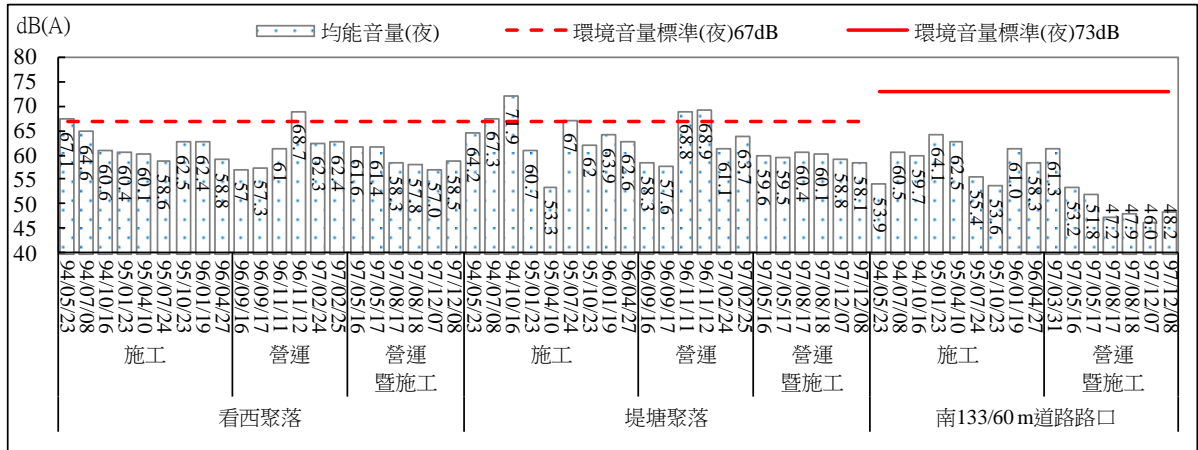


圖 2.75 環境噪音監測結果比較圖(晚間)



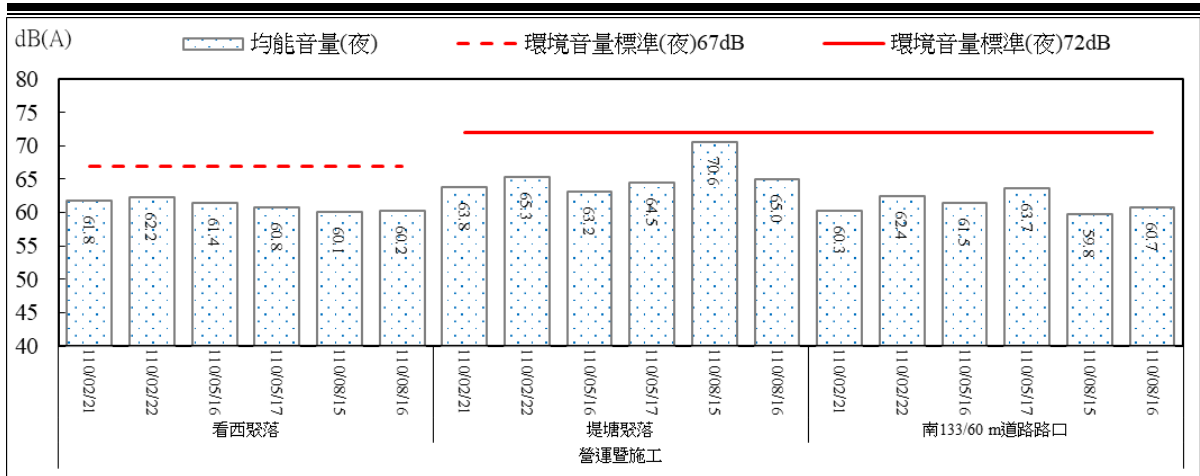
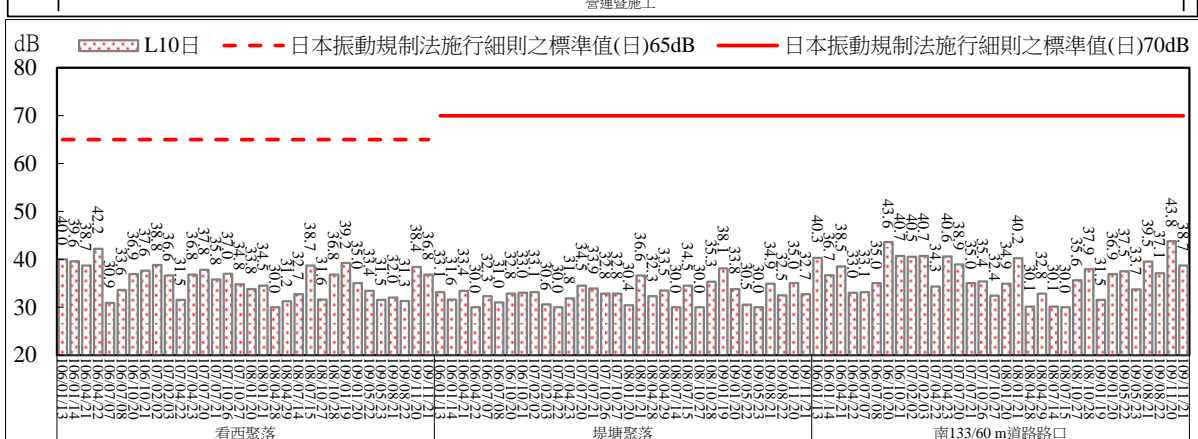
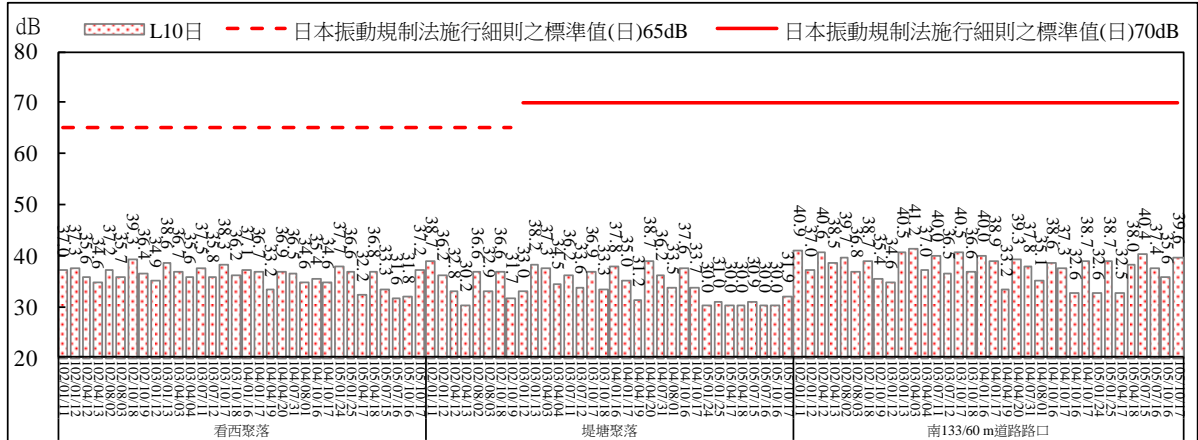
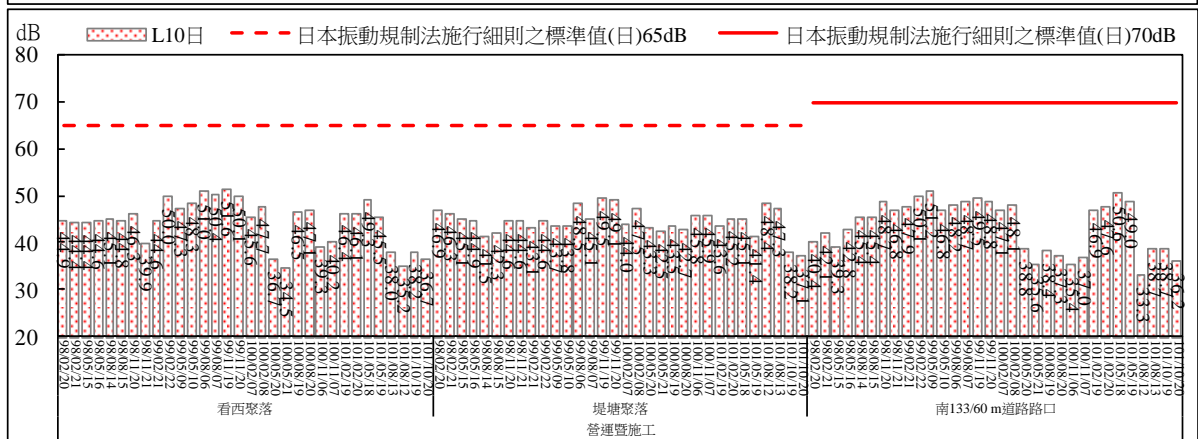
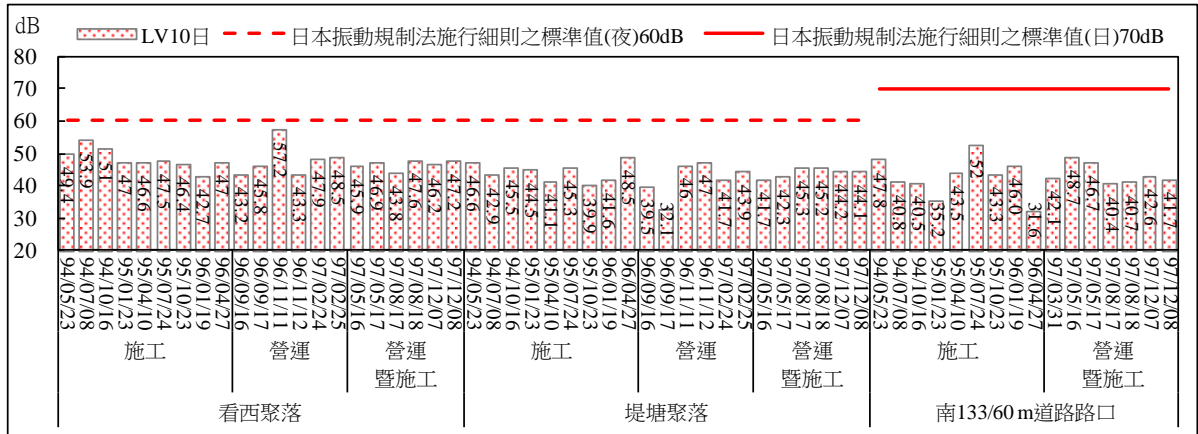


圖 2.76 環境噪音監測結果比較圖(夜間)



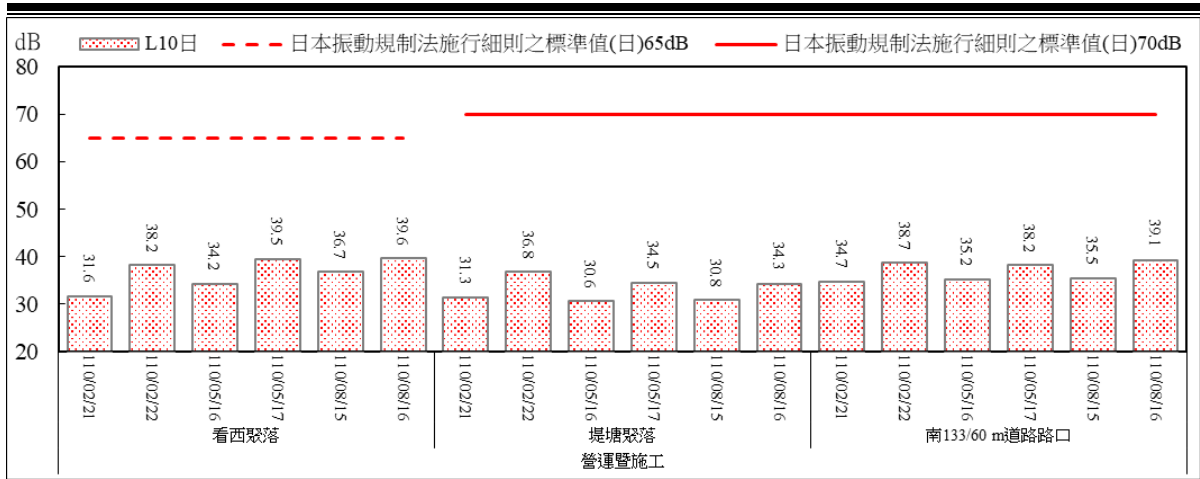
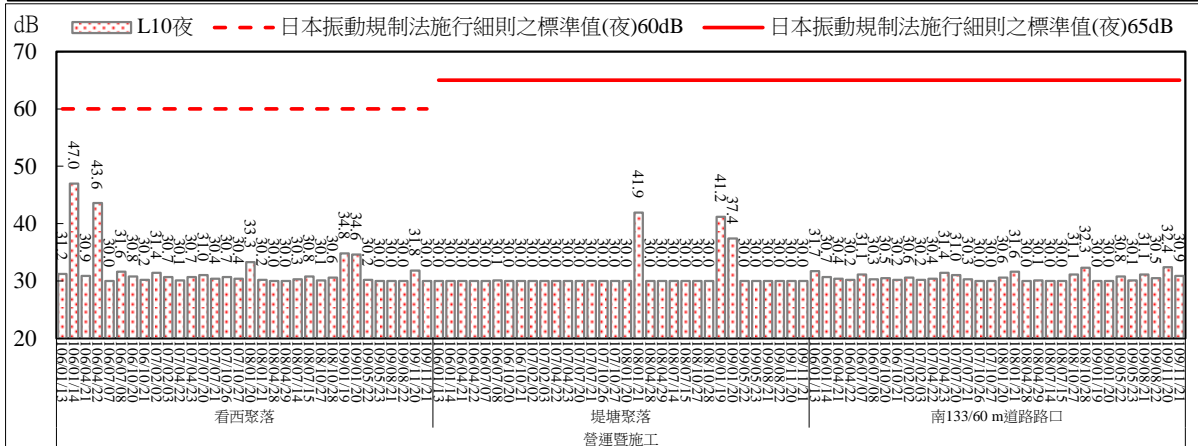
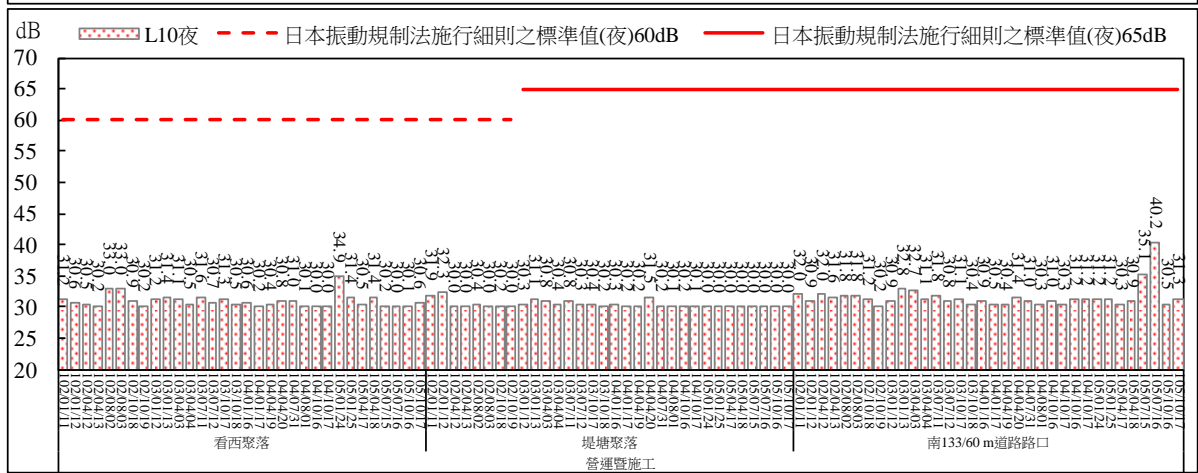
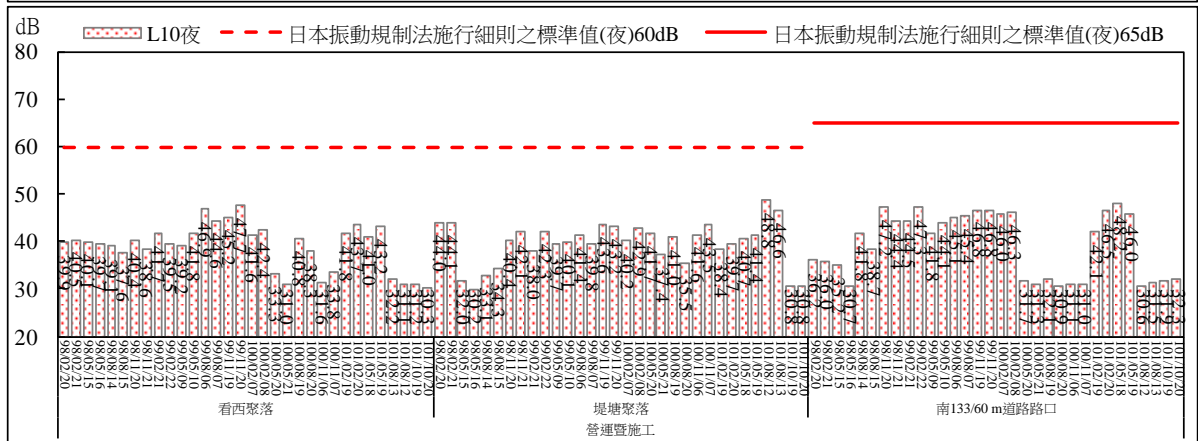
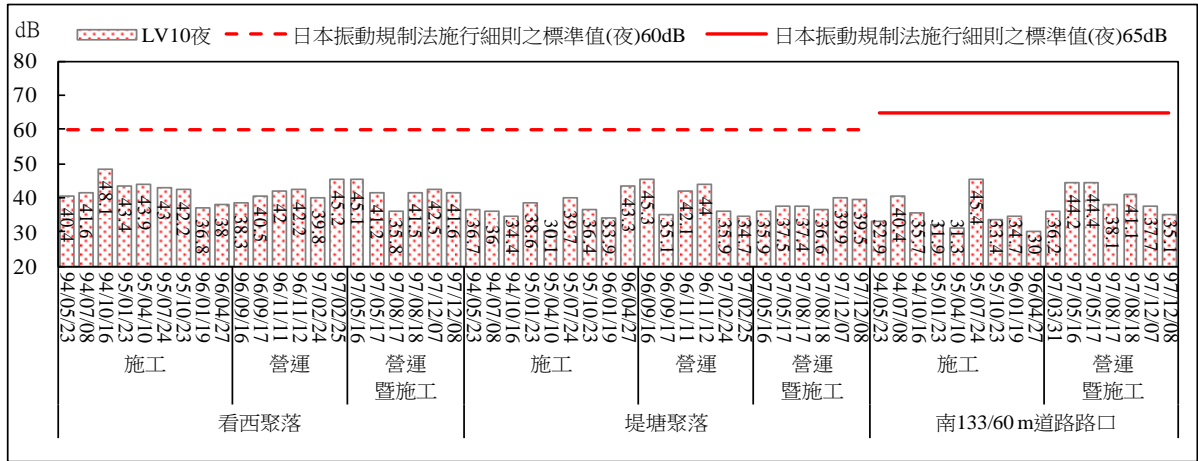


圖 2.77 環境振動監測結果比較圖(日間)



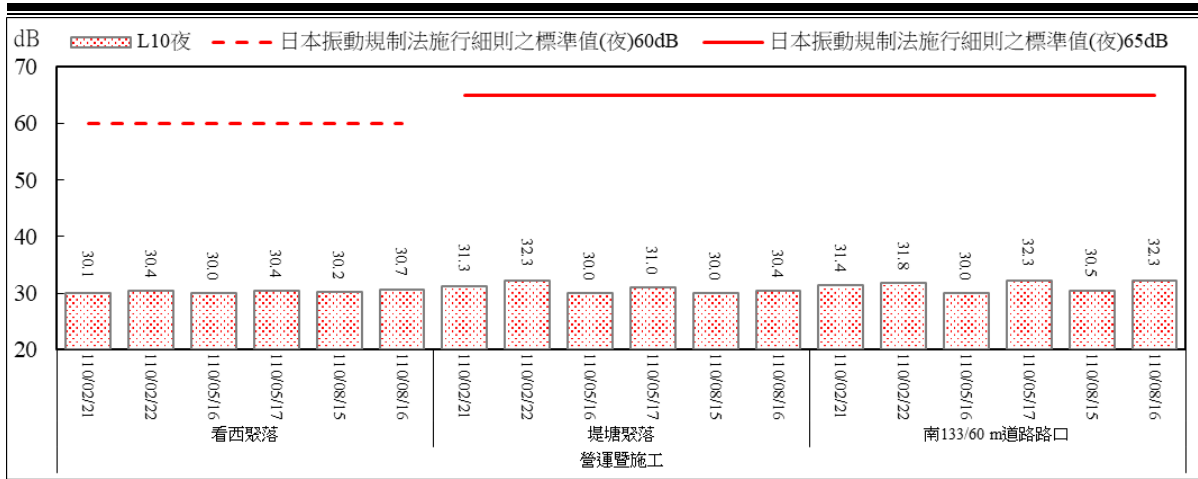
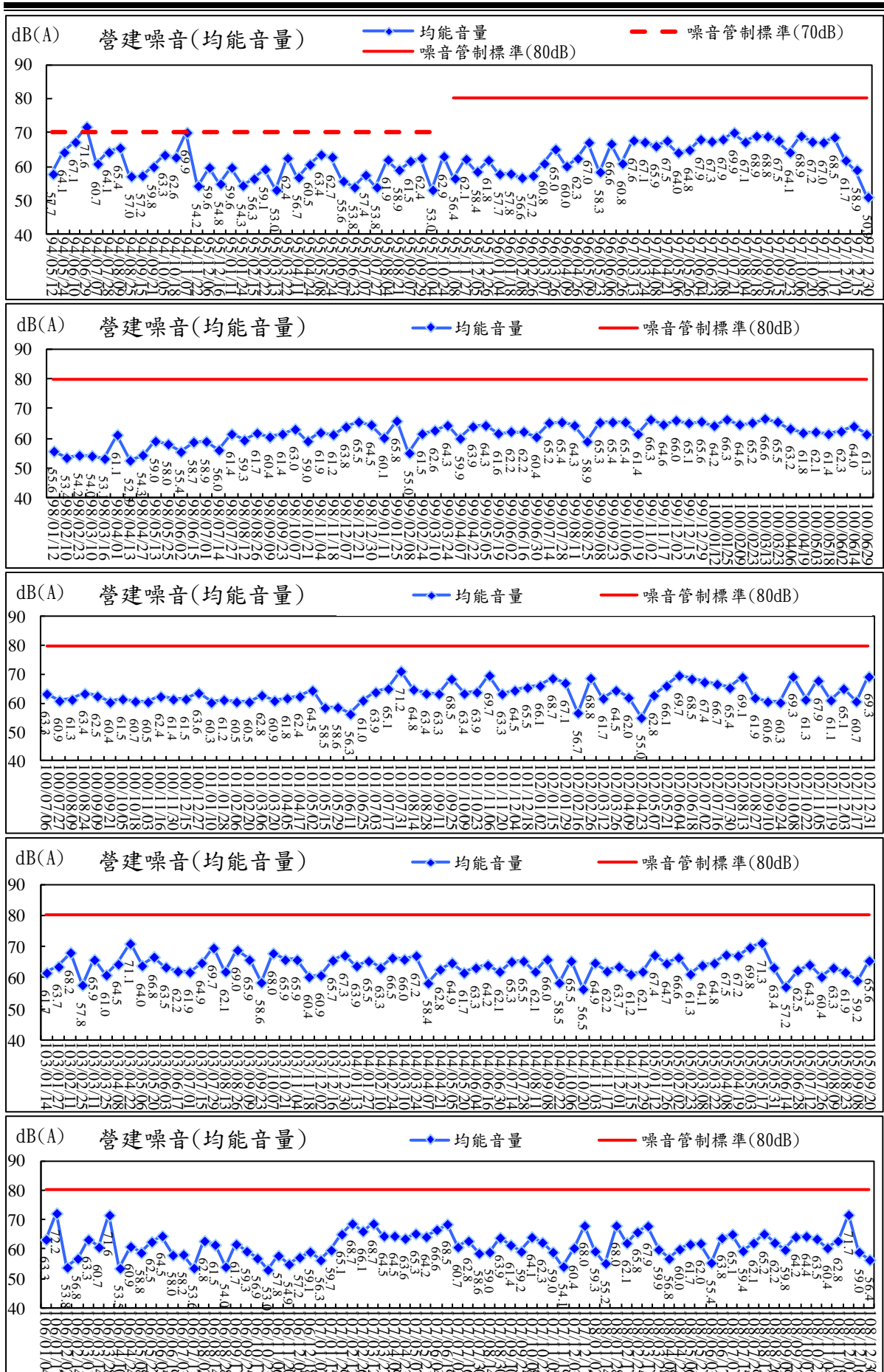


圖 2.78 環境振動監測結果比較圖(夜間)

表 3-1 本季監測結果 (續 9)

| 監測項目 | | 法規標準 | 110年第3季 | 監測結果檢討 |
|----------|------------------|-----------|-----------|--|
| 營建 噪音 | L _{max} | 100 dB(A) | 67.3~84.1 | 各營建噪音測值均符合日間第四類噪音管制區之營建工程噪音管制標準(20Hz至20k Hz)，現場未發現異常情況。請參閱營建噪音監測結果比較圖。 |
| | L _{eq} | 80 dB(A) | 59.1~78.6 | |



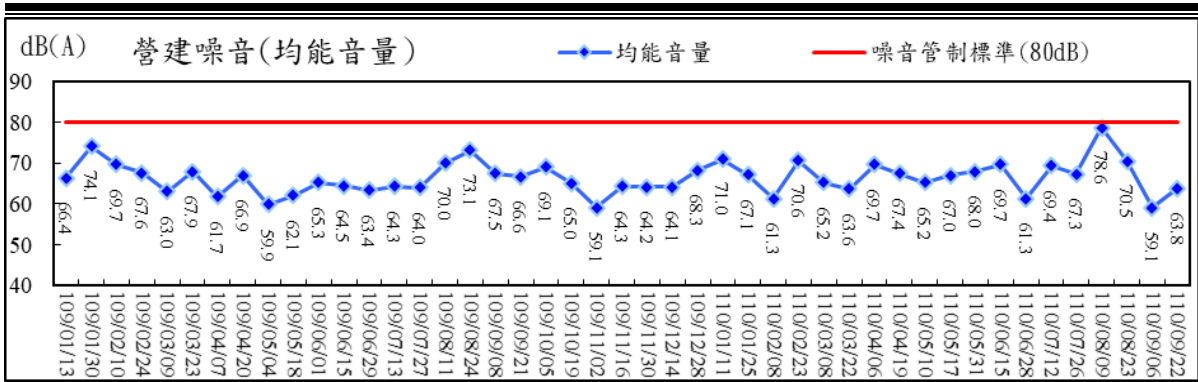
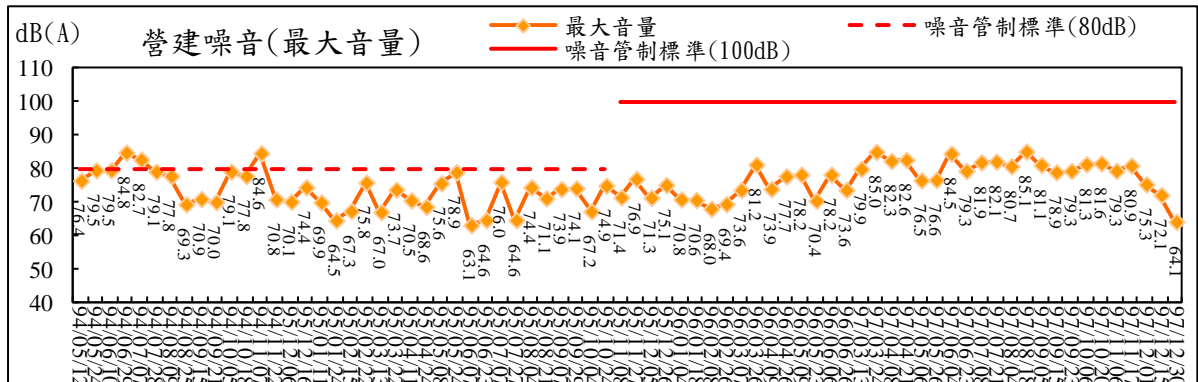


圖 2.79 營建噪音(均能音量)監測結果比較圖



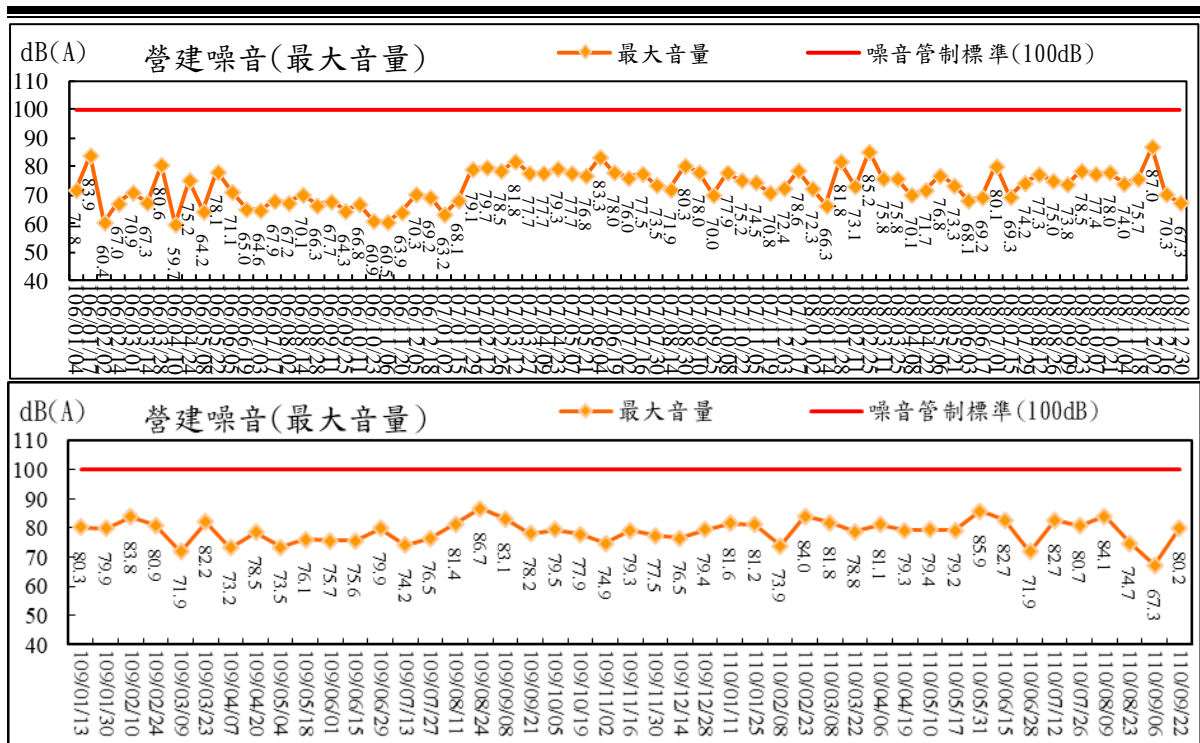


圖 2.80 營建噪音(最大音量)監測結果比較圖

表 3-1 本季監測結果 (續 10)

| 監測項目 | | 法規標準 | 110年第3季 | 監測結果檢討 |
|--------------|-------|--|--------------|--|
| 放流水質 (工區) | 生化需氧量 | 30 mg/L | ND<2.0~11.3 | 本季工區放流水均符合法規標準。請參閱工區放流口放流水監測結果比較圖。自 105 年 8 月後園區內無列管工區，105 年 9 月起暫停工區放流水監測。106 年 2 月起開始監測。 |
| | 化學需氧量 | 100 mg/L | 11.2~47.8 | |
| | 懸浮固體 | 30 mg/L | ND<1.25~25.2 | |
| | 油脂 | 10.0 mg/L | ND<0.5~6.0 | |
| | 真色色度 | 550 | <25~170 | |
| | 溫度 | 1.攝氏三十八度以下(適用於五月至九月)。 2.攝氏三十五度以下(適用於十月至翌年四月)。 | 29.4~30.2 | |
| | pH 值 | 6.0~9.0 | 8.3~8.5 | |

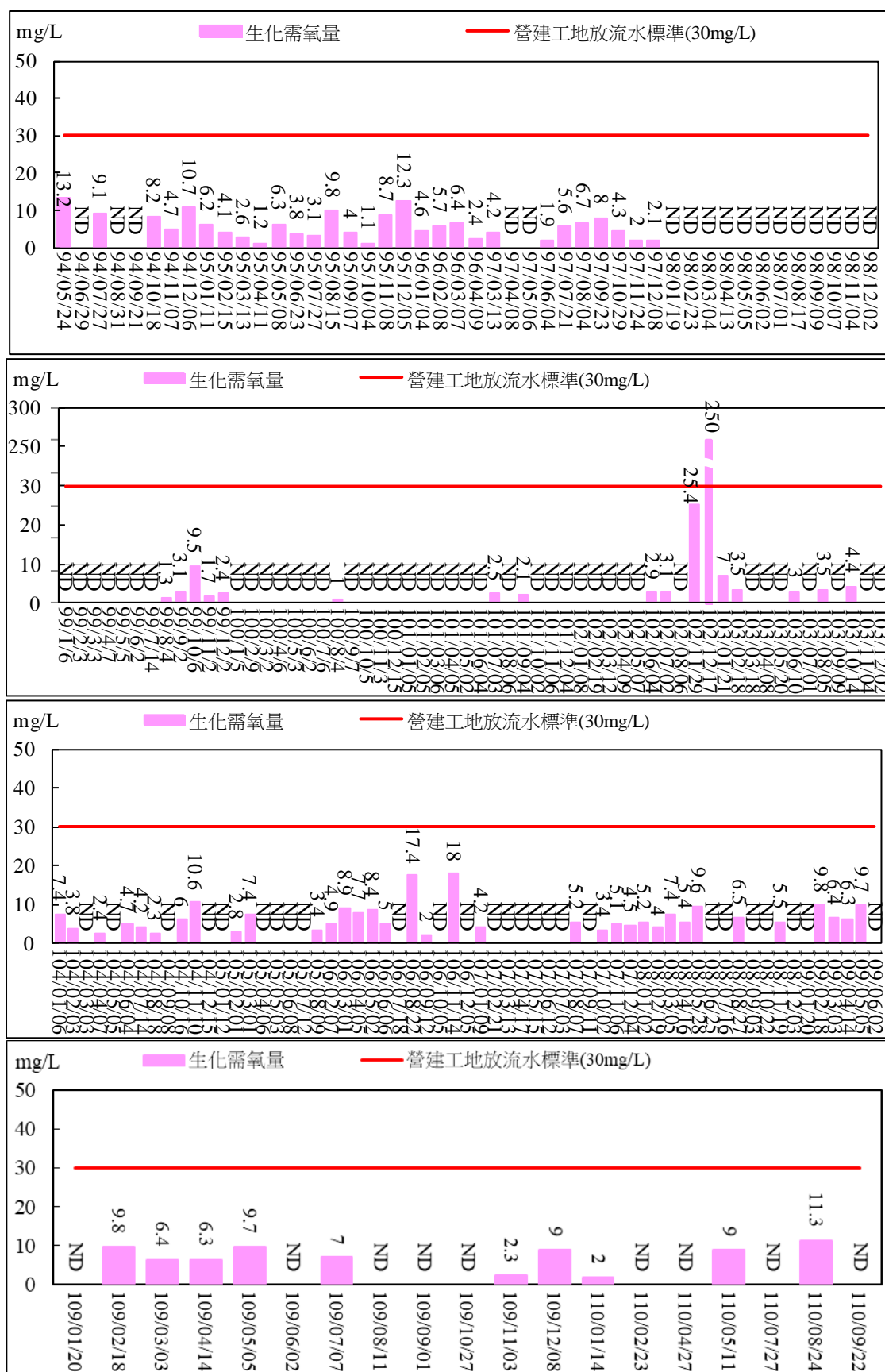


圖 2.81 工區放流口放流水質監測結果比較圖(生化需氧量)

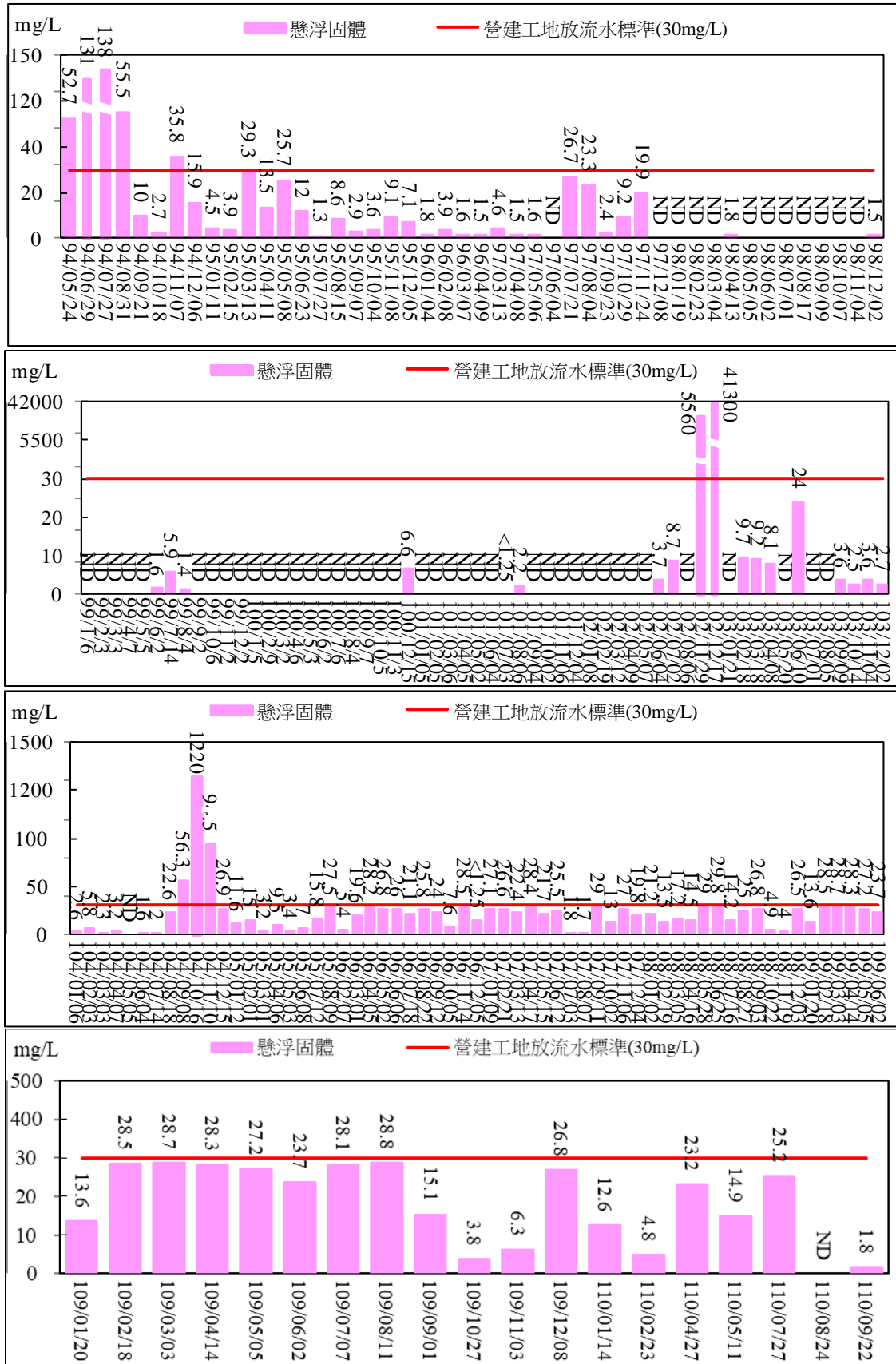


圖 2.83 工區放流口放流水質監測結果比較圖(懸浮固體)

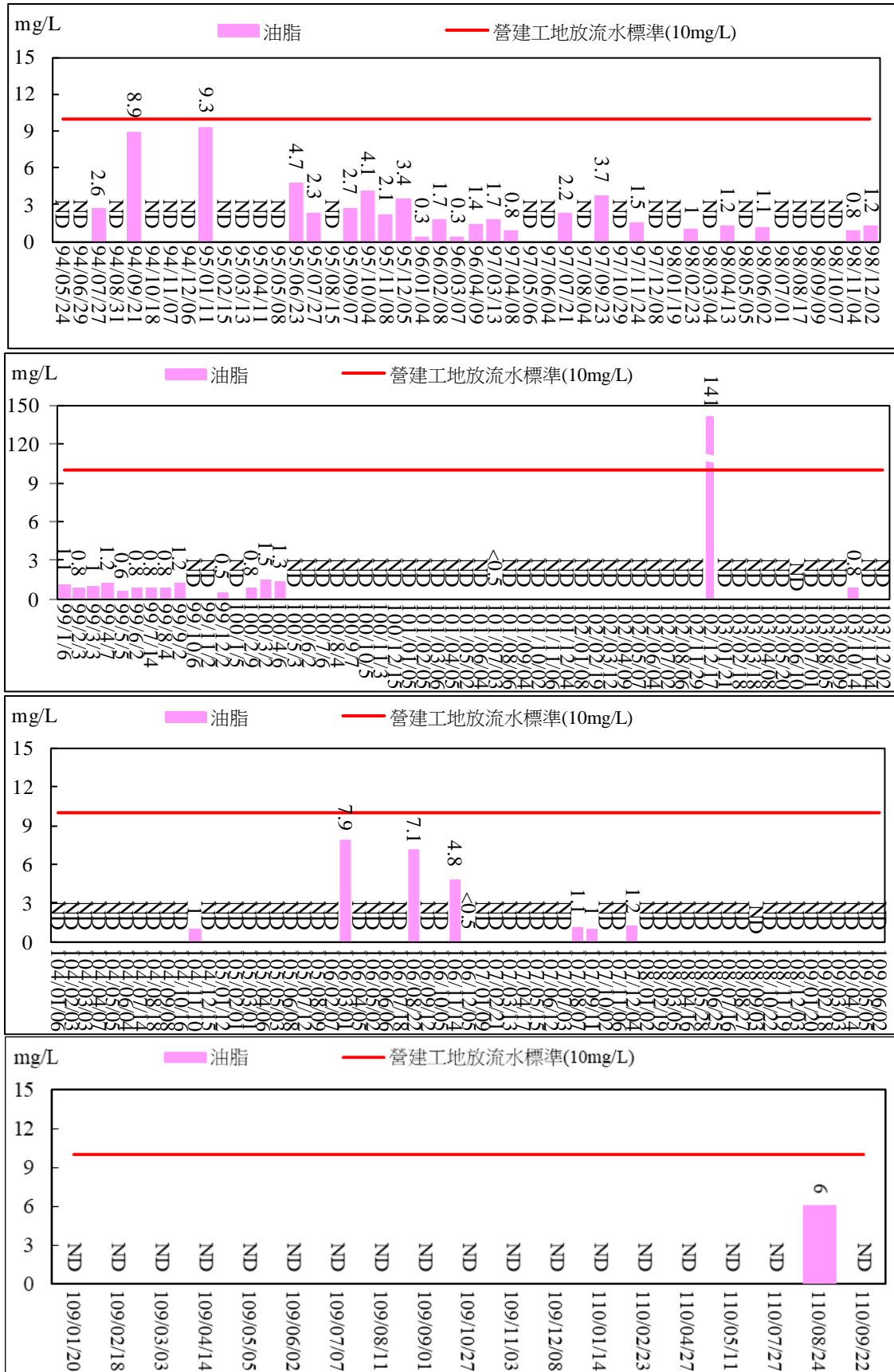


圖 2.84 工區放流口放流水質監測結果比較圖(油脂)

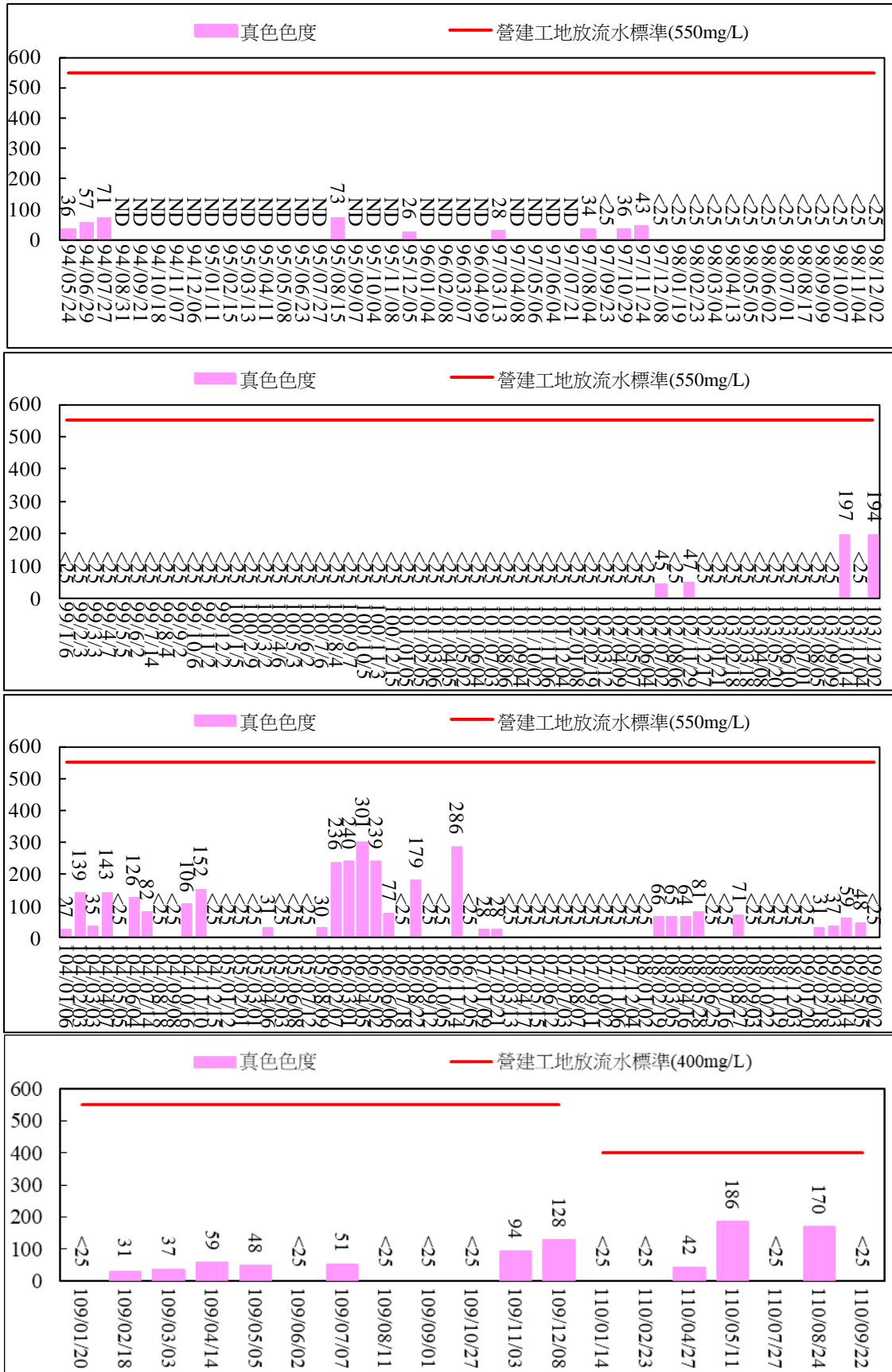


圖 2.85 工區放流口放流水質監測結果比較圖(真色色度)

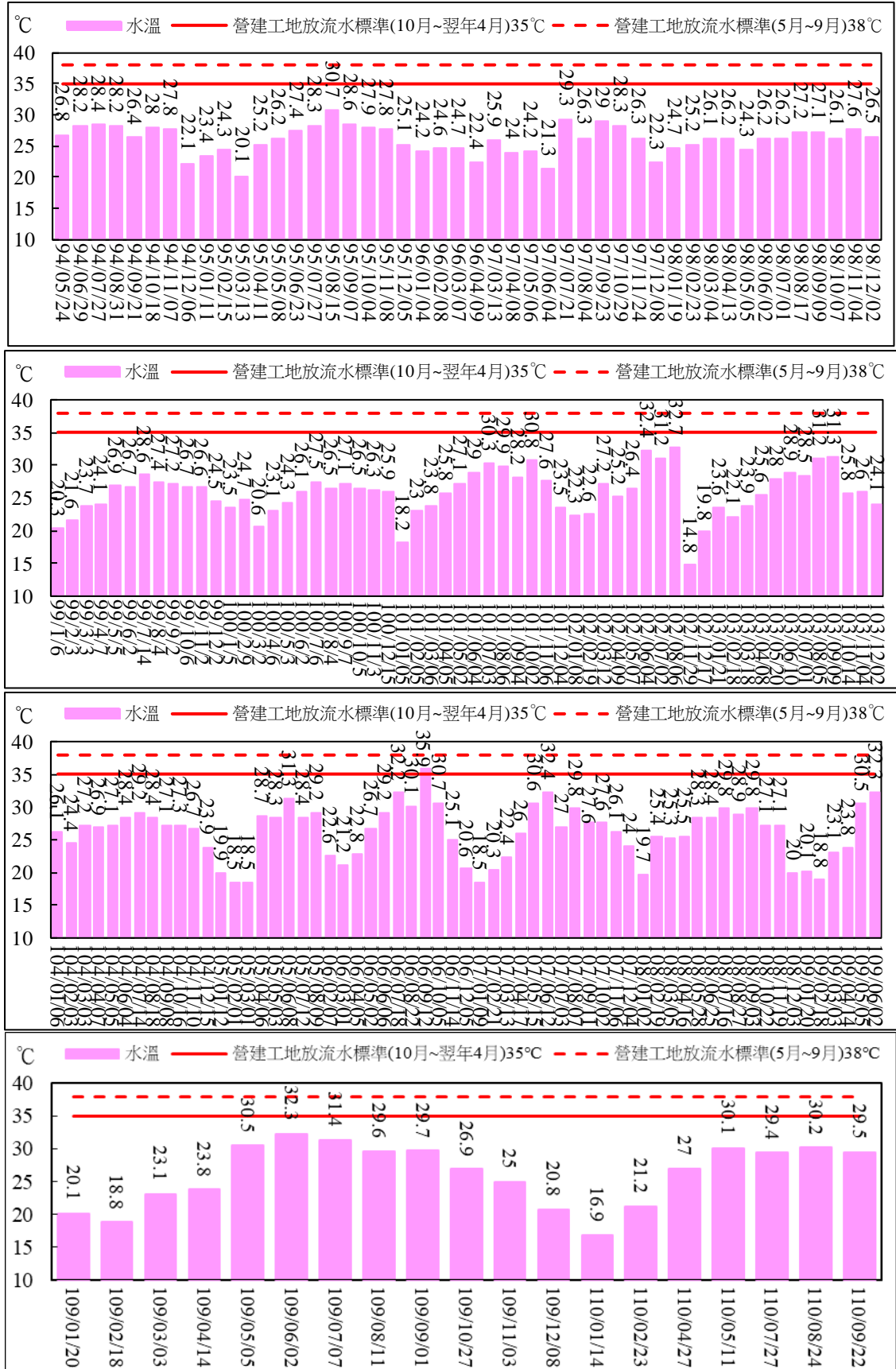


圖 2.86 工區放流口放流水質監測結果比較圖(水溫)

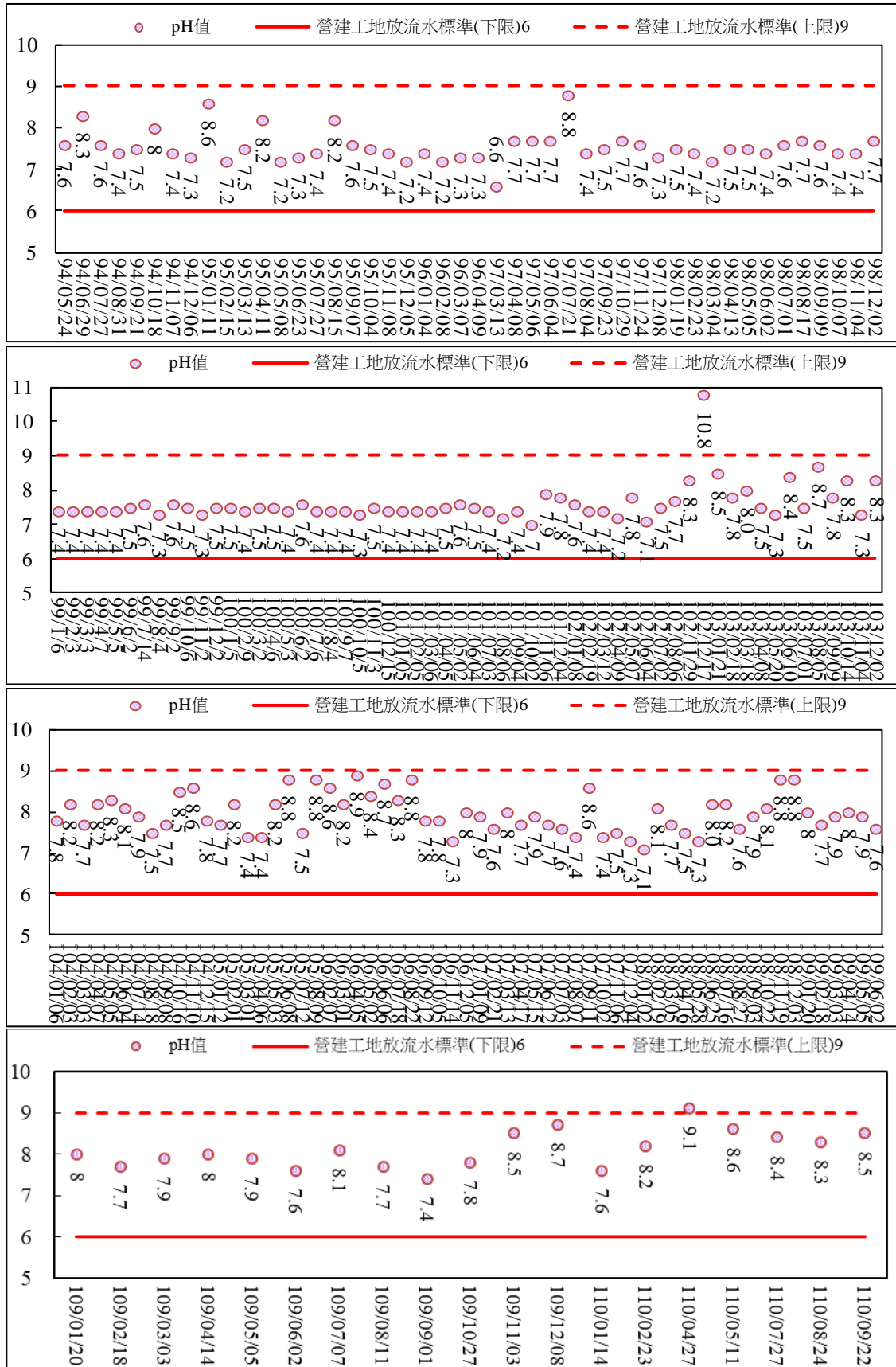


圖 2.87 工區放流口放流水質監測結果比較圖(pH 值)

四、以上監測結果報告書正本存放服務中心以備查用，如需查閱請洽服務中心環保組窗口林育勳 (06)5889955#65163。