

Appendix J Water Quality Monitoring Results and their Graphical Presentation

Project Name: Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3
 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Date of Monitoring: 2/1/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:07 | <0.5 | 20.8 | 6.3 | 7.4 | 83.2 | 14.4 | <0.1 | 11 |
| C3b | 11:32 | <0.5 | 20.0 | 6.6 | 7.6 | 83.3 | 7.6 | <0.1 | 3.85 |
| I5 | 11:48 | <0.5 | 20.8 | 7.0 | 7.9 | 88.6 | 6.3 | <0.1 | 2.8 |

Date of Monitoring: 2/3/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:08 | <0.5 | 18.9 | 6.4 | 7.2 | 77.5 | 12.9 | <0.1 | 13.05 |
| C3b | 11:36 | <0.5 | 18.7 | 6.7 | 8.0 | 85.2 | 7.5 | <0.1 | 3.65 |
| I5 | 11:50 | <0.5 | 19.1 | 6.9 | 7.4 | 79.5 | 5.6 | <0.1 | 2.8 |

Date of Monitoring: 2/6/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:22 | <0.5 | 22.2 | 6.4 | 7.7 | 88.2 | 21.4 | <0.1 | 25.5 |
| C3b | 11:44 | <0.5 | 20.5 | 6.6 | 7.2 | 80.0 | 7.5 | <0.1 | 5.8 |
| I5 | 11:56 | <0.5 | 21.5 | 6.8 | 6.8 | 77.4 | 5.7 | <0.1 | <2.5 |

Date of Monitoring: 2/8/2017 Weather: Cloudy

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 8:44 | <0.5 | 18.4 | 6.3 | 5.7 | 60.3 | 14.3 | <0.1 | 17.95 |
| C3b | 9:09 | <0.5 | 18.3 | 6.5 | 6.6 | 70.1 | 7.6 | <0.1 | 5.75 |
| I5 | 9:22 | <0.5 | 18.3 | 6.8 | 5.2 | 55.0 | 6.1 | <0.1 | 3.2 |

Date of Monitoring: 2/10/2017 Weather: Cloudy

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 12:26 | <0.5 | 16.9 | 6.6 | 8.6 | 88.5 | 17.0 | <0.1 | 18 |
| C3b | 11:50 | <0.5 | 16.1 | 6.5 | 9.3 | 94.5 | 11.2 | <0.1 | 7.3 |
| I5 | 12:01 | <0.5 | 15.2 | 6.7 | 8.5 | 85.1 | 8.1 | <0.1 | 5.9 |

Date of Monitoring: 2/13/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:17 | <0.5 | 19.1 | 6.4 | 8.6 | 93.1 | 18.2 | <0.1 | 14 |
| C3b | 11:46 | <0.5 | 18.2 | 6.6 | 7.8 | 83.2 | 8.5 | <0.1 | 4.15 |
| I5 | 11:56 | <0.5 | 18.0 | 7.1 | 8.1 | 85.3 | 6.4 | <0.1 | <2.5 |

Date of Monitoring: 2/15/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 10:54 | <0.5 | 18.8 | 6.6 | 9.7 | 103.7 | 24.4 | <0.1 | 34.5 |
| C3b | 11:10 | <0.5 | 18.1 | 6.8 | 8.1 | 86.3 | 10.0 | <0.1 | 14.5 |
| I5 | 11:23 | <0.5 | 18.5 | 7.2 | 7.6 | 80.7 | 11.1 | <0.1 | 15 |

Date of Monitoring: 2/17/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:07 | <0.5 | 21.4 | 6.7 | 8.9 | 101.1 | 17.4 | <0.1 | 16.5 |
| C3b | 11:31 | <0.5 | 20.5 | 6.9 | 8.2 | 91.0 | 8.6 | <0.1 | 10.5 |
| I5 | 11:42 | <0.5 | 21.0 | 7.0 | 8.8 | 98.8 | 12.4 | <0.1 | 10.35 |

Project Name: Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3
Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Date of Monitoring: 2/20/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:28 | <0.5 | 22.9 | 7.1 | 8.4 | 85.0 | 12.9 | <0.1 | 11.5 |
| C3b | 11:57 | <0.5 | 21.5 | 7.1 | 9.0 | 92.1 | 9.0 | <0.1 | 12 |
| I5 | 12:08 | <0.5 | 22.2 | 7.3 | 8.3 | 82.4 | 5.7 | <0.1 | 4.75 |

Date of Monitoring: 2/22/2017 Weather: Cloudy

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:27 | <0.5 | 21.1 | 7.0 | 8.6 | 95.6 | 32.8 | <0.1 | 24.5 |
| C3b | 11:49 | <0.5 | 20.7 | 7.1 | 8.8 | 98.8 | 12.6 | <0.1 | 10.25 |
| I5 | 12:01 | <0.5 | 22.0 | 7.2 | 9.1 | 103.8 | 23.5 | <0.1 | 14 |

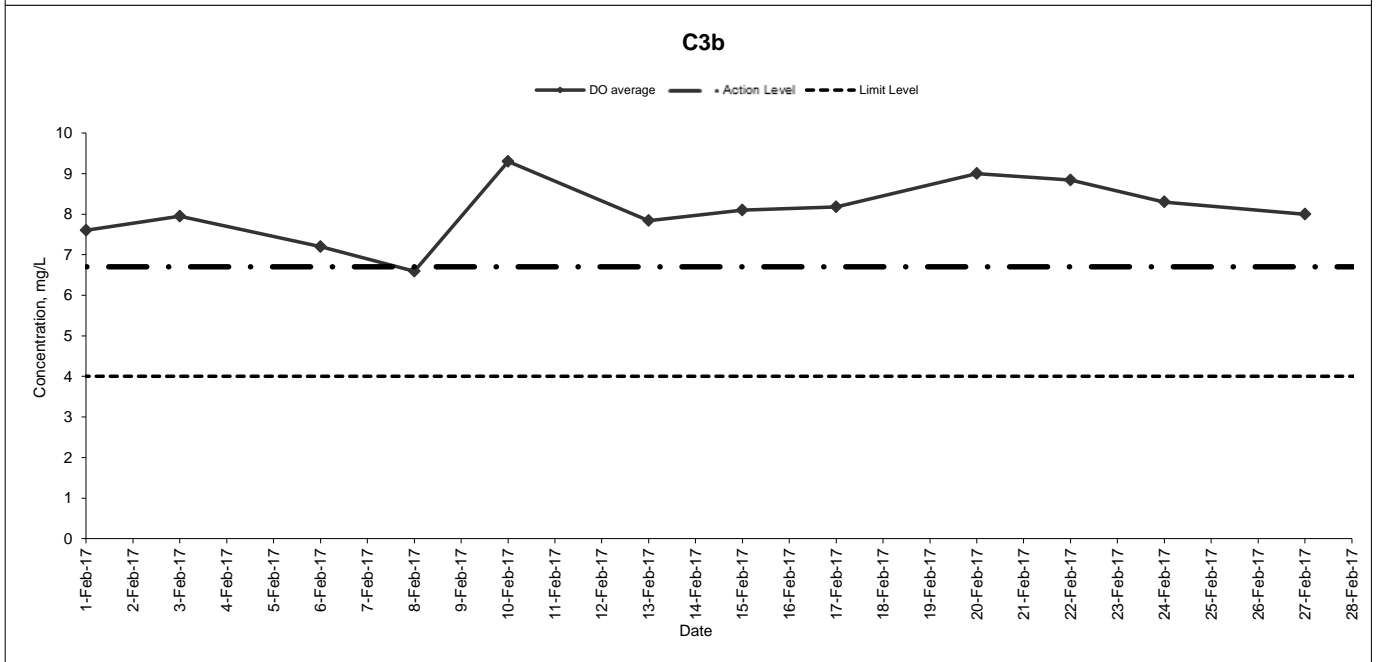
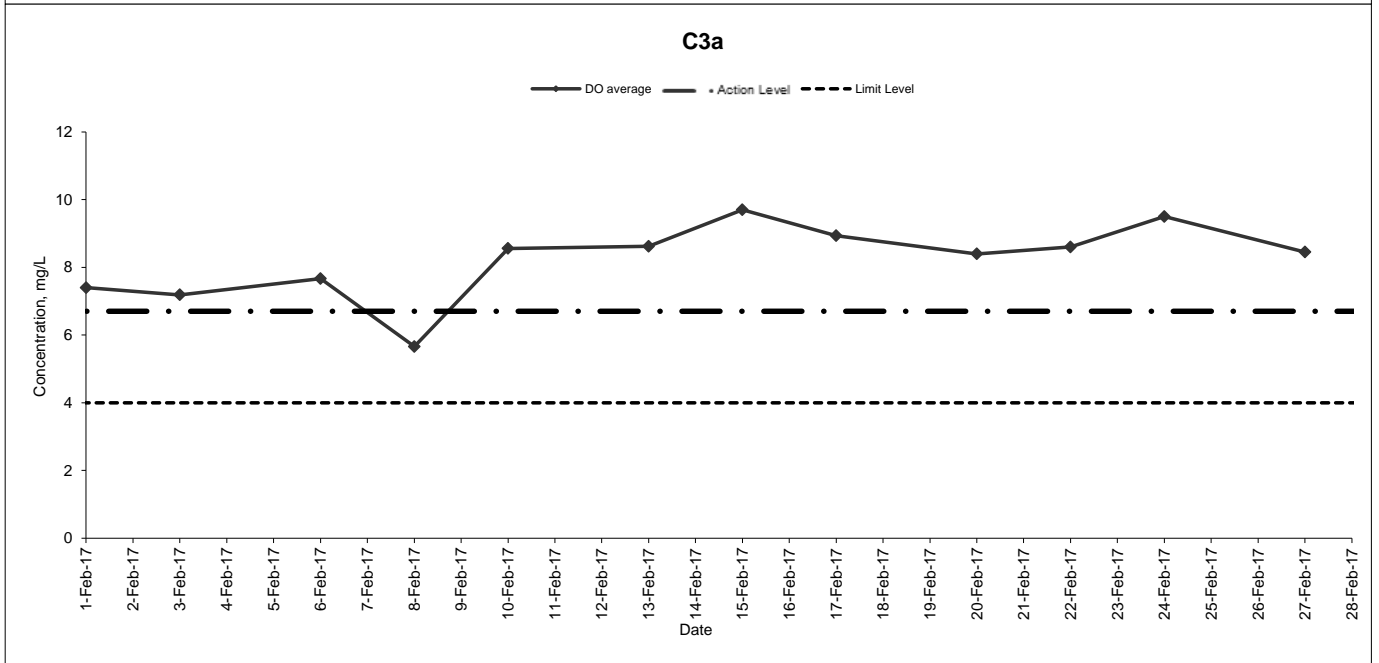
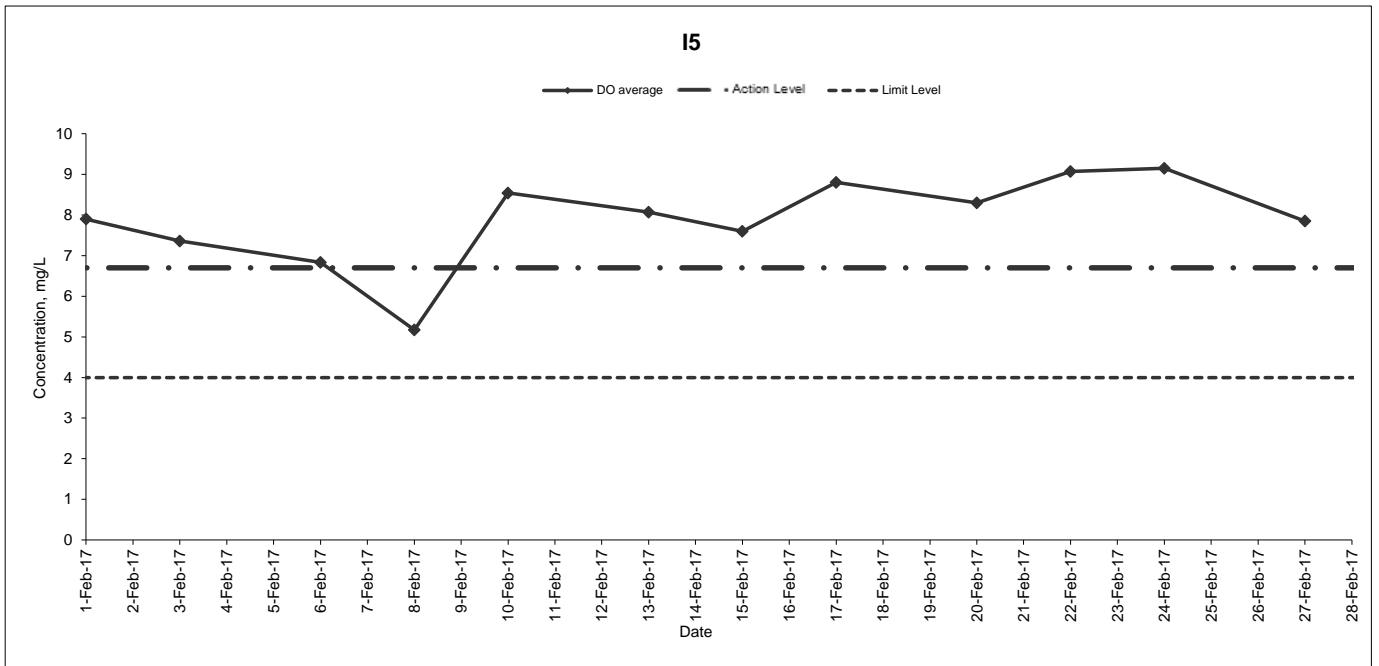
Date of Monitoring: 2/24/2017 Weather: Cloudy

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:22 | <0.5 | 15.7 | 6.6 | 9.5 | 95.7 | 13.2 | <0.1 | 12.5 |
| C3b | 11:46 | <0.5 | 15.6 | 7.1 | 8.3 | 83.5 | 29.5 | <0.1 | 21.5 |
| I5 | 11:59 | <0.5 | 14.9 | 7.3 | 9.2 | 91.4 | 6.9 | <0.1 | 5.95 |

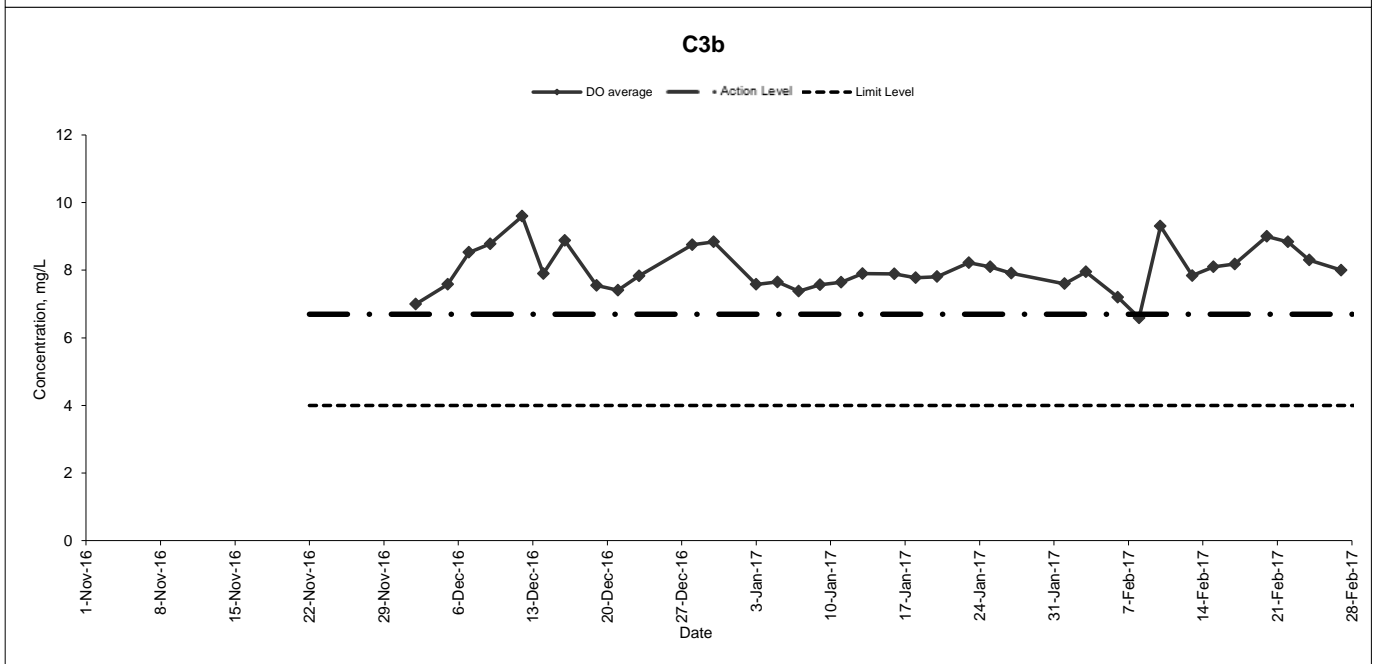
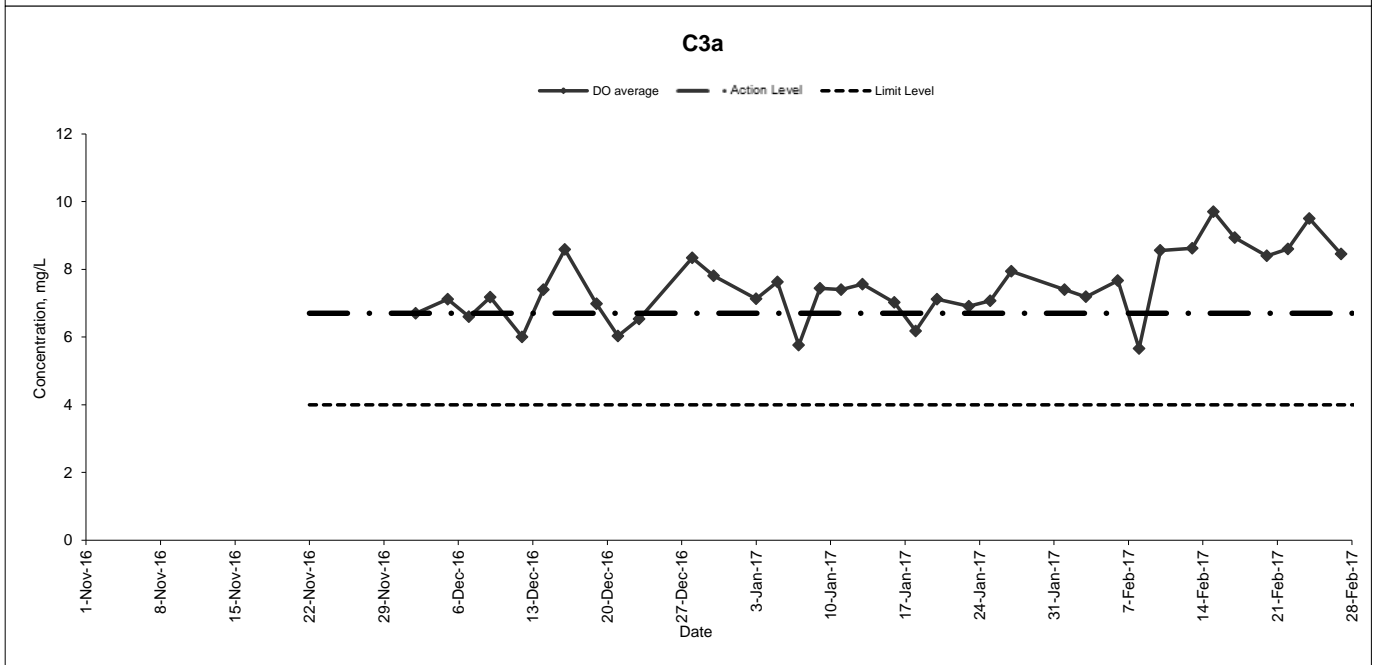
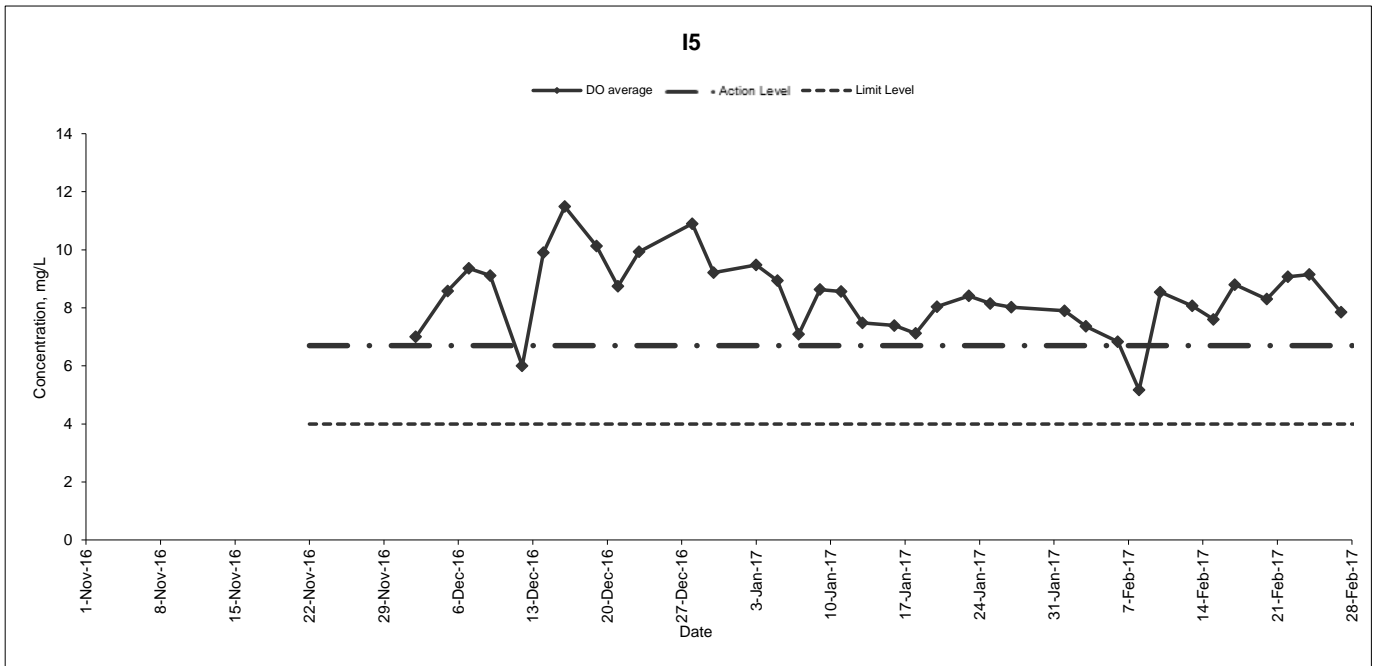
Date of Monitoring: 2/27/2017 Weather: Sunny

| Monitoring Location | Time | Water Depth (m) | Temperature (°C) | pH | DO (mg/L) | DO (% saturation) | Turbidity (NTU) | Salinity (g/L) | SS (mg/L) |
|---------------------|-------|-----------------|------------------|---------------|---------------|-------------------|-----------------|----------------|---------------|
| | | | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value | Average Value |
| C3a | 11:36 | <0.5 | 19.3 | 7.0 | 8.5 | 91.7 | 31.6 | <0.1 | 38 |
| C3b | 11:56 | <0.5 | 18.3 | 7.1 | 8.0 | 85.3 | 8.2 | <0.1 | 9 |
| I5 | 12:09 | <0.5 | 20.3 | 7.2 | 7.9 | 87.5 | 24.7 | <0.1 | 15 |

Dissolved Oxygen

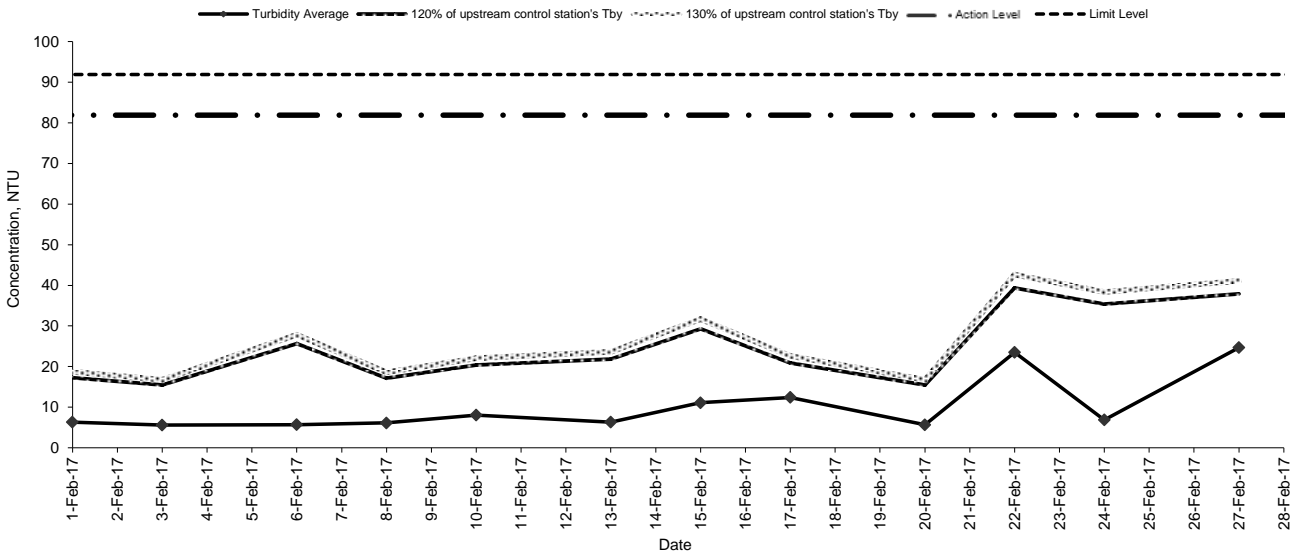


Dissolved Oxygen November 2016 - February 2017)

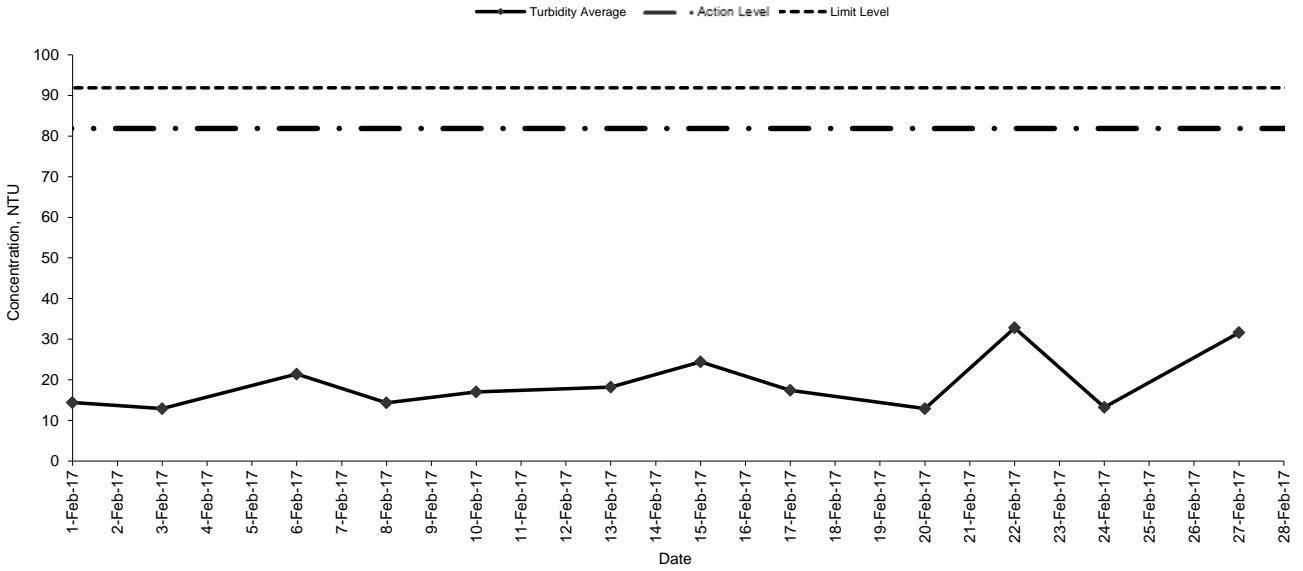


Turbidity

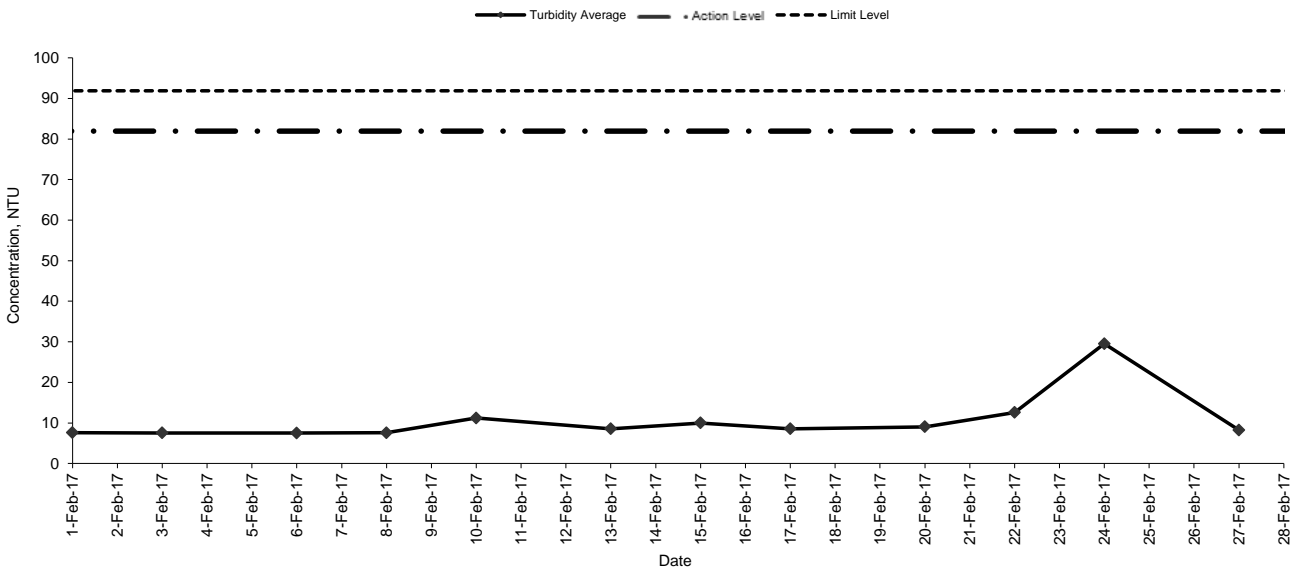
15



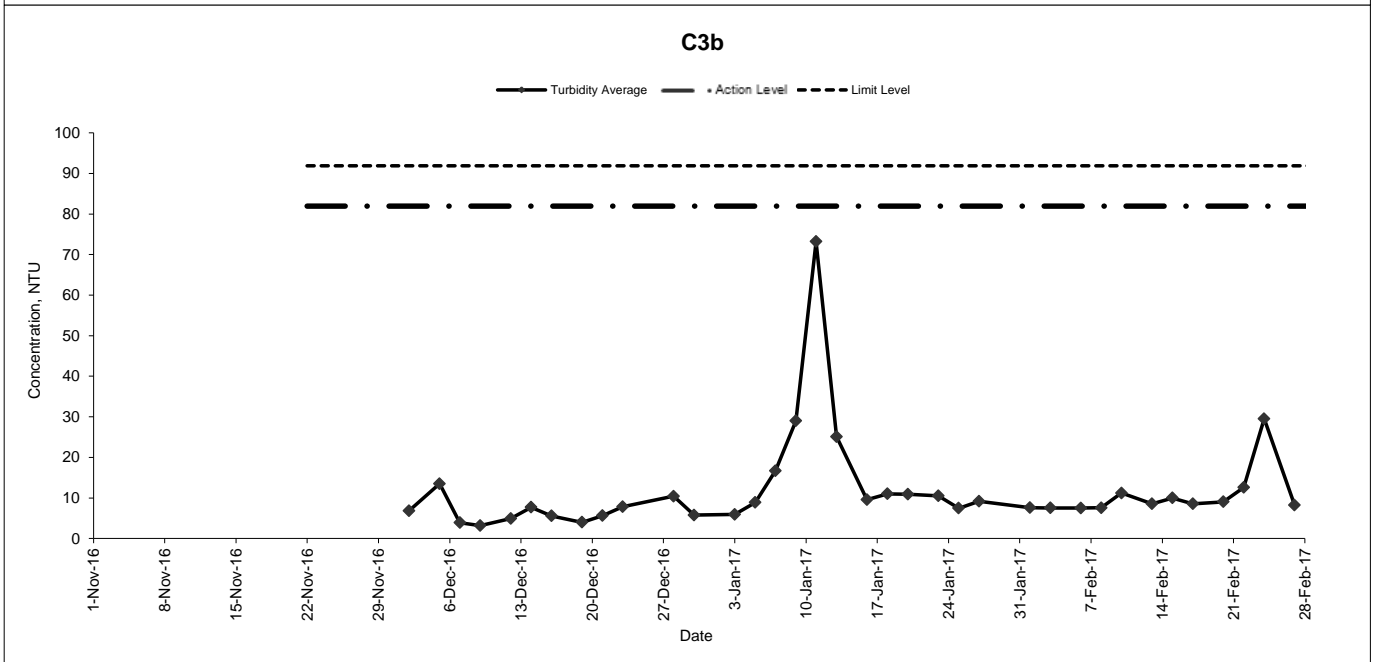
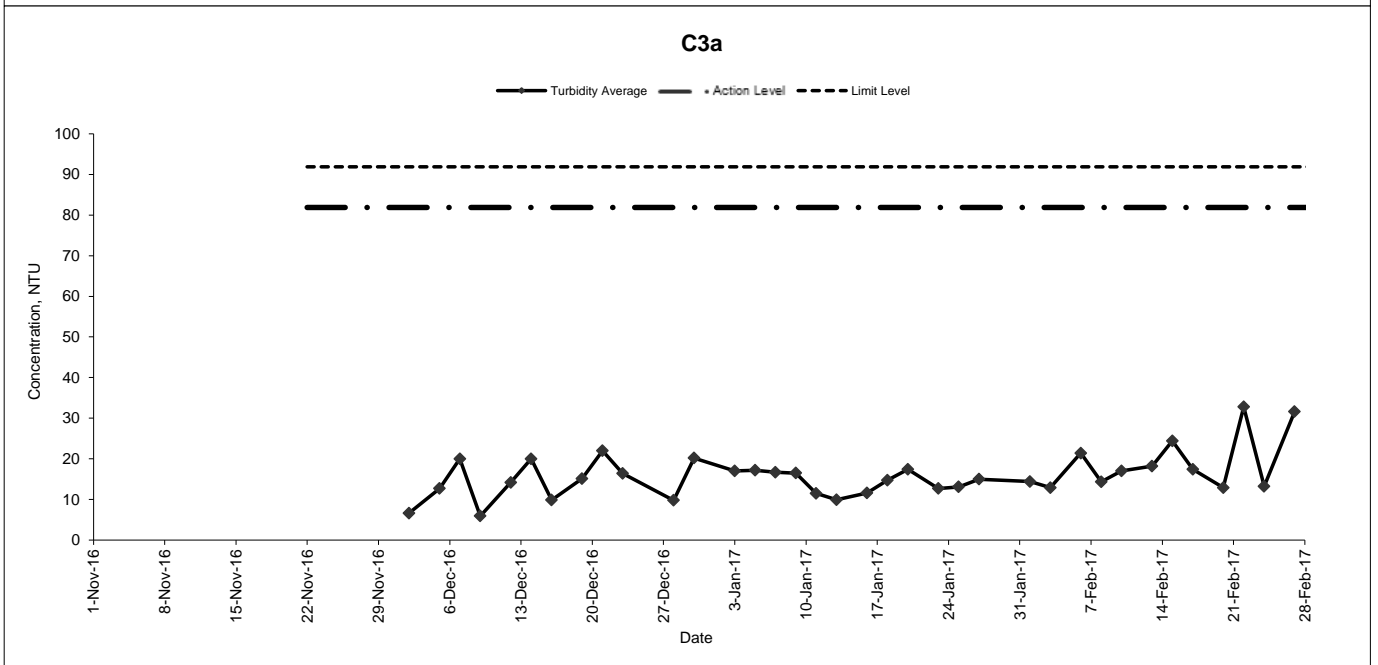
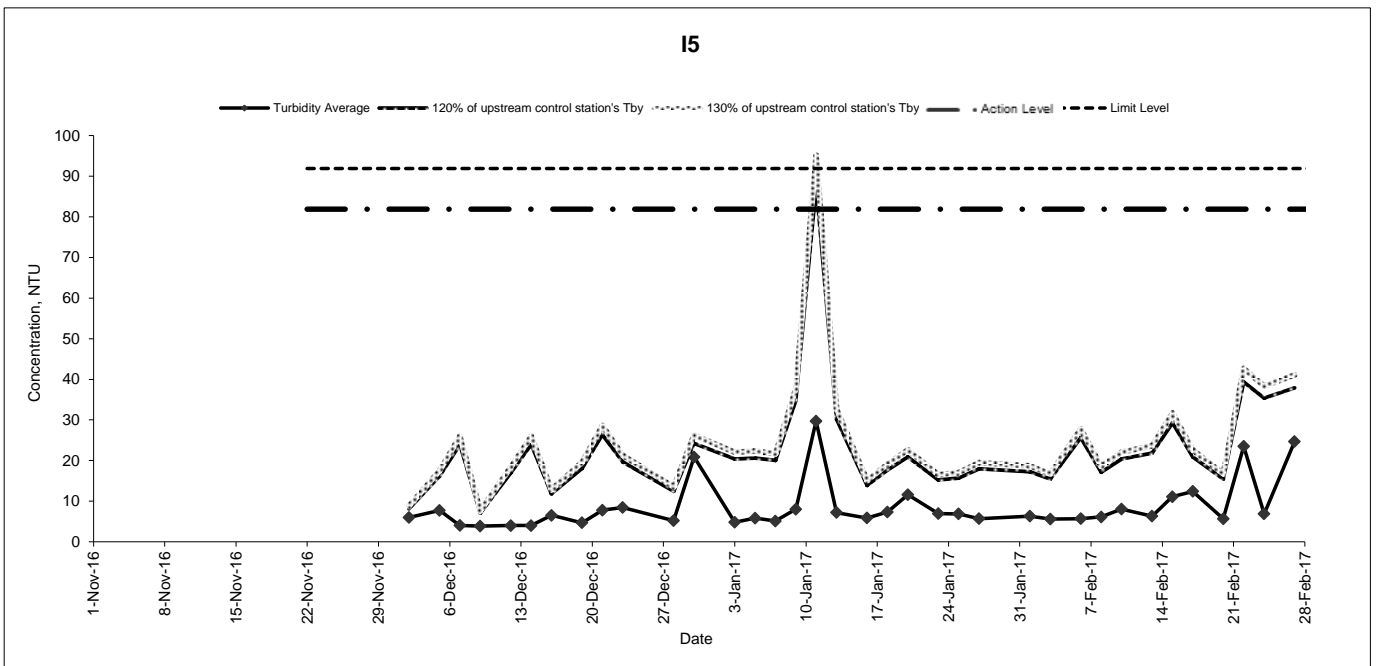
C3a



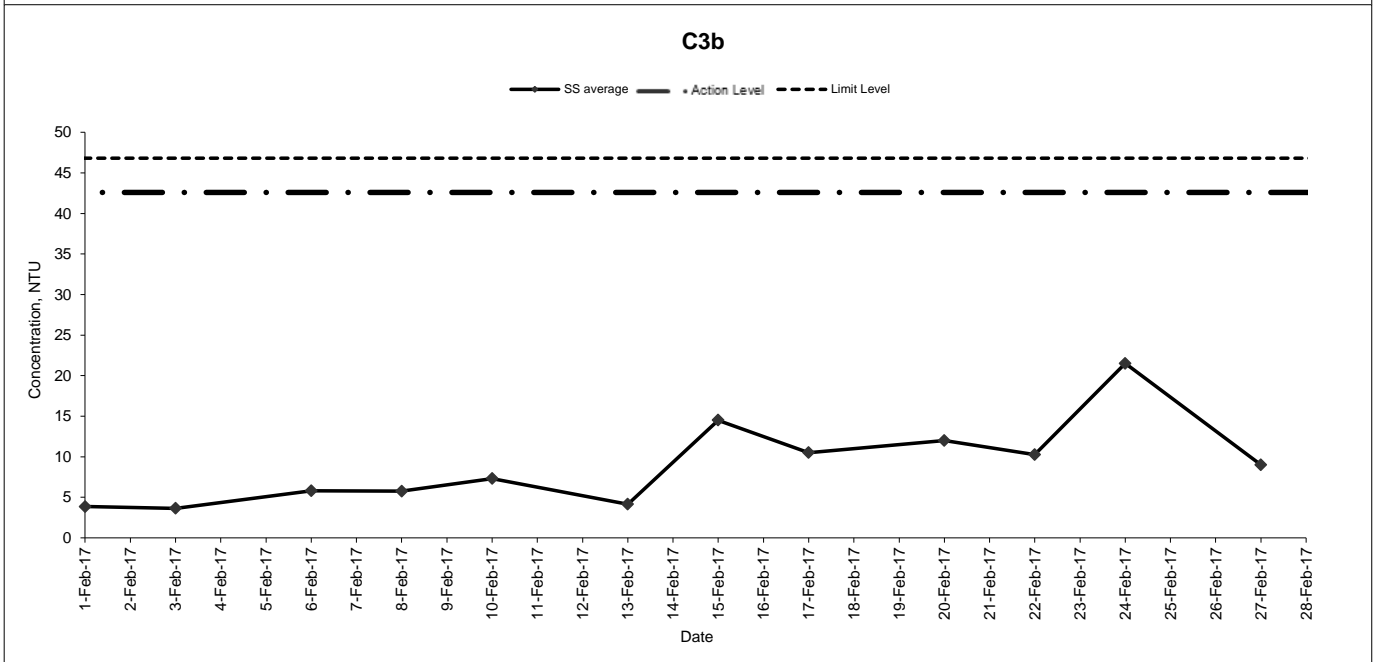
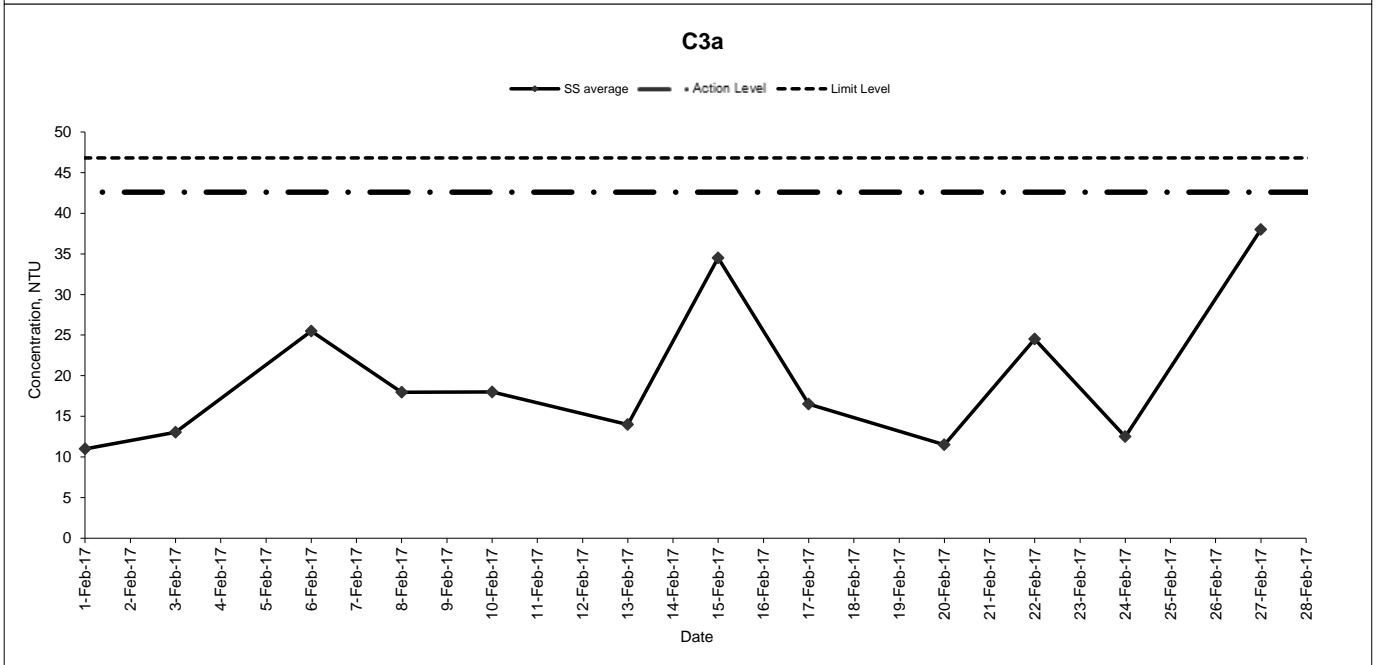
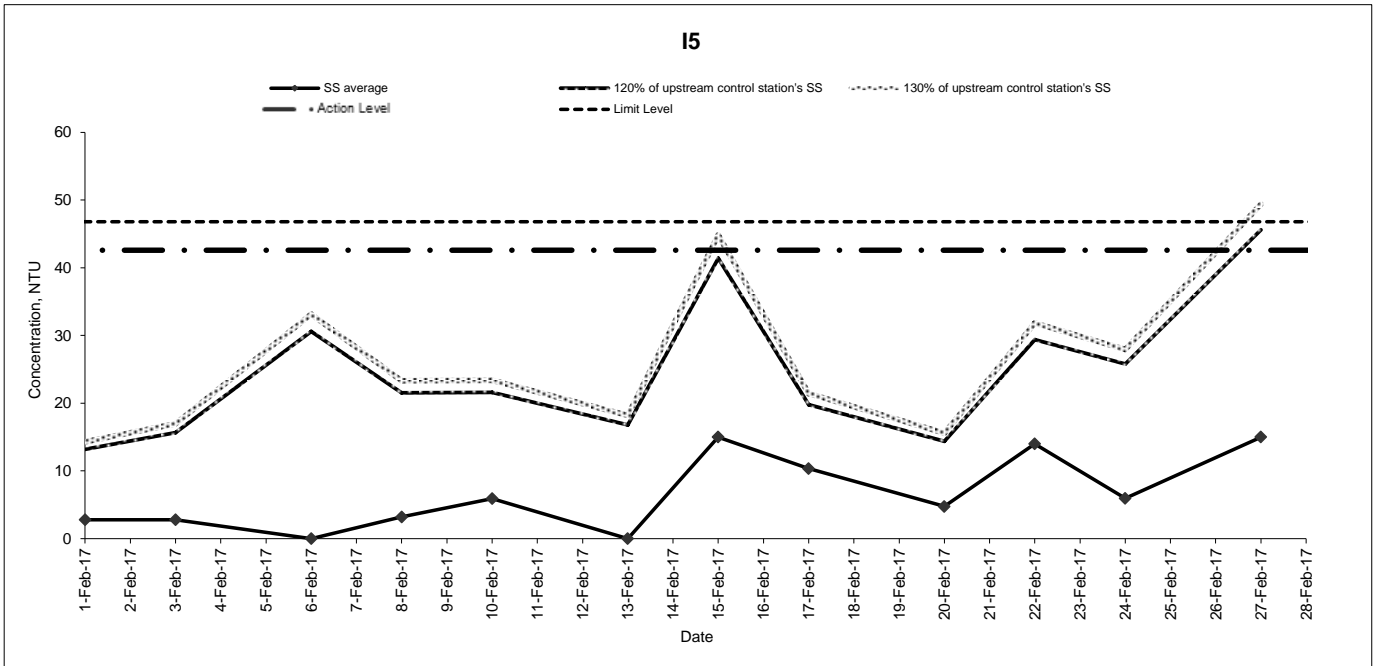
C3b



Turbidity (November 2016 - February 2017)



Suspended Solid



Suspended Solid (November 2016 - February 2017)

