

# Air Quality Dashboard | May | 2023

## AIR QUALITY MONITORING IN TOWNSVILLE

Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

Click here to visit the Port of Townsville's monitoring network

Click here to visit DES monitoring network

### Information



Dust Monitoring Equipment – an explanation

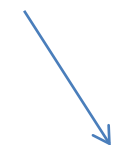
What cargo is handled at the Townsville Port?

Subscribe, ask questions, provide feedback

Queensland Health statement on lead and safe levels in air around humans

What does this Dashboard show me?

### Data



Live Air Quality Monitoring data

Air Quality Bulletin

Live Shipping Schedule

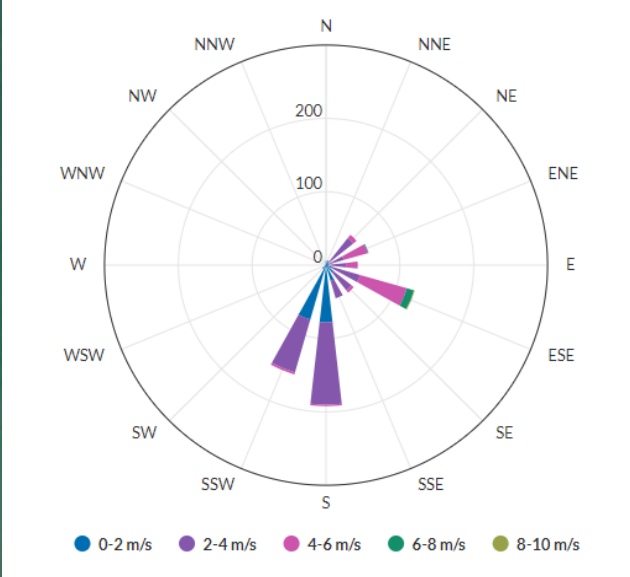
Rainfall Data - BOM

Air Quality Monitoring Plan

# Air Quality Monitoring Locations



Wind speed ranges correlating to wind direction



# Shipping Movements in May 2023

[Click here](#) to return to Main Page

| Date In/Out               | Vessel Name        | Cargo                                   | Berth |
|---------------------------|--------------------|---|-------|
| 28 Apr 2023 - 01 May 2023 | IVS MERLION        | FERTILIZER (EXPORT)                     | 8     |
| 29 Apr 2023 - 01 May 2023 | AQUAGEMINI         | LEAD INGOTS (EXPORT)                    | 3 STH |
| 01 May 2023 - 03 May 2023 | CANO               | FERTILIZER (EXPORT)                     | 8     |
| 02 May 2023 - 04 May 2023 | ANL DHAMBI         | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 3 STH |
| 03 May 2023 - 03 May 2023 | SIRIUS HIGHWAY     | MOTOR VEHICLES (IMPORT)                 | 4     |
| 03 May 2023 - 04 May 2023 | IYO SEA            | ZINC CONCENTRATES (EXPORT)              | 8     |
| 04 May 2023 - 04 May 2023 | CONTSHIP YEN       | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 3 STH |
| 06 May 2023 - 07 May 2023 | UNIQUE INFINITY    | FUELS (IMPORT)                          | 1     |
| 08 May 2023 - 10 May 2023 | FEDERAL BARENTS    | CONCENTRATES (EXPORT)                   | 11    |
| 08 May 2023 - 09 May 2023 | GOLDEN ACE         | FUELS (IMPORT)                          | 1     |
| 08 May 2023 - 09 May 2023 | THERESA MICRONESIA | MOLASSES (EXPORT)                       | 9     |
| 09 May 2023 - 09 May 2023 | BRAHMAN EXPRESS    | CATTLE (EXPORT)                         | 3 NTH |
| 10 May 2023 - 12 May 2023 | CSC PEACE          | FUELS (IMPORT)                          | 1     |
| 10 May 2023 - 11 May 2023 | LAUTOKA CHIEF      | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 4     |
| 10 May 2023 - 11 May 2023 | DAIWAN JUSTICE     | SUGAR (EXPORT)                          | 9     |
| 12 May 2023 - 12 May 2023 | GLOUCESTER EXPRESS | CATTLE (EXPORT)                         | 4     |
| 12 May 2023 - 13 May 2023 | POLARIS LEADER     | MOTOR VEHICLES (IMPORT)                 | 10    |
| 15 May 2023 - 18 May 2023 | FEDERAL IZUMI      | FERTILIZER (EXPORT)                     | 8     |
| 17 May 2023 - 17 May 2023 | ANL KOKODA         | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 4     |
| 17 May 2023 - 18 May 2023 | OCEAN UTE          | CATTLE (EXPORT)                         | 3 NTH |
| 17 May 2023 - 20 May 2023 | NORDIC DALIAN      | FERTILIZER (EXPORT)                     | 10    |
| 17 May 2023 - 20 May 2023 | ETERNAL HAKATA     | SUGAR (EXPORT)                          | 9     |
| 18 May 2023 - 19 May 2023 | FAIRCHEM RESTIO    | CAUSTIC SODA (IMPORT) TALLOW (EXPORT)   | 4     |
| 18 May 2023 - 19 May 2023 | FEDERAL BARENTS    | CONCENTRATES (EXPORT)                   | 3 STH |
| 19 May 2023 - 20 May 2023 | OCEAN SWAGMAN      | CATTLE (EXPORT)                         | 4     |

| Date In/Out               | Vessel Name        | Cargo                                   | Berth |
|---------------------------|--------------------|---|-------|
| 19 May 2023 - 20 May 2023 | POAVOSA WISDOM VI  | CONCENTRATES (EXPORT)                   | 8     |
| 19 May 2023 - 20 May 2023 | NH ERLE            | FUELS (IMPORT)                          | 1     |
| 19 May 2023 - 22 May 2023 | KYOWA ROSE         | TYRES (IMPORT)                          | 3 STH |
| 20 May 2023 - 23 May 2023 | WYUNA              | CEMENT (IMPORT)                         | 4     |
| 20 May 2023 - 21 May 2023 | DAT MERCURY        | FUELS (IMPORT)                          | 1     |
| 21 May 2023 - 27 May 2023 | AFRICAN MARGAUX    | SULPHUR (IMPORT) FERTILIZER (EXPORT)    | 8     |
| 22 May 2023 - 23 May 2023 | ANGUS EXPRESS      | CATTLE (EXPORT)                         | 10    |
| 23 May 2023 - 29 May 2023 | AAL BANGKOK        | ZINC CONCENTRATES (IMPORT)              | 10    |
| 23 May 2023 - 24 May 2023 | LILSTELLA          | BITUMEN (IMPORT)                        | 4     |
| 24 May 2023 - 25 May 2023 | SUVA CHIEF         | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 4     |
| 24 May 2023 - 25 May 2023 | THERESA MICRONESIA | MOLASSES (EXPORT)                       | 9     |
| 24 May 2023 - 25 May 2023 | SOFRANA TOURVILLE  | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 3 NTH |
| 24 May 2023 - 26 May 2023 | ELANDRA STAR       | FUELS (IMPORT)                          | 1     |
| 25 May 2023 - 27 May 2023 | FEDERAL BARENTS    |   | 3 STH |
| 29 May 2023 - 30 May 2023 | ORIENTAL GOLD      | FUELS (IMPORT)                          | 1     |
| 30 May 2023 - 31 May 2023 | HANSA FREYBURG     | CONTAINERS (IMPORT) CONTAINERS (EXPORT) | 4     |
| 30 May 2023 - 31 May 2023 | VIRGO LEADER       | MOTOR VEHICLES (IMPORT)                 | 10    |





First established in 1864, the Port of Townsville operates eight berths handles around \$8 billion in trade; servicing more than 136 ports around the globe.

In 2020-21, the Port of Townsville delivered strong financial results and continued to roll-out major infrastructure investments despite the impacts of the ongoing global pandemic, COVID-19. In a year where supply chains across the world have been tested, a total of 7.7 million tonnes of freight passed over our wharves, which was a 6.3 per cent decrease on last year. With a focus on cost management, the Port also reported a \$14.33 million net profit for 2020/21, see the Annual Report.

The role of mining, resources and agricultural industries have never been more significant with our growth primarily driven by exports of mineral concentrates (down 8.14%), fertiliser (up 9.7%) and livestock (down 6%). Townsville is the number one port in Australia for copper, zinc, lead and sugar exports and services 75% of the Northern Australia population. More than 20 shipping lines operate out of the Townsville Port offering more than 40 different services. Townsville is also a strategic Navy port and facilitates cruise ship visits.

Commodities/cargo that passes over the Townsville Port's berths include:

**Imports**

Containers and general cargo, motor vehicles, tyres, bulk products - cement, sulphuric acid, fertiliser, sulphur, zinc concentrate and petroleum (fuel) products.

**Exports**

General cargo, containers, timber, cattle, tallow, refined metal products, bulk products - sugar, molasses, fertiliser and mineral concentrates (zinc, copper, lead).

# Port of Townsville Overview

# Subscribe to Dashboard Updates

Visit our website and subscribe here [www.townsville-port.com.au/community/](http://www.townsville-port.com.au/community/)

OR

Visit the [Port of Townsville Facebook page](#) and click on “Sign up” at the top of the page.

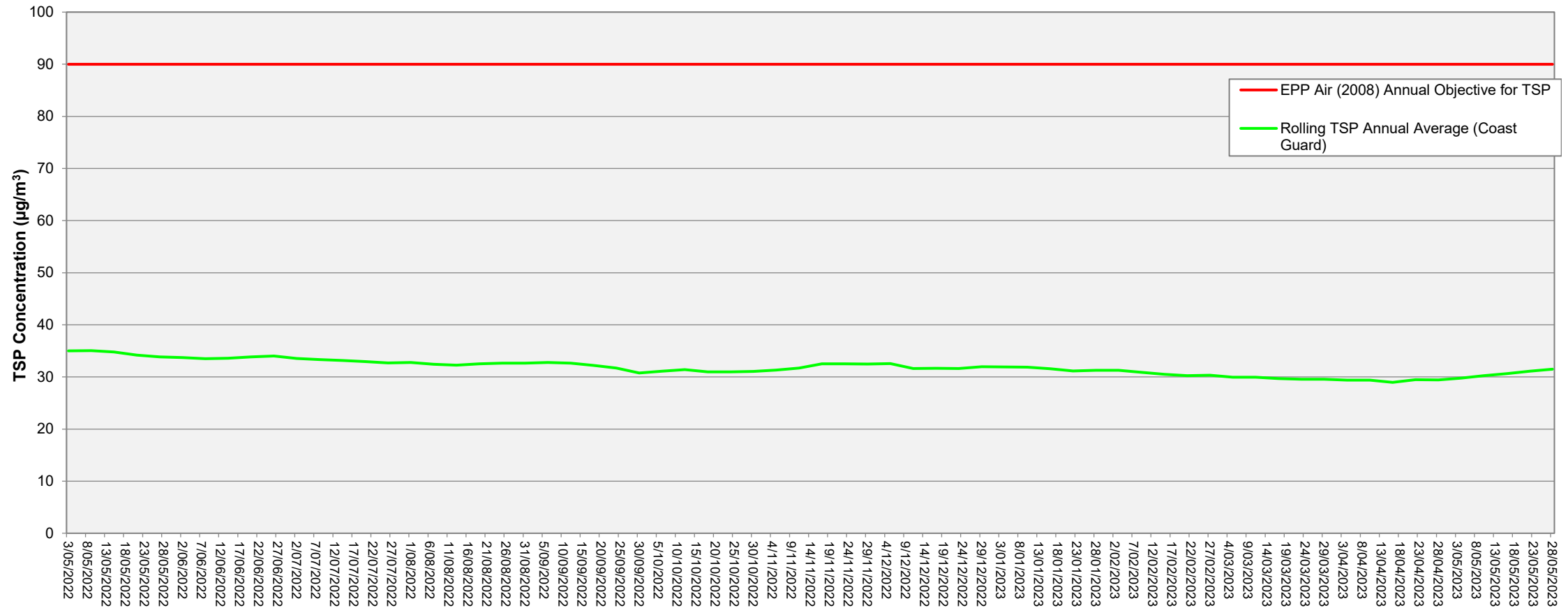
OR

Phone 07 4781 1500 and asked to be added to the list.

## Ask a Question / Provide Feedback

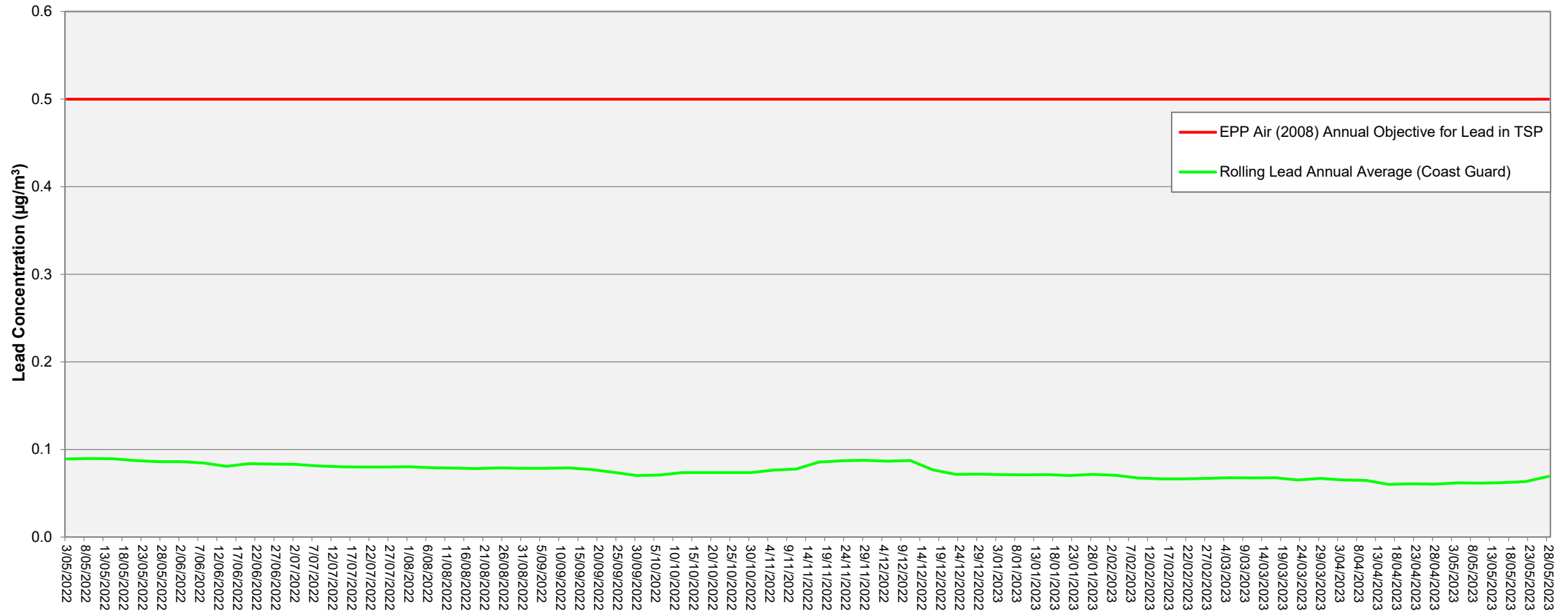
Send your enquiry or feedback to [community@townsvilleport.com.au](mailto:community@townsvilleport.com.au)

## Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site May 2022 – May 2023



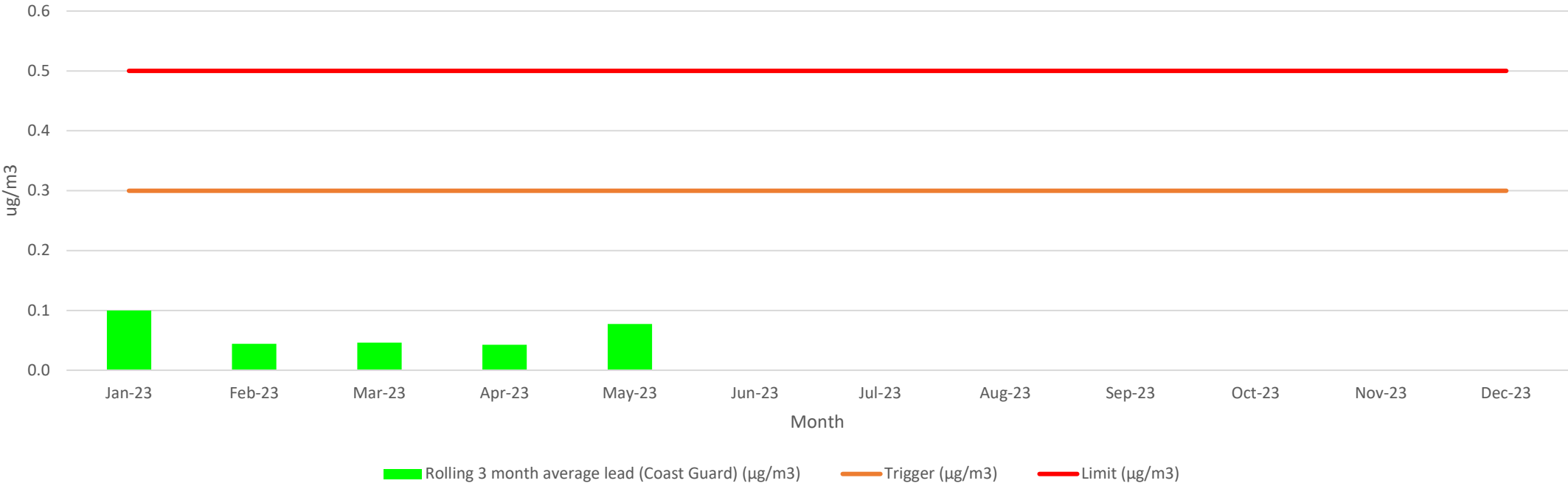
Note: TSP Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

## Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site May 2022 – May 2023



Note: Lead Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

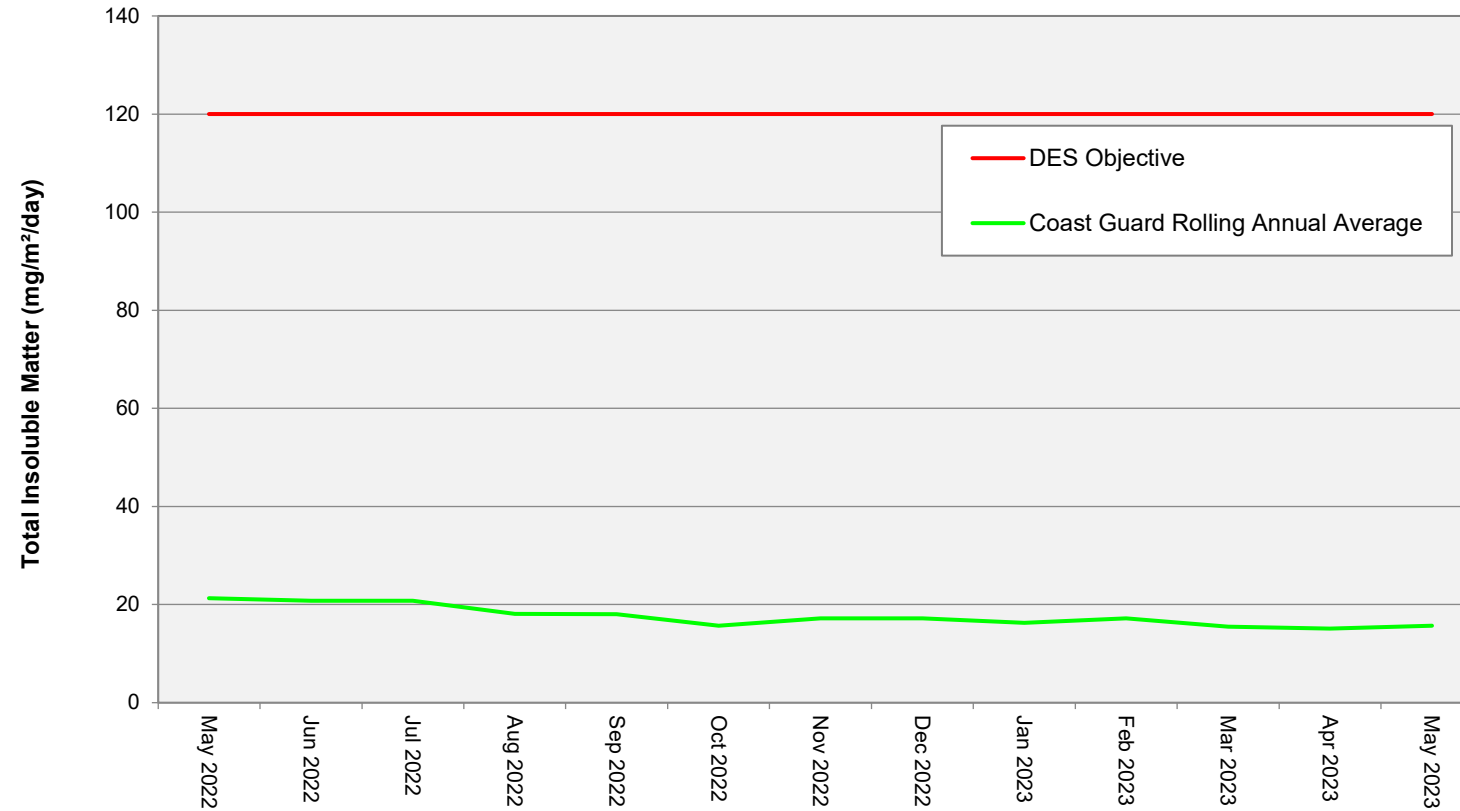
### Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2023



Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result

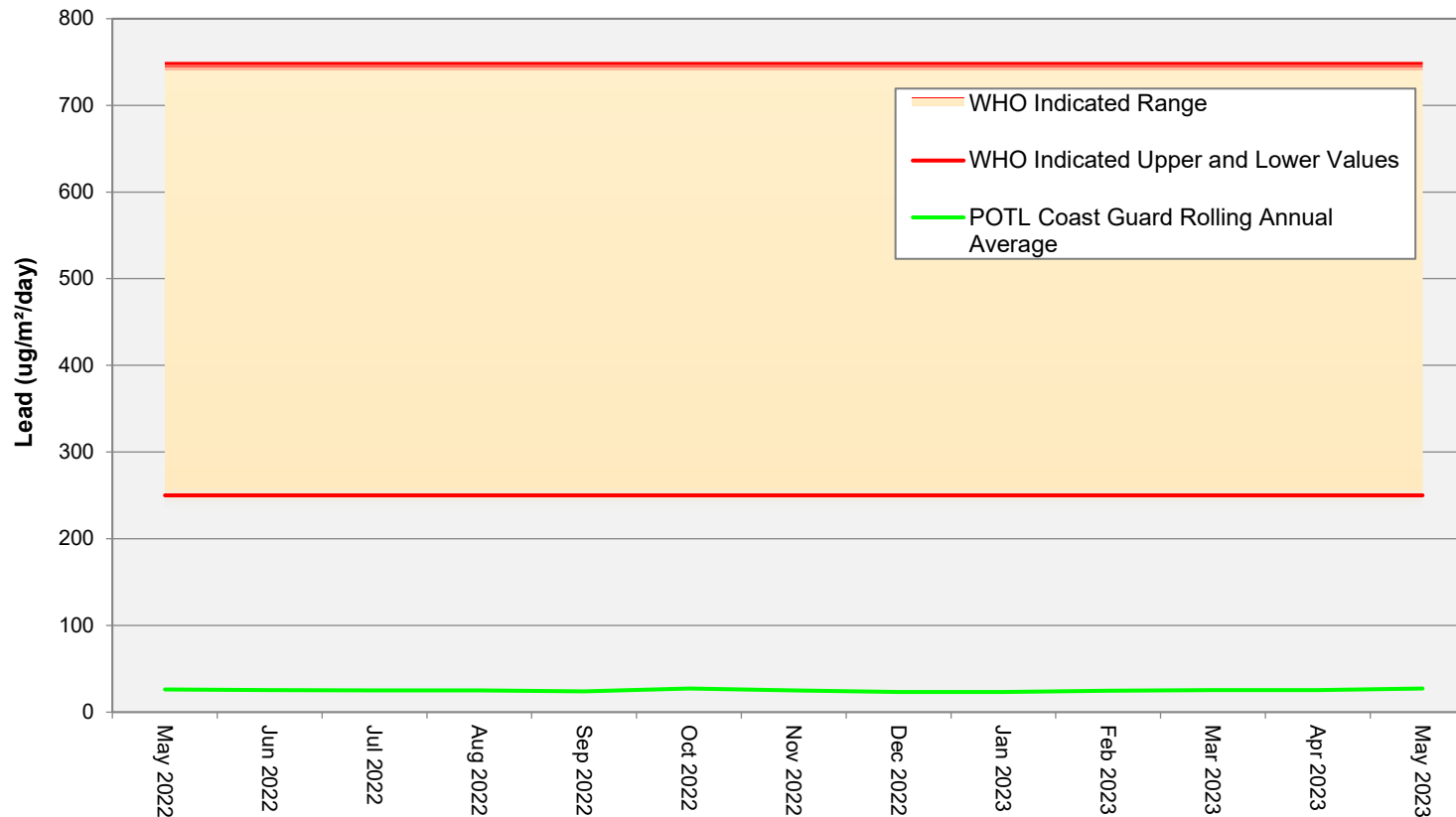


## Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site May 2022 – May 2023



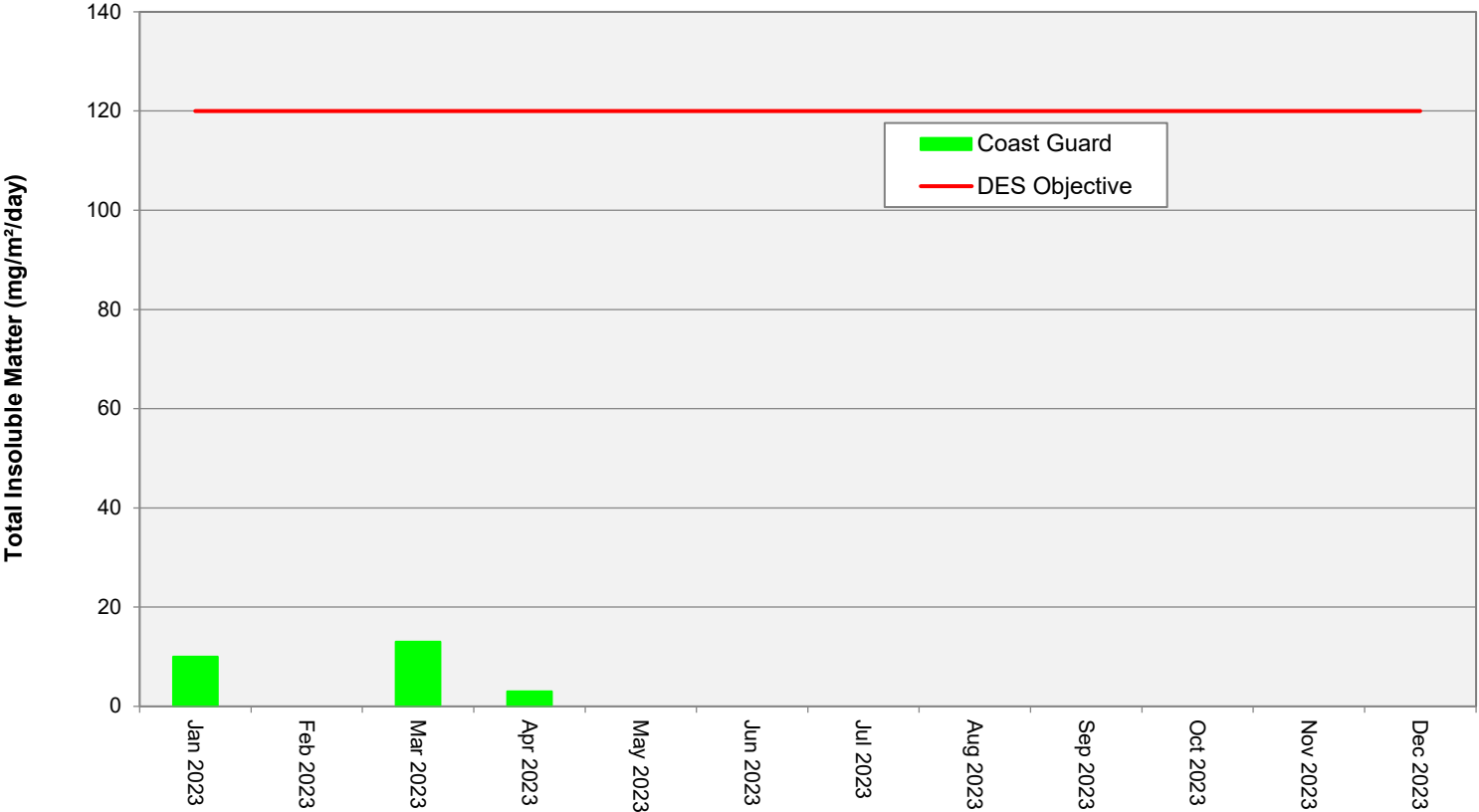
Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site MAY 2022– MAY 2023



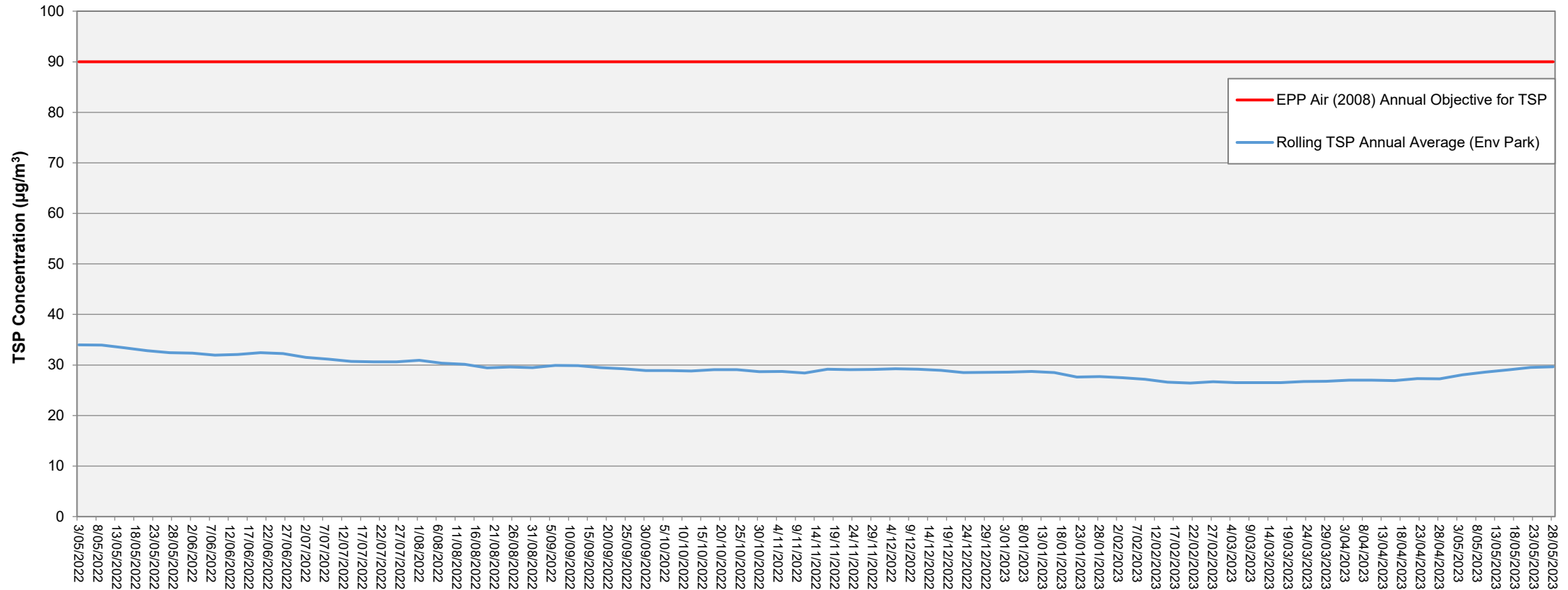
Note: Lead Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result.

### Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2023



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day.  
No result for February 2023 due to Laboratory error.  
No result for May 2023 due to Laboratory error.

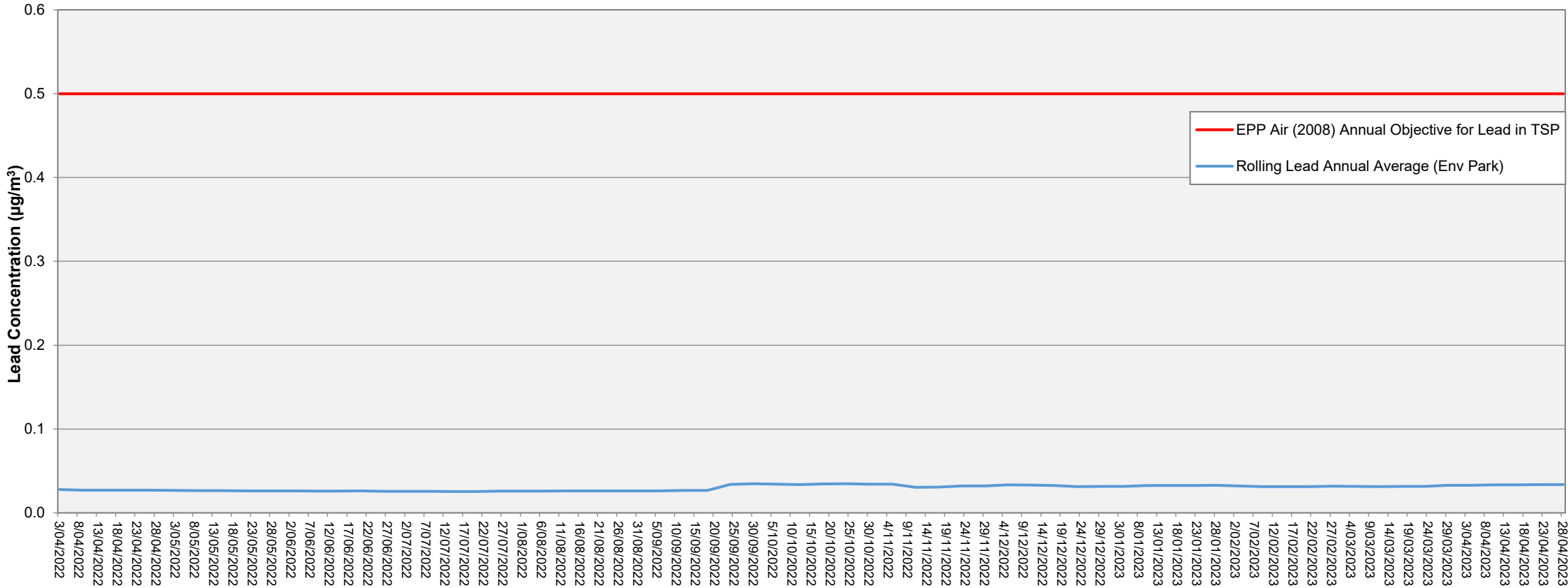
## Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site May 2022 – May 2023



Note: TSP Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

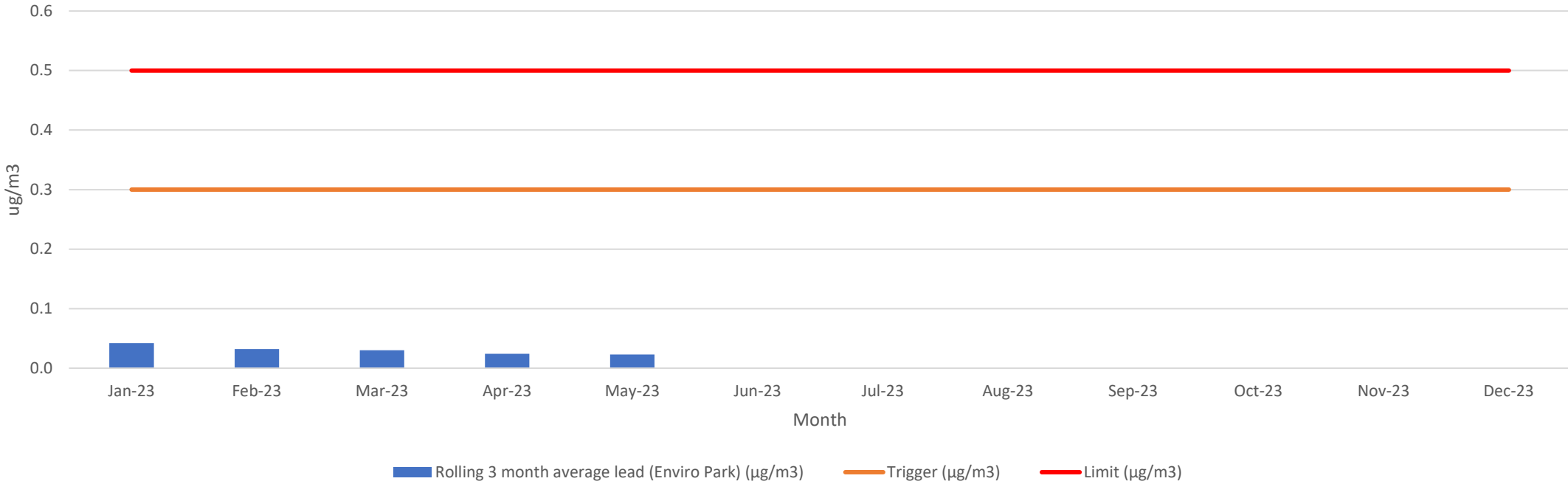


### Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site May 2022 – May 2023



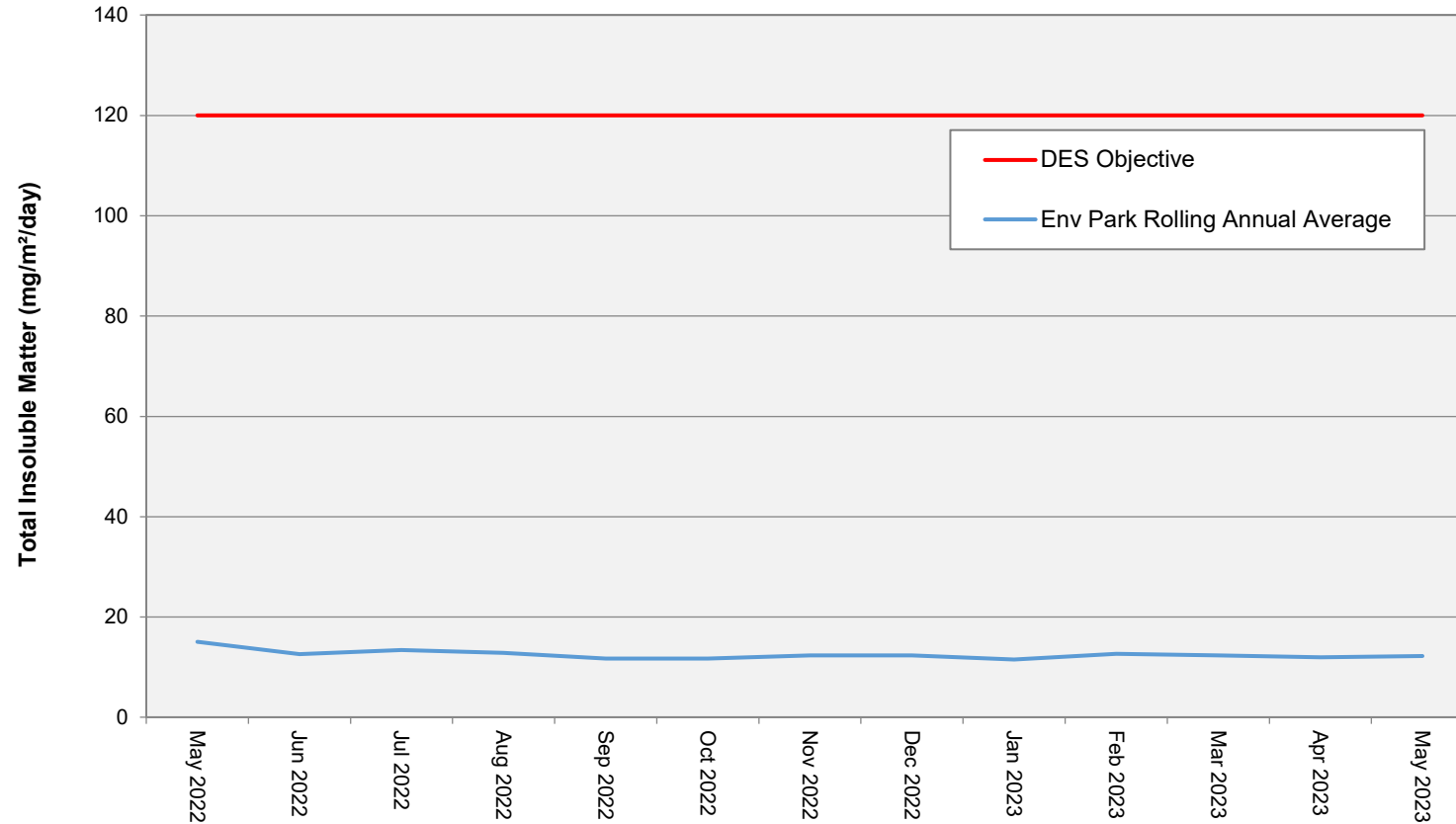
Note: Lead Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

### Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2023



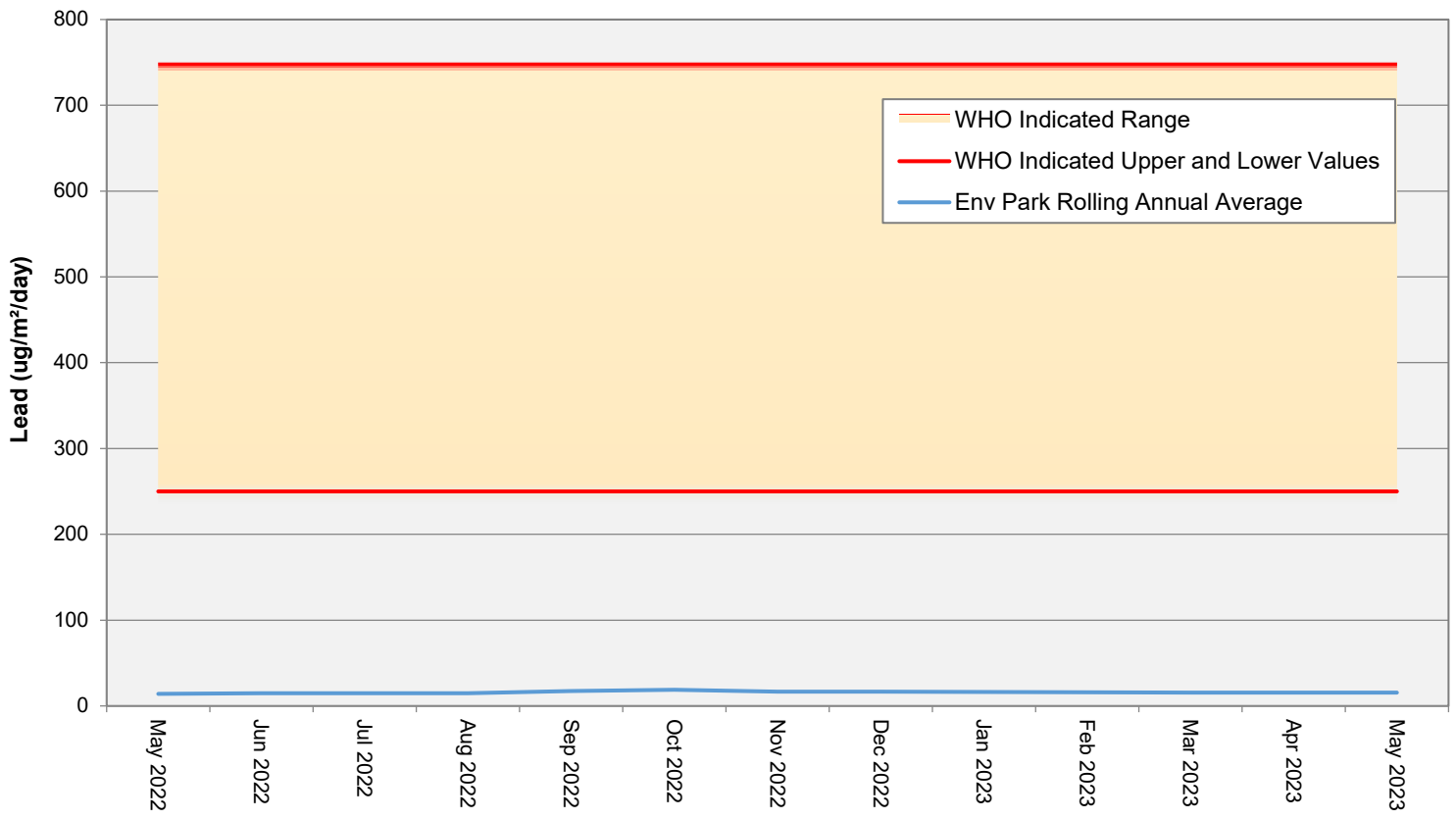
Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result

## Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site May 2022 – May 2023



Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

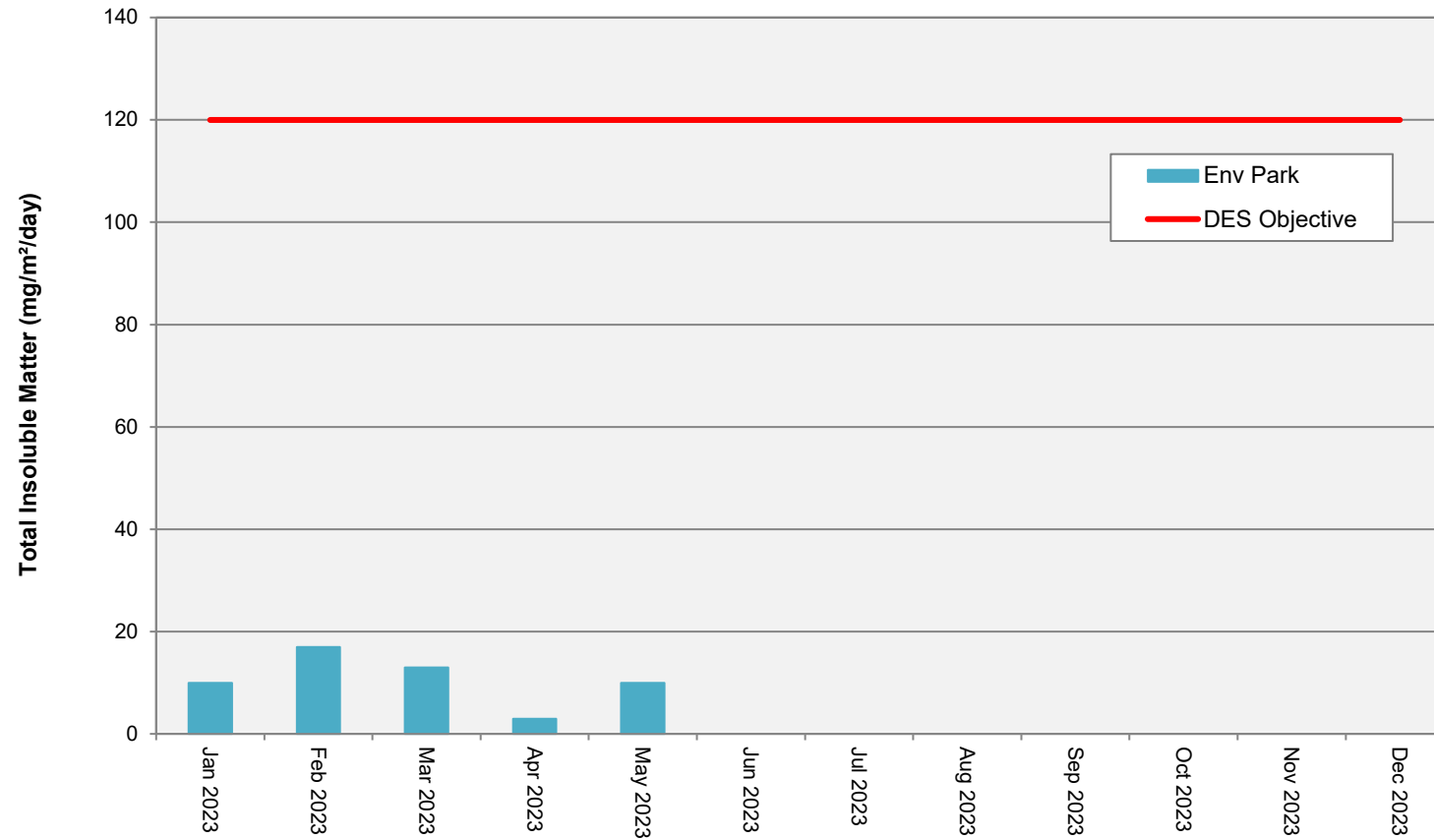
### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site MAY 2022 – MAY 2023



Note: Lead Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

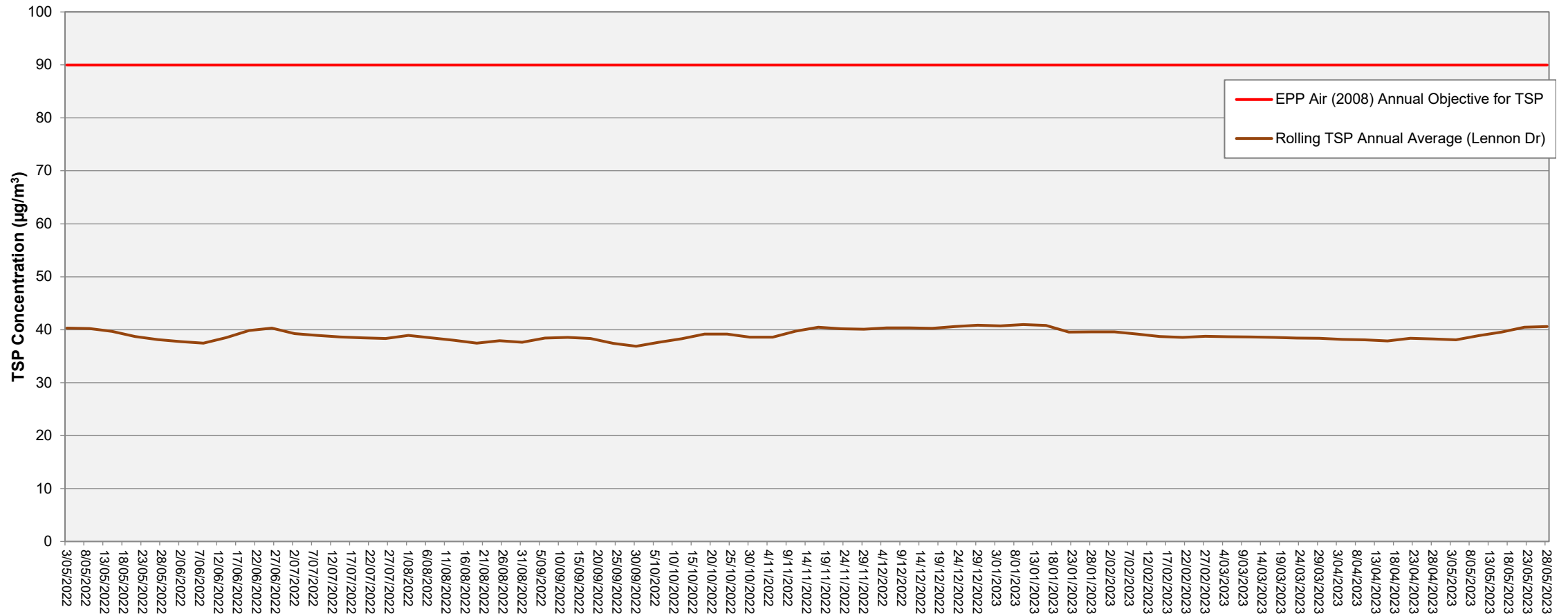


## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2023



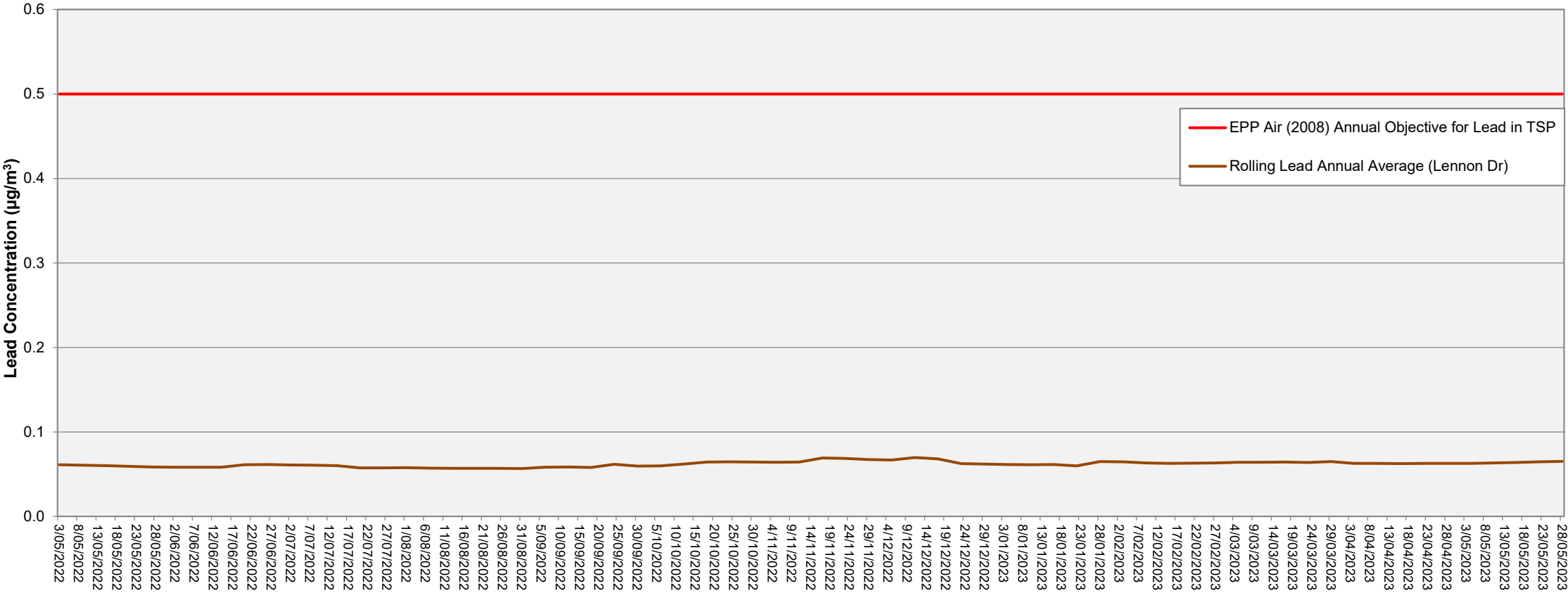
Note: Total Insoluble Matter Concentration units = milligrams per square metre per day

## Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site May 2022 – May 2023



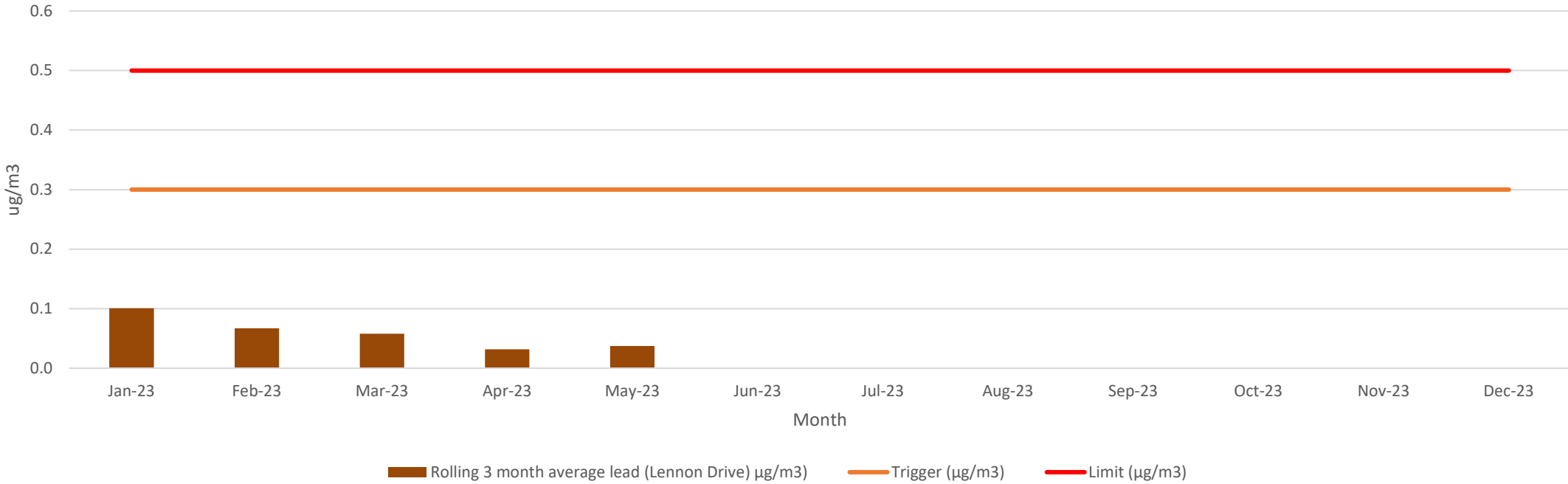
Note: TSP Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site May 2022 – May 2023



Note: Lead Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2023

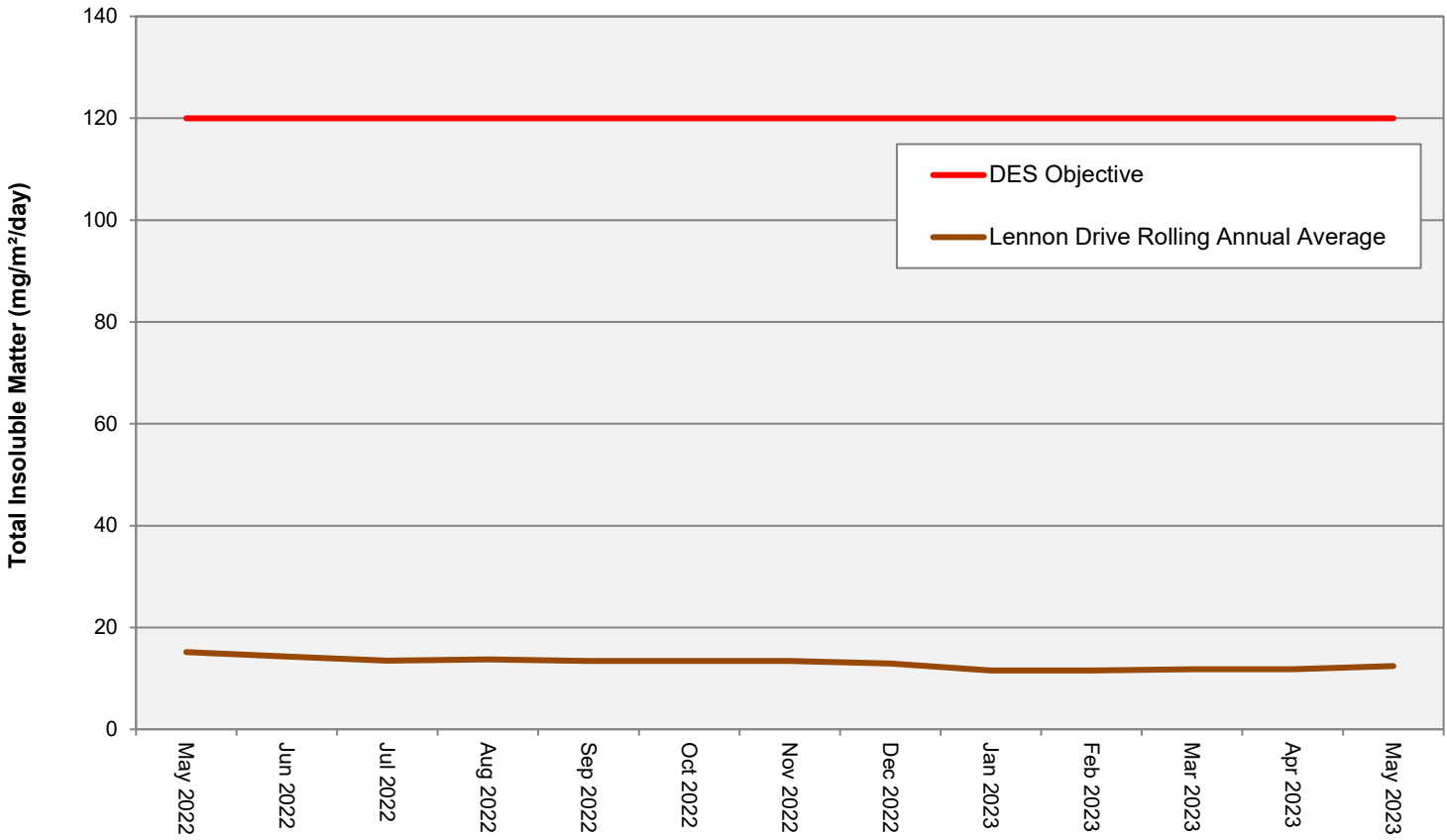


Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result



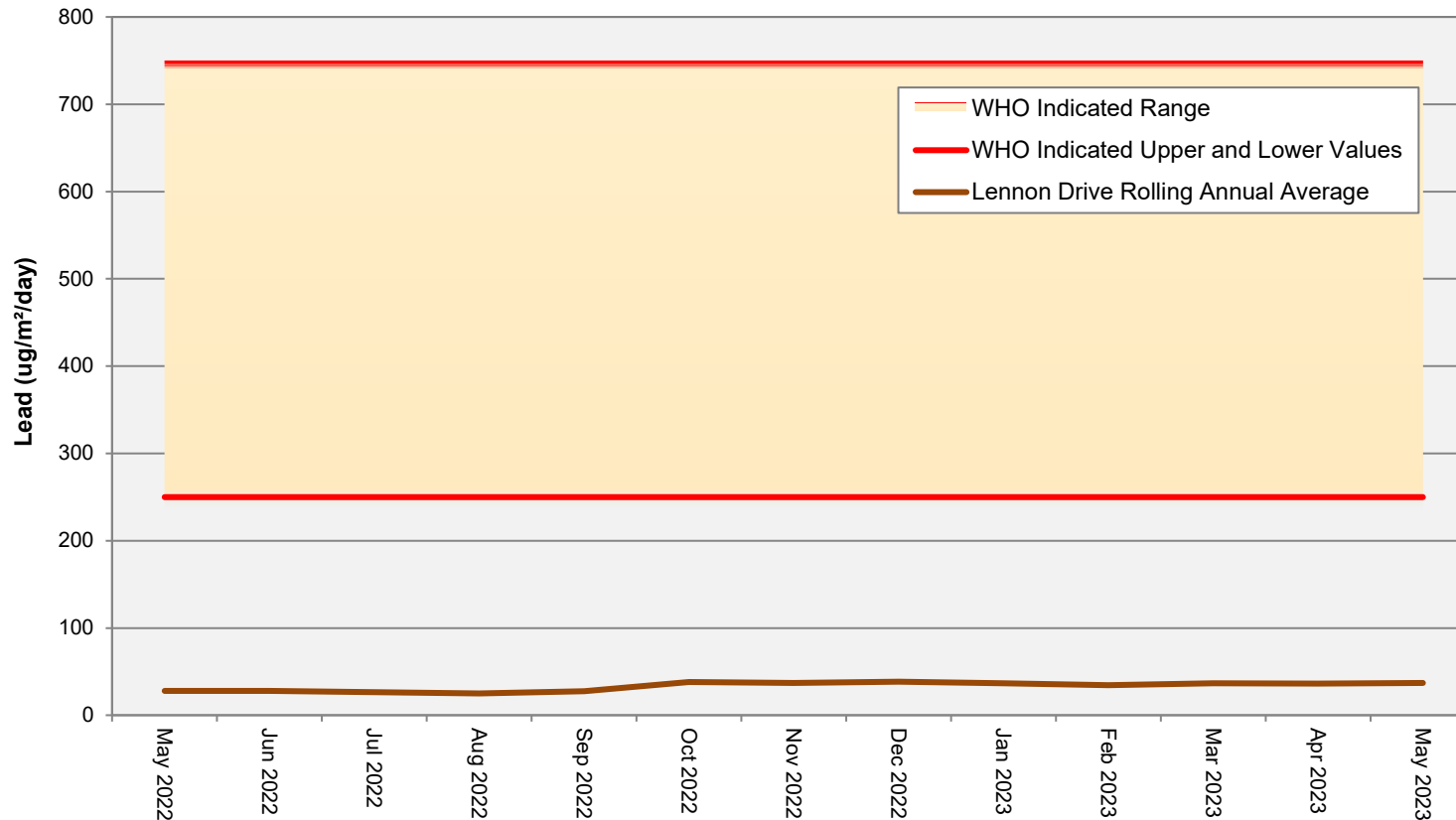
[Click here](#) for information on how to interpret this data

### Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site May 2022 – May 2023



Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

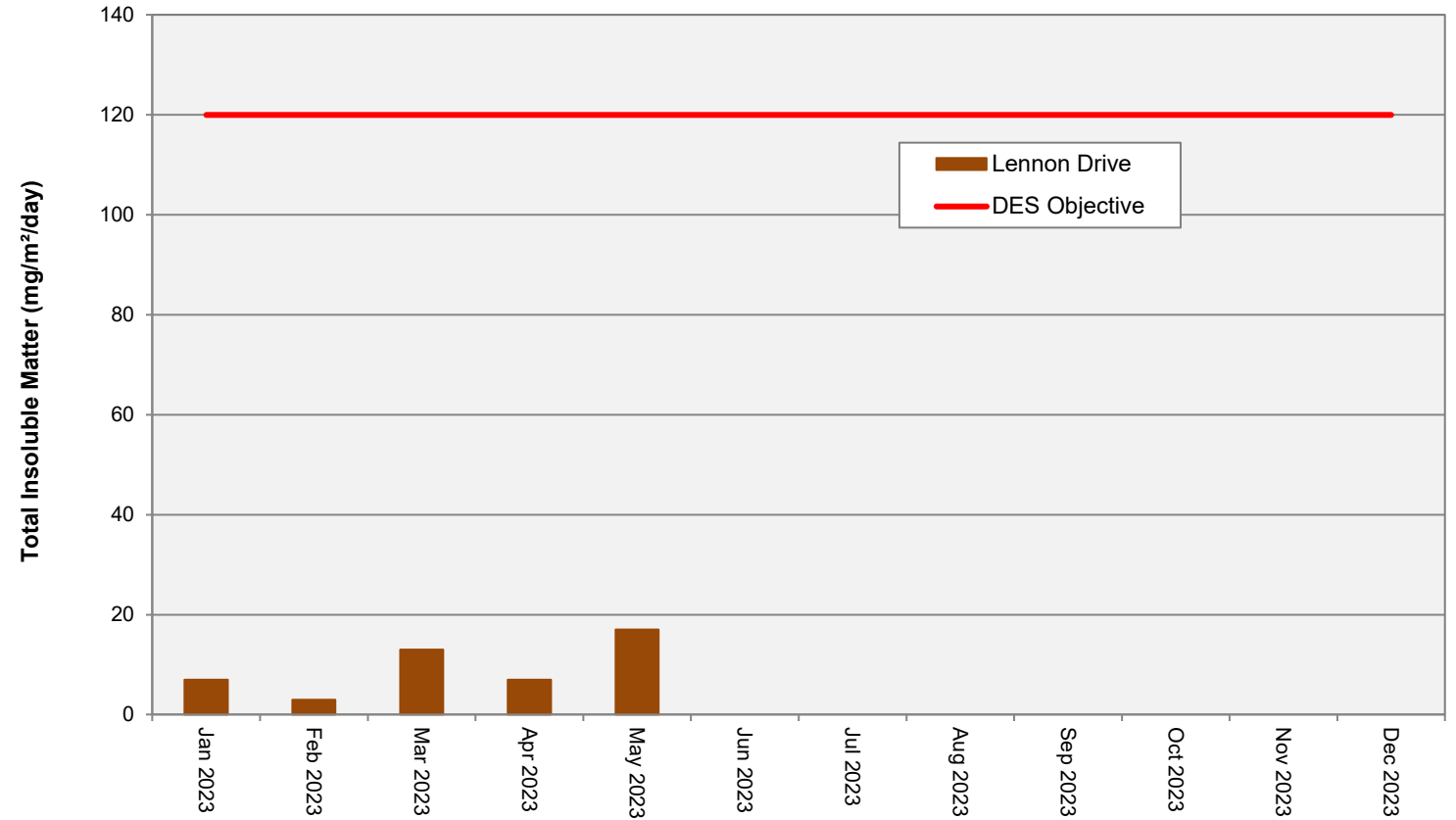
## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site MAY 2022– MAY 2023



Note: Lead Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

[Click here](#) for information on how to interpret this data

### Dust Deposition Gauge – General dust deposition levels (monthly) at Lennon Drive Site 2023



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day

## **This statement/advice was provided by Queensland Health in relation to blood lead levels in Townsville in April 2016**

Environmental limits for lead are set using a number of possible criteria including potential health effects.

Blood lead level within the Australian population have been decreasing over time as the use of lead – particularly in petrol and paint - has been phased out. The most recent NHMRC guidance document suggests that a blood lead level of less than 5 µg/dL is what should be expected in the general population.

Elevated blood lead levels are notified to Queensland Health for investigation. Previously this level was 10 µg/dL but since the beginning of 2016 has been reduced to 5 µg/dL. This is not an indication of a safe blood level, but is a trigger level that requires investigation into what in the individual's environment is contributing to the level.

Based on studies recognised by the World Health Organisation into the relationship between lengthy exposure to ambient air lead levels and increases in blood lead levels, the current 12 month rolling average for measurements (as at March 2016) at the Townsville Coast Guard Site could be expected to add between 0.36 µg/dL and 0.6 µg/dL to a person's total blood lead level. This increment is only about 10% of the level that would require further investigation. Along with other normal exposure, this would not be expected to exceed that level, is well within the expected community range, and below the level that would trigger further investigation.

The highest rolling annual average in recent years (recorded in May 2014 at the Townsville Coast Guard Site) yields a predicted result of between 1.14 µg/dL and 1.9 µg/dL, still well under the level which should trigger concern.