

# Air Quality Dashboard | OCTOBER | 2020

## 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

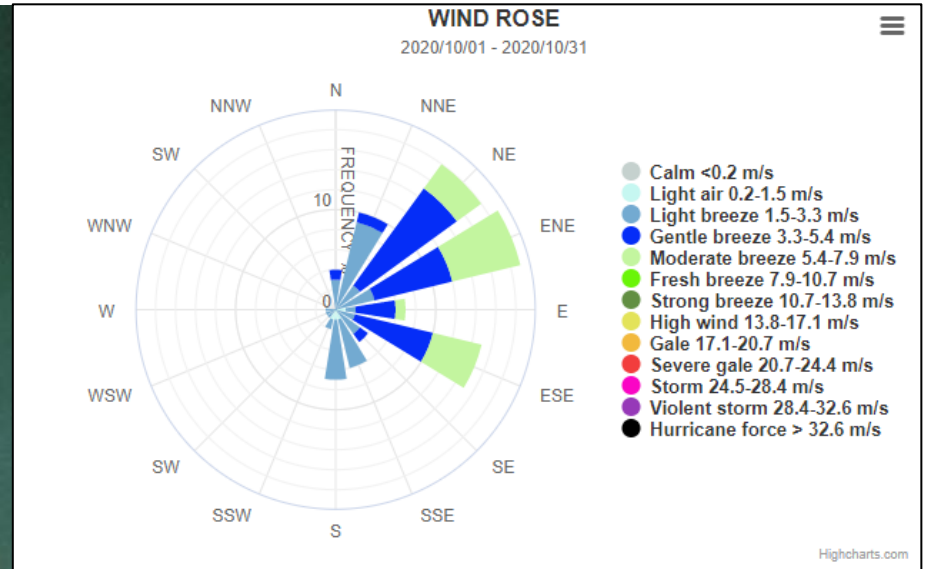
Air Quality  
Bulletin

**Live** Shipping  
Schedule

Rainfall Data -  
BOM

Air Quality  
Monitoring Plan

## Air Quality Monitoring Locations



# Shipping Movements in October 2020

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

Date In/Out	Vessel Name	Cargo	Berth	Date In/Out	Vessel Name	Cargo	Berth
02 Oct - 03 Oct	YANGTZE HARMONY	Fodder, Cattle (Export), Nil Cargo (Import)	T03South	16 Oct - 16 Oct	HYPERION LEADER	Nil Cargo (Export), Motor Vehicles (Import)	T10
02 Oct - 04 Oct	PACIFIC CONDOR	General Cargo (Export), Containers (Import)	T03North	16 Oct - 17 Oct	STI FONTVIEILLE	Nil Cargo (Export), Fuels (Import)	T01
03 Oct - 05 Oct	ECO DESTINY	Nil Cargo (Export), Fertilizer (Import)	T10	17 Oct - 18 Oct	GAIA LEADER	Nil Cargo (Export), Motor Vehicles (Import)	T04
03 Oct - 05 Oct	OCEAN DROVER	Fodder, Cattle (Export), Nil Cargo (Import)	T04	17 Oct - 20 Oct	FAIRCHEM VALOR	Sulphuric Acid (Export), Nil Cargo (Import)	T01
03 Oct - 05 Oct	VENTURE GRACE	Sugar (Export), Nil Cargo (Import)	T09	18 Oct - 20 Oct	HOUTMANGRACHT	Copper Concentrates (Export), Nil Cargo (Import)	T10
05 Oct - 06 Oct	THERESA MICRONESIA	Molasses (Export), Nil Cargo (Import)	T09	19 Oct - 19 Oct	HANSA CLOPPENBURG	Nil Cargo (Export), Containers (Import)	T03South
06 Oct - 08 Oct	CORONADO BAY	Containers (Export), Containers (Import)	T04	20 Oct - 22 Oct	THERESA MICRONESIA	Molasses (Export), Nil Cargo (Import)	T09
07 Oct - 08 Oct	KAITI HILL	Nil Cargo (Export), Fertilizer (Import)	T03South	21 Oct - 22 Oct	STI AMBER	Nil Cargo (Export), Fuels (Import)	T01
07 Oct - 10 Oct	AFRICAN ROOK	Nil Cargo (Export), Fertilizer (Import)	T08	21 Oct - 22 Oct	ASPHALT CARRIER	Nil Cargo (Export), Bitumen (Import)	T04
07 Oct - 08 Oct	HAMBURG HIGHWAY	Nil Cargo (Export), Motor Vehicles (Import)	T10	21 Oct - 22 Oct	DRIVE GREEN HIGHWAY	Nil Cargo (Export), Motor Vehicles (Import)	T03North
07 Oct - 09 Oct	ROSLYN	Sugar (Export), Nil Cargo (Import)	LUC	21 Oct - 22 Oct	SEA BREEZE	Zinc Concentrates (Export), Nil Cargo (Import)	T11
08 Oct - 09 Oct	ELANDRA PINE	Nil Cargo (Export), Fuels (Import)	T01	21 Oct - 23 Oct	AL KUWAIT	Fodder, Cattle (Export), Nil Cargo (Import)	T10
08 Oct - 09 Oct	SOFRANA TOURVILLE	Containers (Export), Containers (Import)	T04	22 Oct - 24 Oct	SEA BREEZE	Nil Cargo (Export), Nil Cargo (Import)	T03South
09 Oct - 10 Oct	ECKERT OLDENDORFF	Concentrates (Export), Nil Cargo (Import)	T03South	23 Oct - 24 Oct	ANSAC WYOMING	Concentrates (Export), Nil Cargo (Import)	T08
09 Oct - 10 Oct	FUZEYYA	Sugar (Export), Nil Cargo (Import)	T09	24 Oct - 31 Oct	EOS ESPERANCE	Zinc Ferrites (Export), Nil Cargo (Import)	T10
10 Oct - 12 Oct	GULF MUTTRAH	Nil Cargo (Export), Fuels (Import)	T01	24 Oct - 26 Oct	SANTA BARBARA	Nil Cargo (Export), Nil Cargo (Import)	T03South
11 Oct - 13 Oct	KOTA HIDAYAH	Containers (Export), Containers (Import)	T03South	26 Oct - 28 Oct	ORTOLAN ALPHA STRAIT	Nil Cargo (Export), Fertilizer (Import)	T09
12 Oct - 16 Oct	BROADGATE	Concentrates (Export), Nil Cargo (Import)	T11	26 Oct - 28 Oct	KONDILI	Nil Cargo (Export), Cement (Import)	T04
12 Oct - 15 Oct	MILLION BELL	Fertilizer (Export), Nil Cargo (Import)	T08	26 Oct - 28 Oct	SOUTHGATE	Concentrates (Export), Nil Cargo (Import)	T11
12 Oct - 14 Oct	THERESA ORION	Molasses (Export), Nil Cargo (Import)	T09	26 Oct - 27 Oct	SANTA BARBARA	Lead Ingots (Export), Nil Cargo (Import)	T08
12 Oct - 13 Oct	GOLDEN ASPIRANT	Nil Cargo (Export), Fuels (Import)	T01	26 Oct - 28 Oct	FLORA DELMAS	Containers (Export), Containers (Import)	T03South
12 Oct - 14 Oct	OCEAN HIRYU	Sugar (Export), Nil Cargo (Import)	LUC	28 Oct - 29 Oct	ORTOLAN ALPHA STRAIT	Nil Cargo (Export), Nil Cargo (Import)	T03South
13 Oct - 14 Oct	HANSA REGENSBURG	Nil Cargo (Export), Nil Cargo (Import)	T03South	28 Oct - 29 Oct	SUNSET	Sugar (Export), Nil Cargo (Import)	T09
13 Oct - 16 Oct	WYUNA	Nil Cargo (Export), Cement (Import)	T04	30 Oct - 31 Oct	BUXHANSA	Containers (Export), Containers (Import)	T04
14 Oct - 14 Oct	SWALLOW ACE	Nil Cargo (Export), Motor Vehicles (Import)	T10	30 Oct - 31 Oct	TEAM CALYPSO	Nil Cargo (Export), Fuels (Import)	T01
14 Oct - 15 Oct	ASPHALT SPIRIT	Nil Cargo (Export), Bitumen (Import)	T01				
15 Oct - 17 Oct	OCEAN VICTORY	Zinc Concentrates (Export), Nil Cargo (Import)	T08				
15 Oct - 16 Oct	SUNBIRD ARROW	Nil Cargo (Export), Bitumen (Import)	T01				







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 2019-20, the Port of Townsville delivered strong financial results and continued to roll-out major infrastructure investments despite the impacts of the global pandemic, COVID-19. In a year where supply chains across the world have been tested, a total of 8.2 million tonnes of freight passed over our wharves, which was a 6.5 per cent increase on last year. With a focus on cost management, the Port also reported a \$13.87 million net profit for 2019/20, 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 (up 17%), fertiliser (up 25%) and livestock (up 32%), making it Australia's largest live cattle export port. Townsville is the number one port in Australia for copper, zinc, lead and sugar exports and services 70% 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

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OR

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

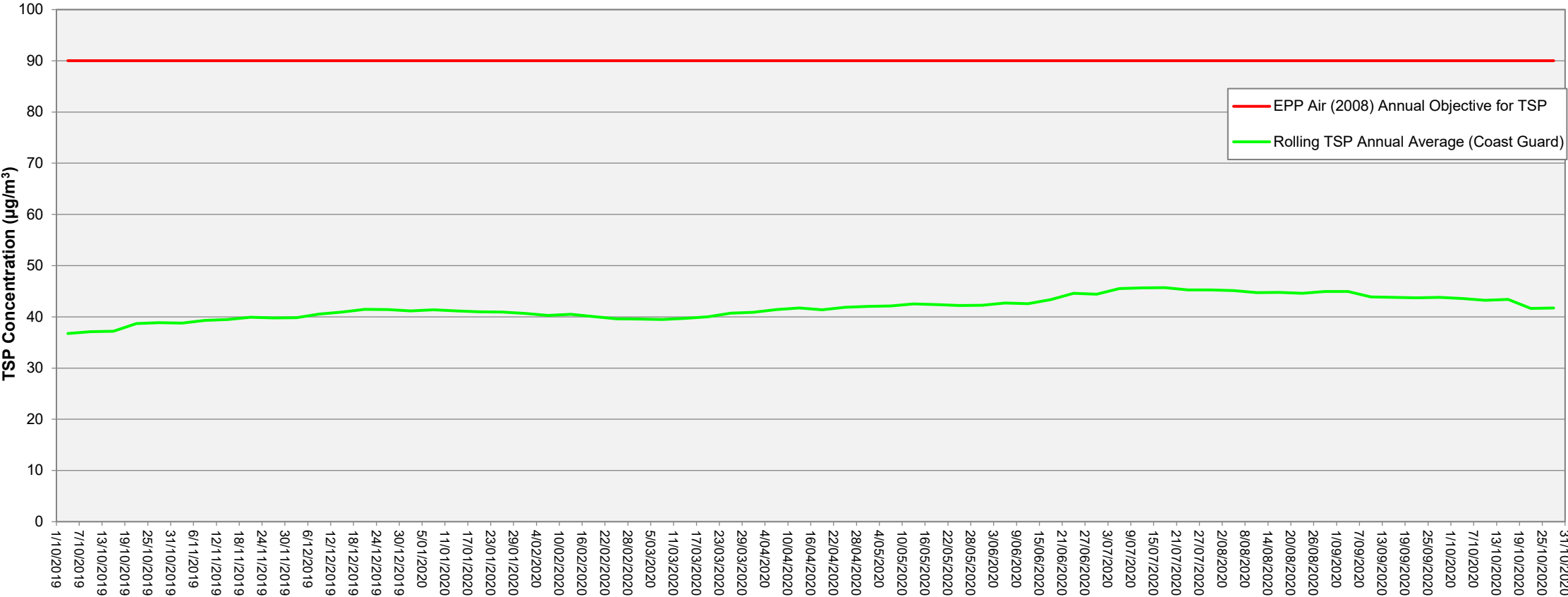
OR

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

## Ask a Question / Provide Feedback

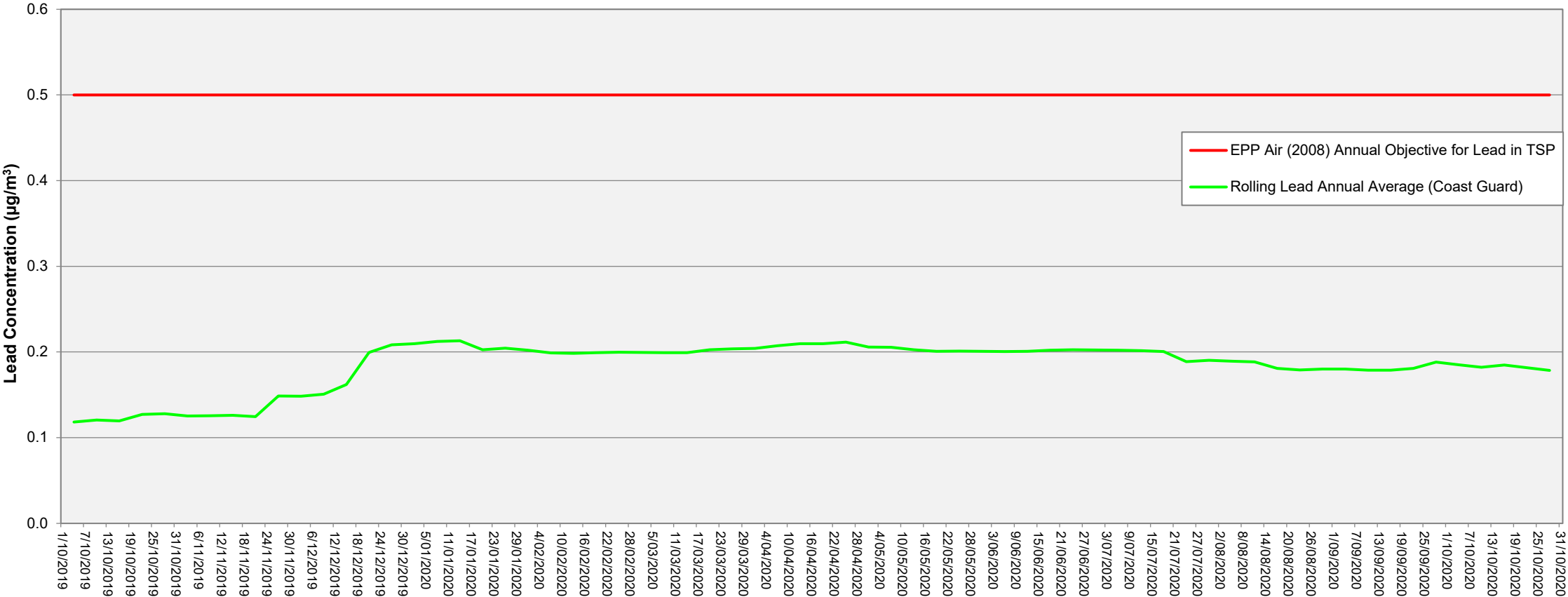
Send your enquiry or feedback to [community@townsvilleport.com.au](mailto:community@townsvilleport.com.au)

Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site  
OCTOBER 2019 – OCTOBER 2020

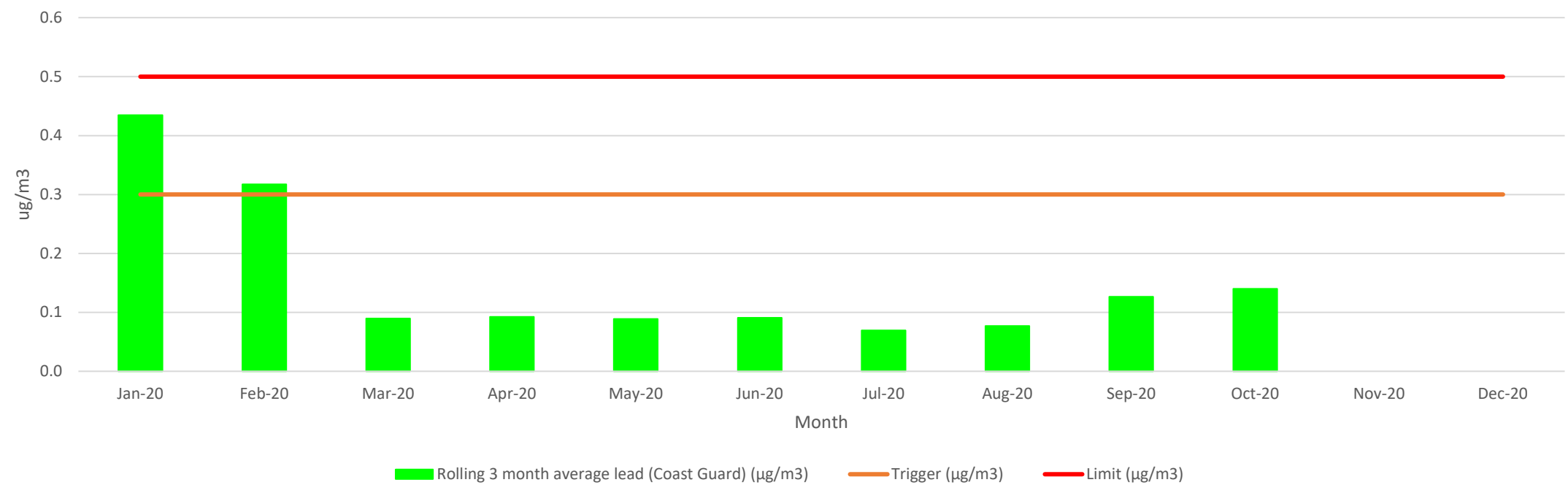


Note: TSP Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site  
OCTOBER 2019 – OCTOBER 2020



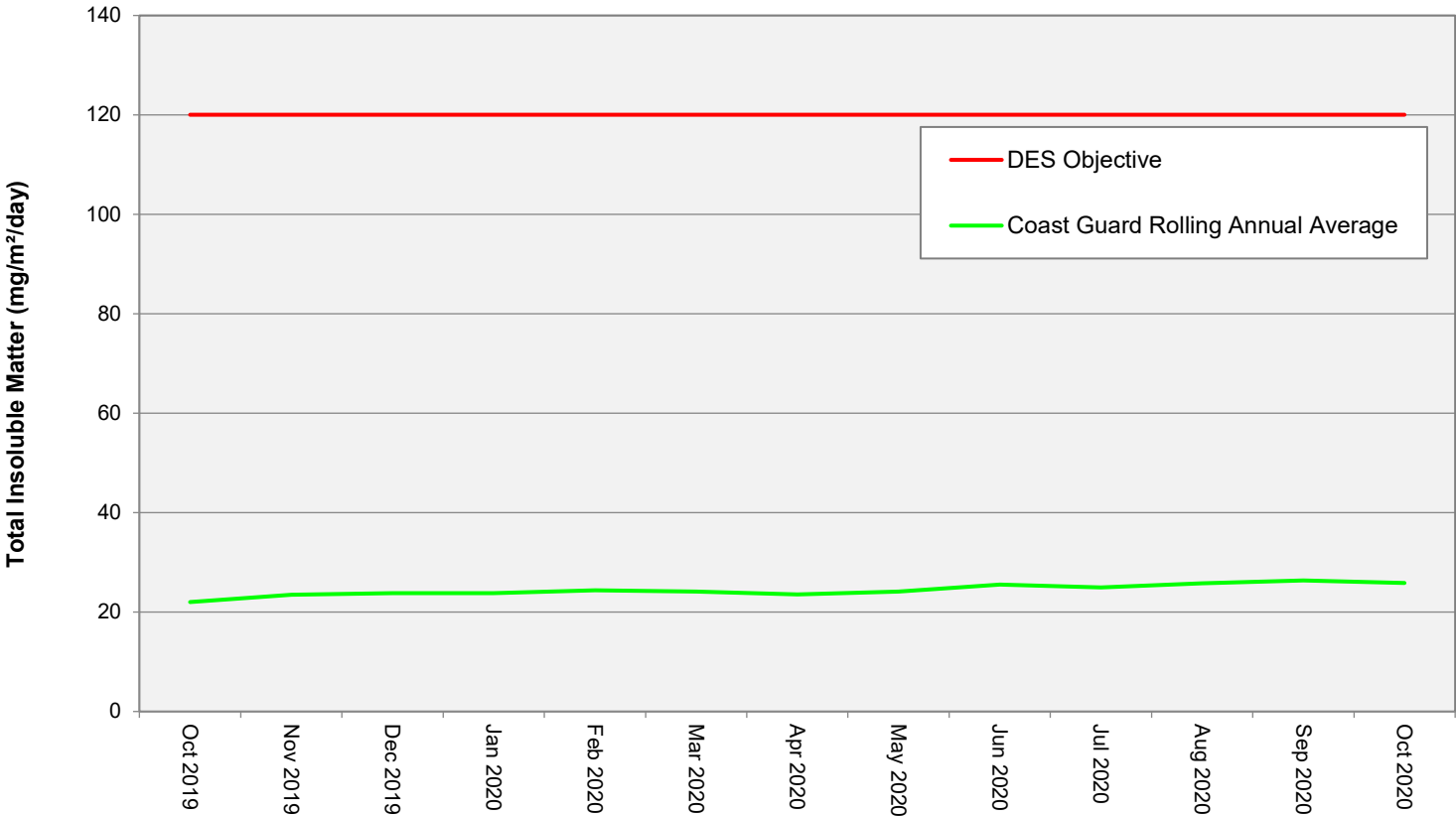
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site  
2020



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

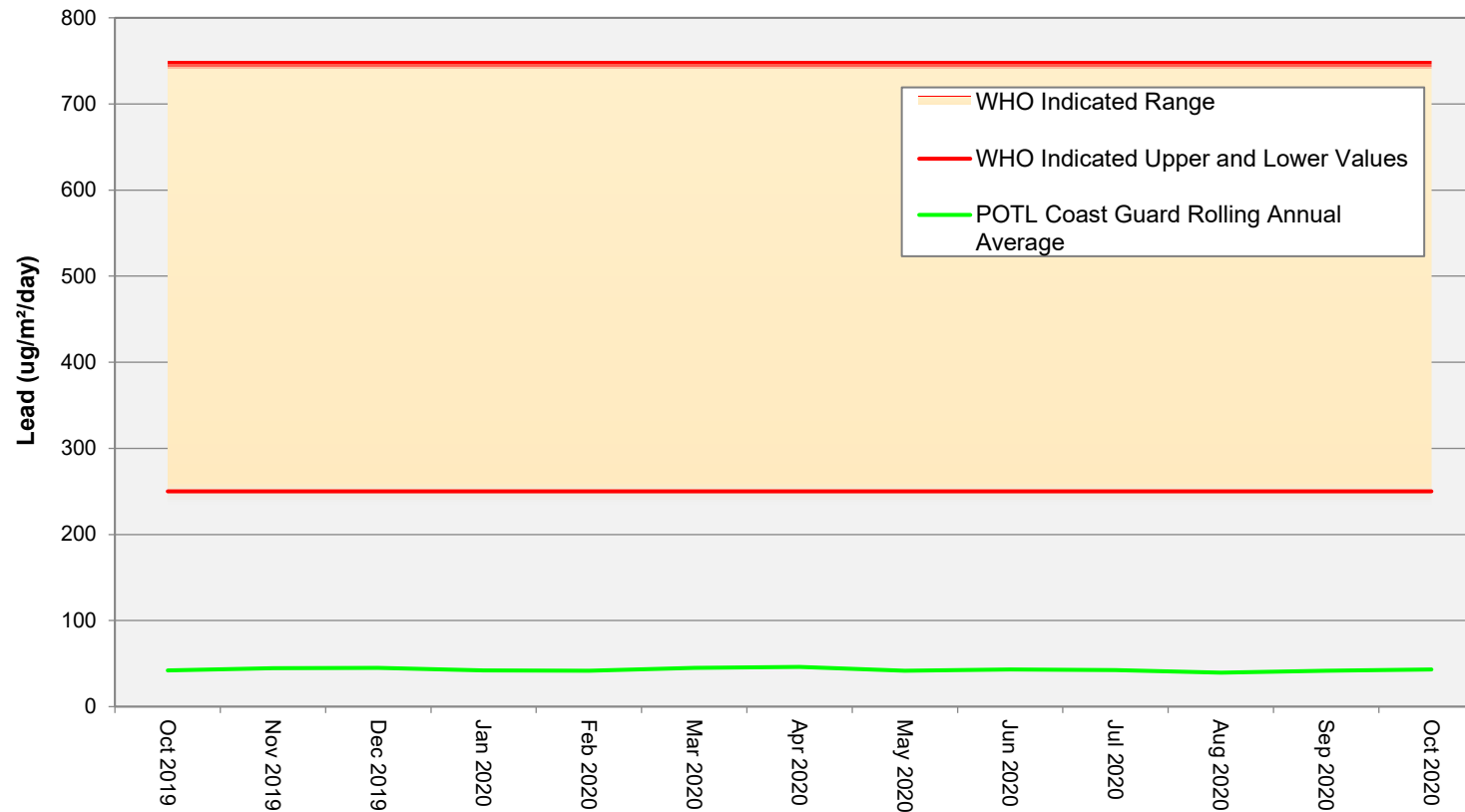


Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site  
OCTOBER 2019 – OCTOBER 2020



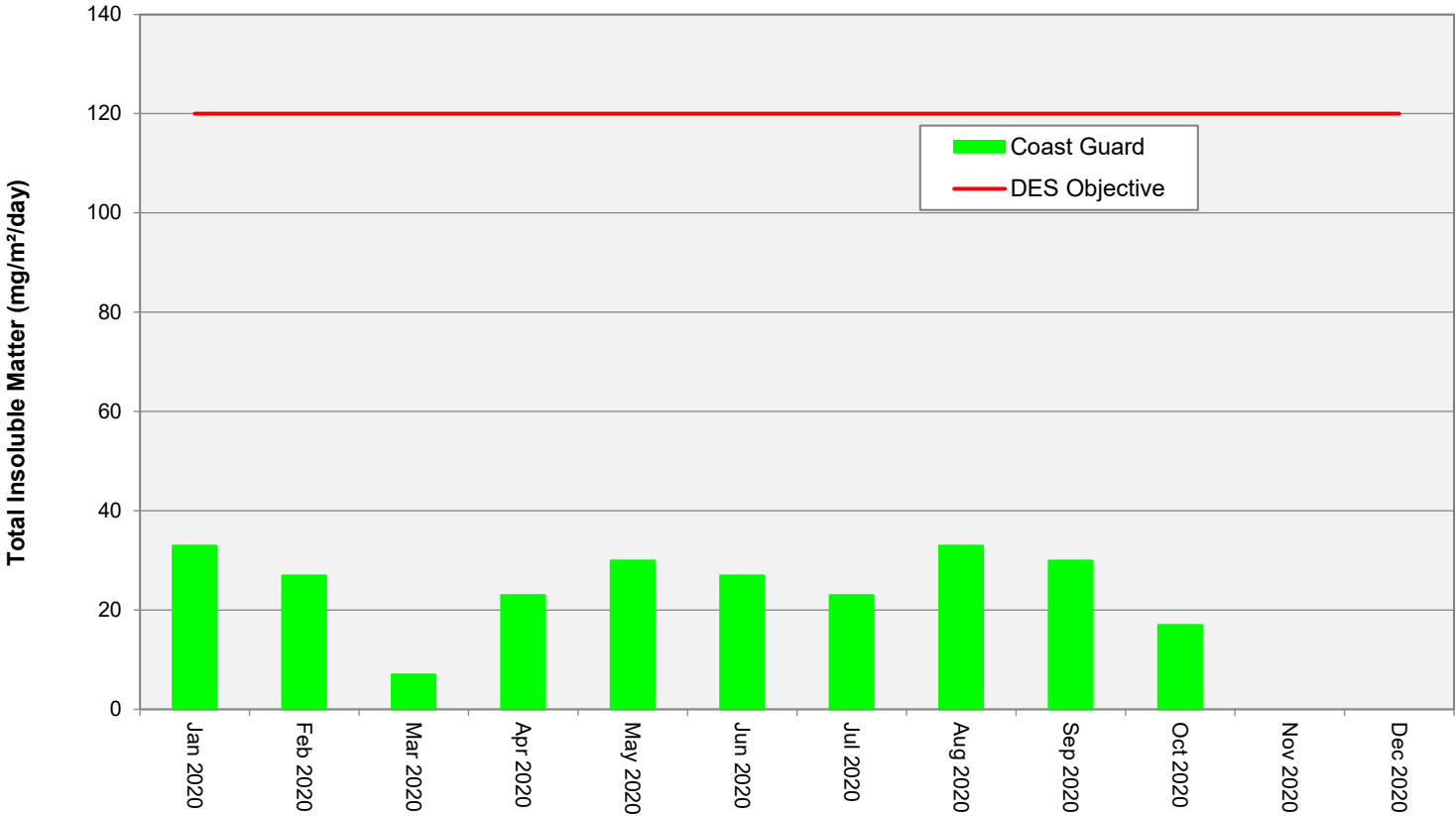
Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site OCTOBER 2019 – OCTOBER 2020



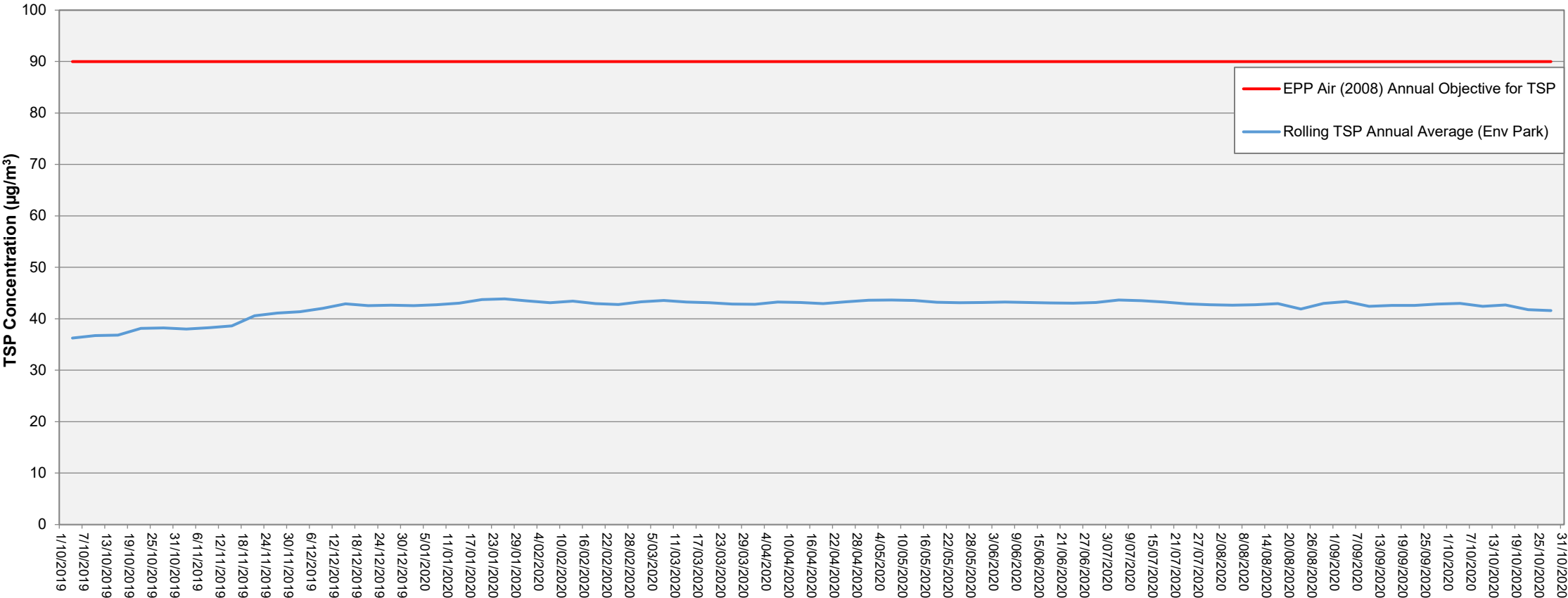
Note: Lead Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result.

Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site  
2020



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

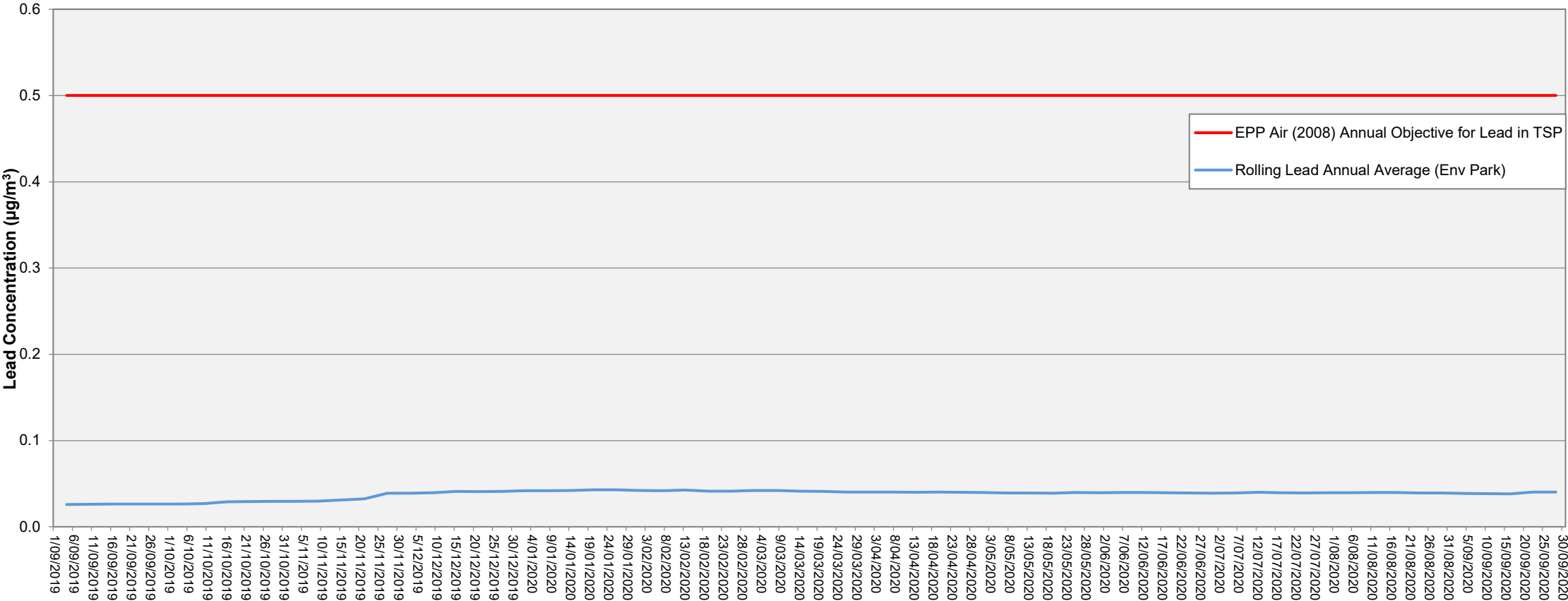
Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site  
OCTOBER 2019 – OCTOBER 2020



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

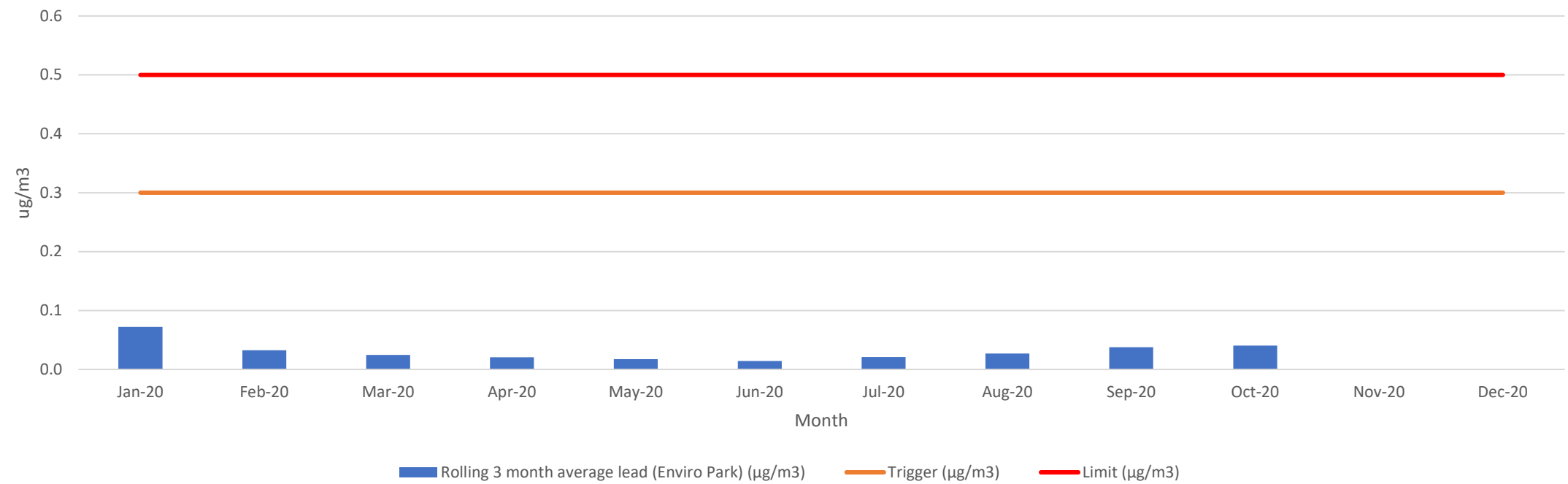


Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site  
OCTOBER 2019 – OCTOBER 2020



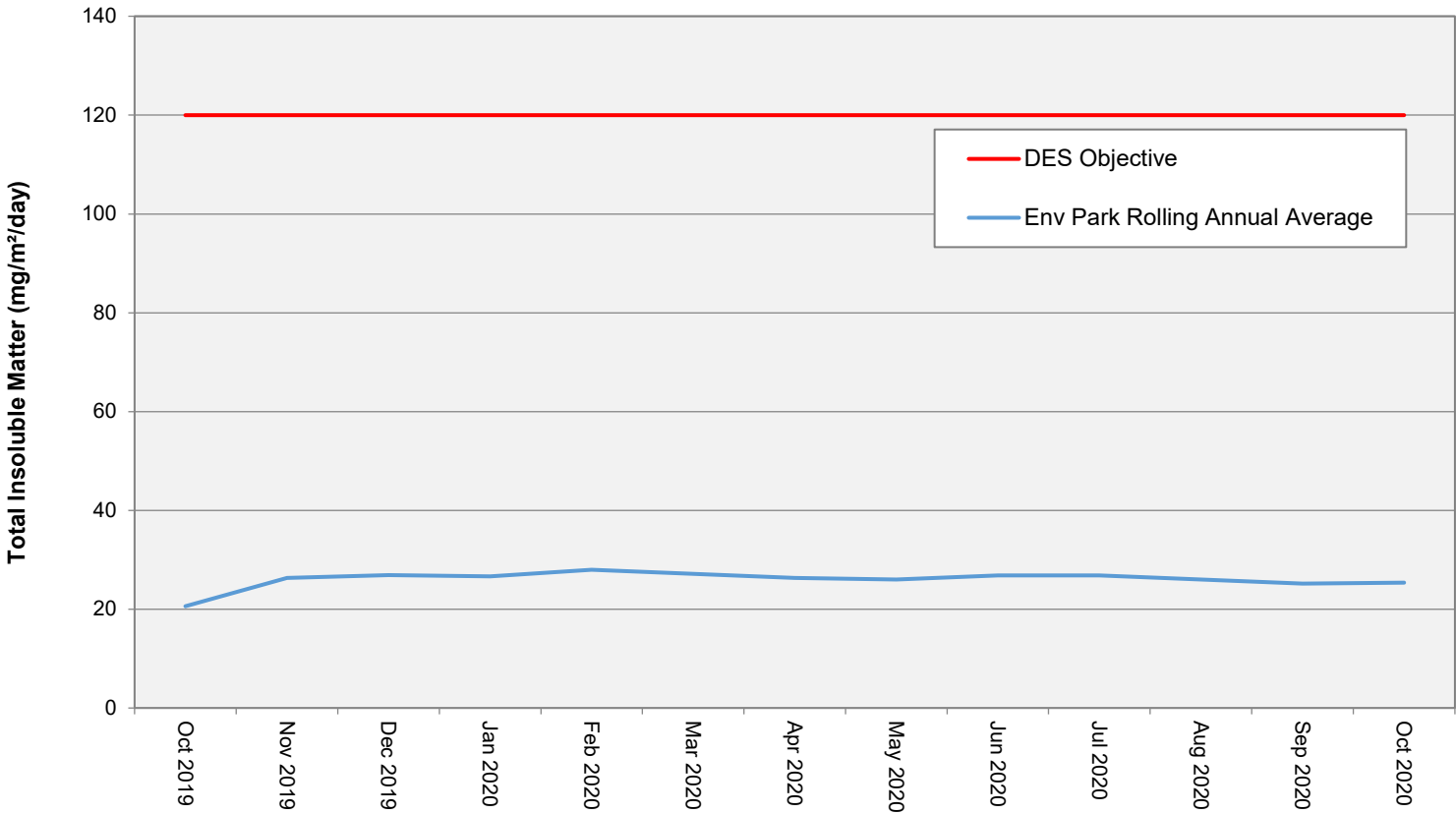
Note: Lead Concentration units = micrograms per cubic metre per 24 hour period  
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Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site  
2020



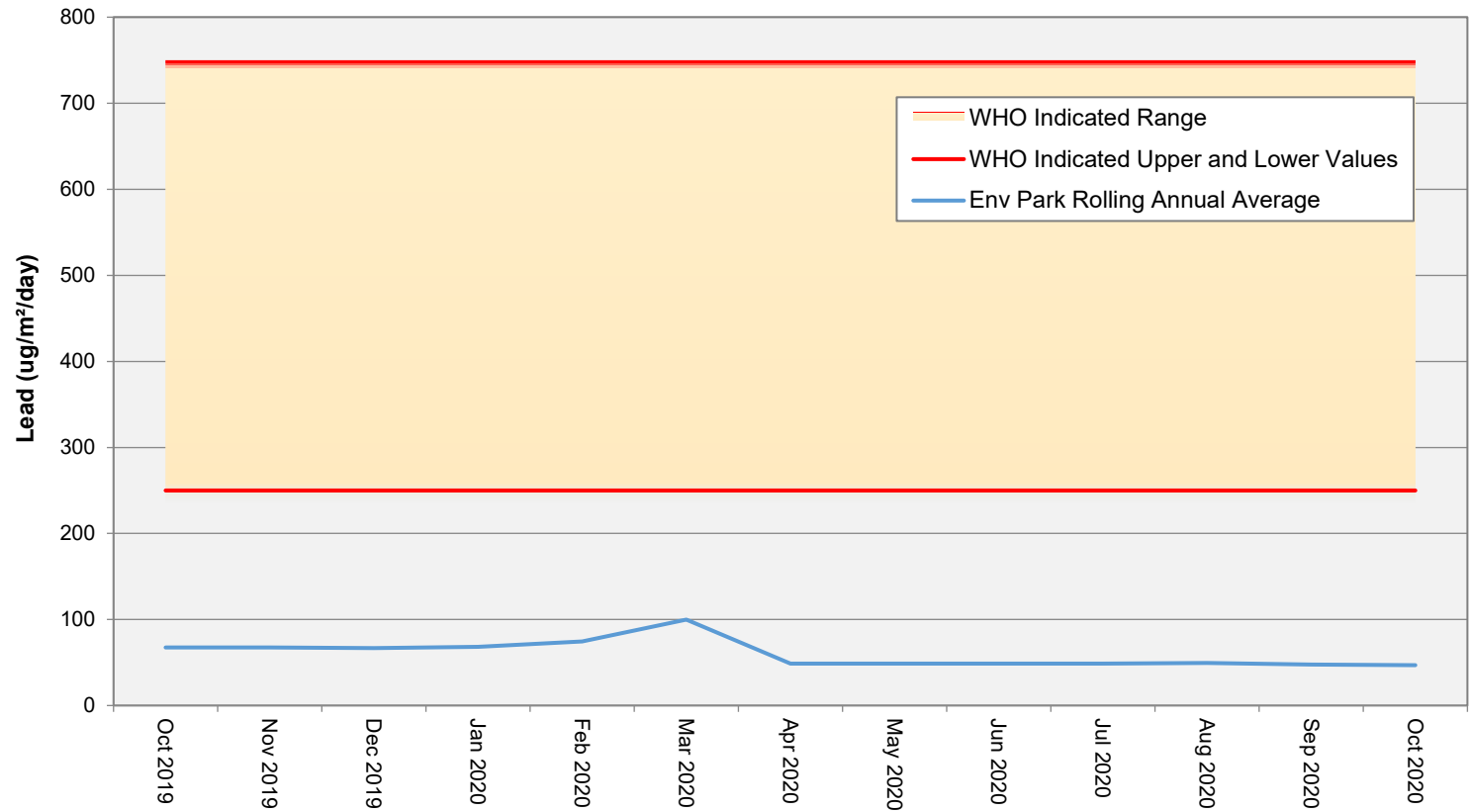
Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result

Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site  
OCTOBER 2019 – OCTOBER 2020



Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
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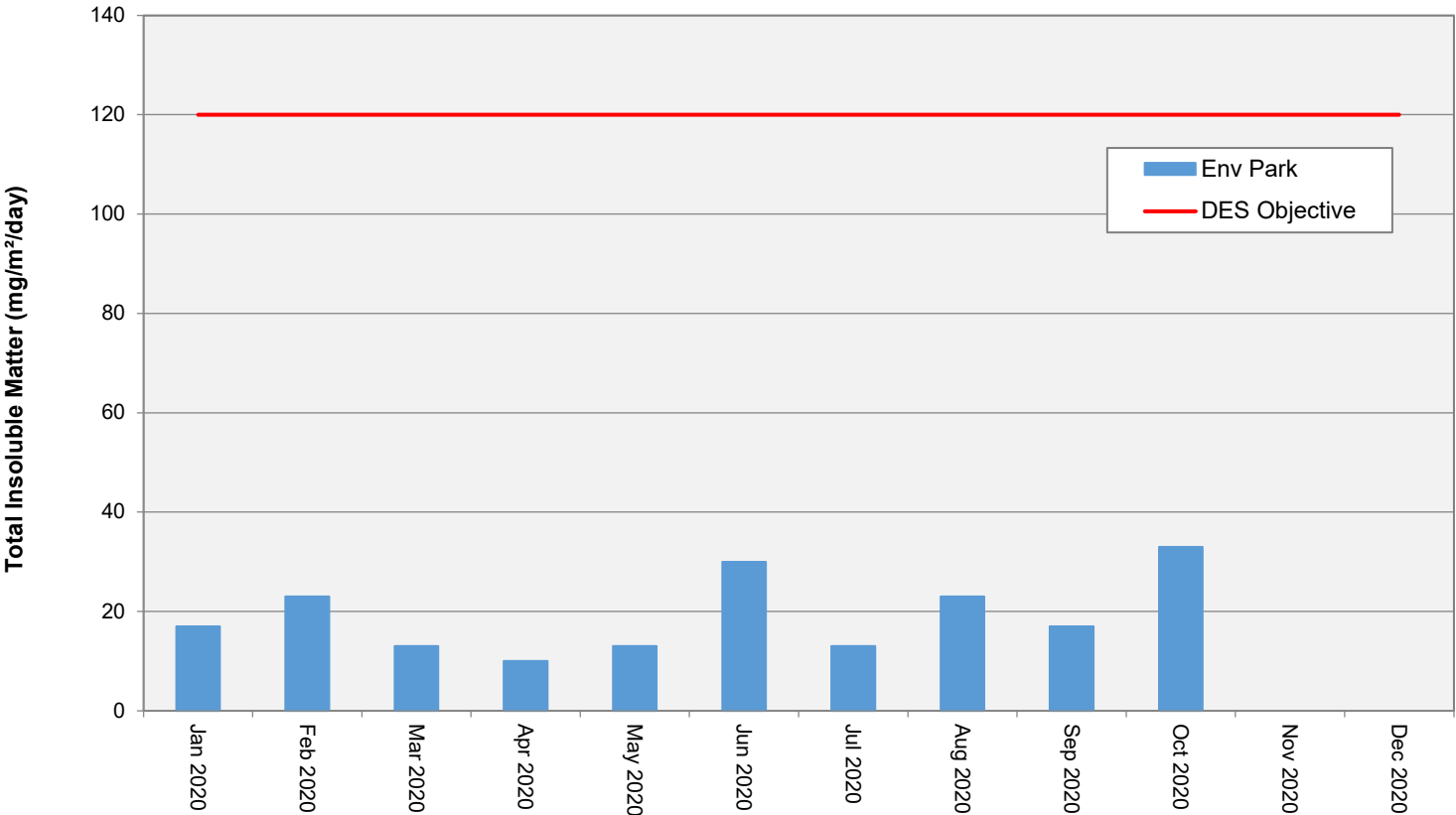
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site  
OCTOBER 2019 – OCTOBER 2020



Note: Lead Concentration units = micrograms per square metre per day  
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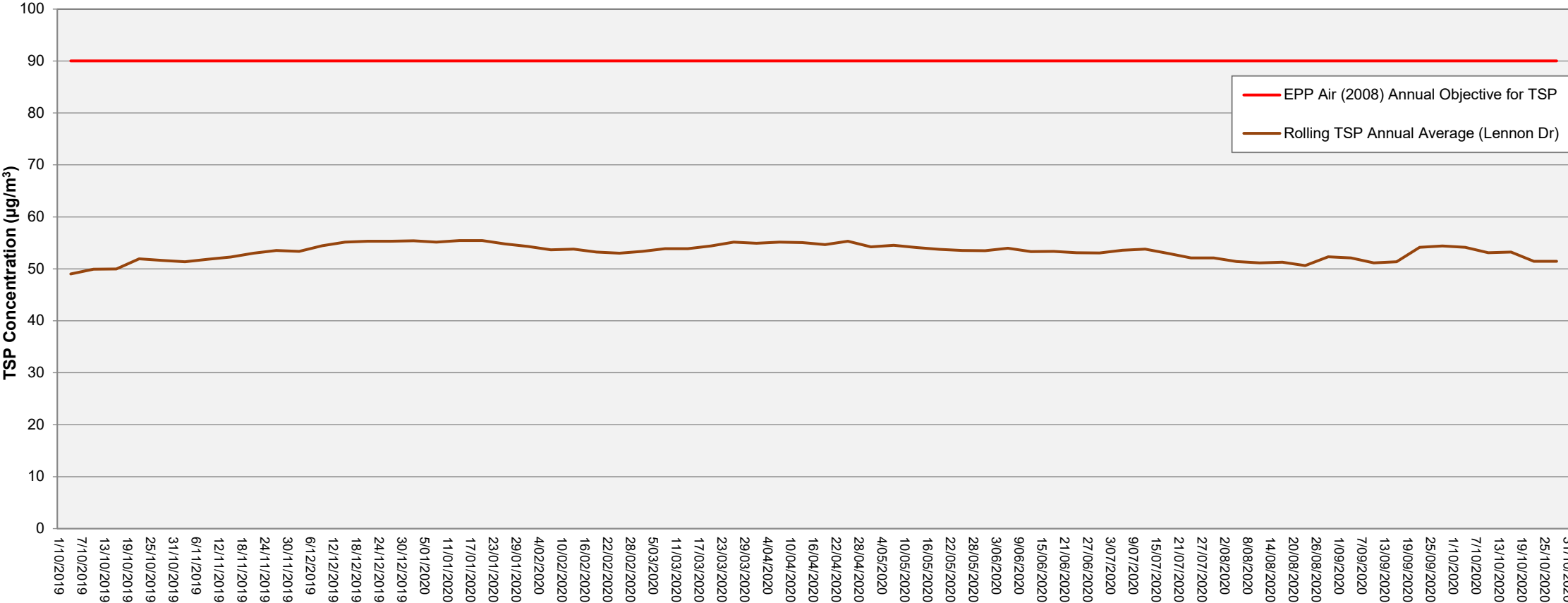


Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site  
2020



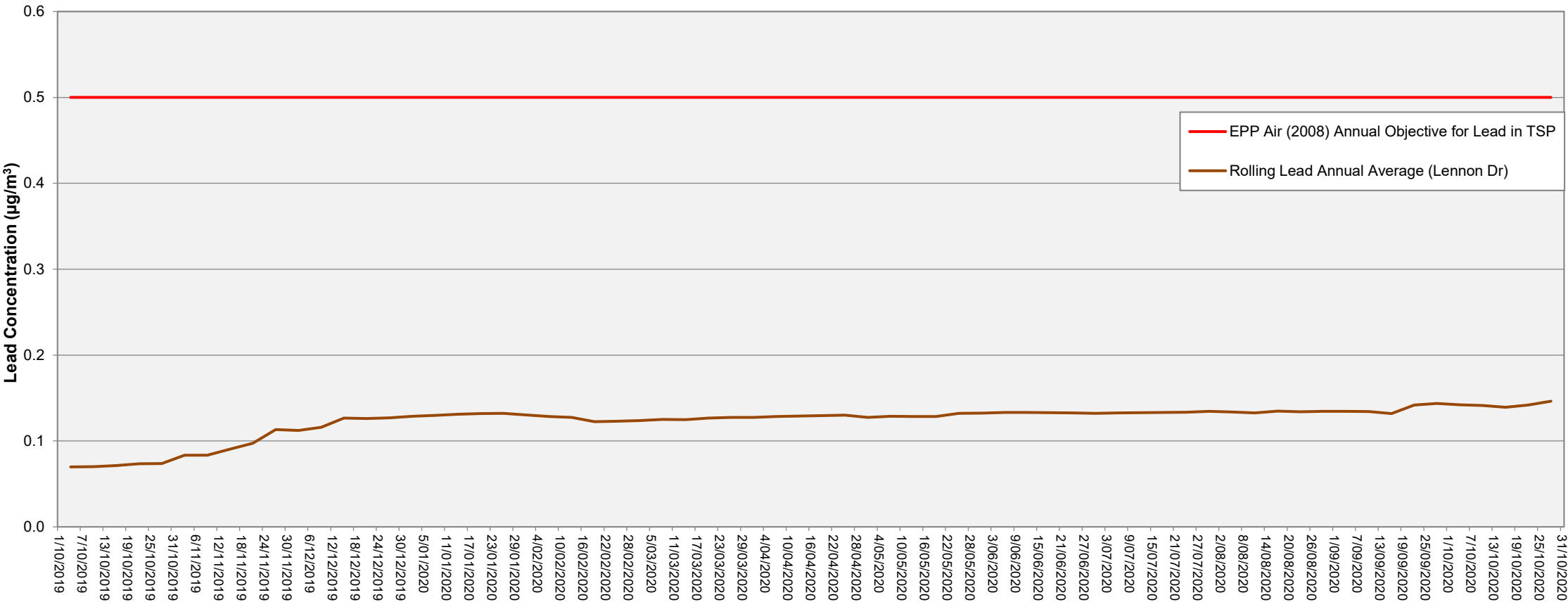
Note: Total Insoluble Matter Concentration units = milligrams per square metre per day

Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site  
OCTOBER 2019 – OCTOBER 2020

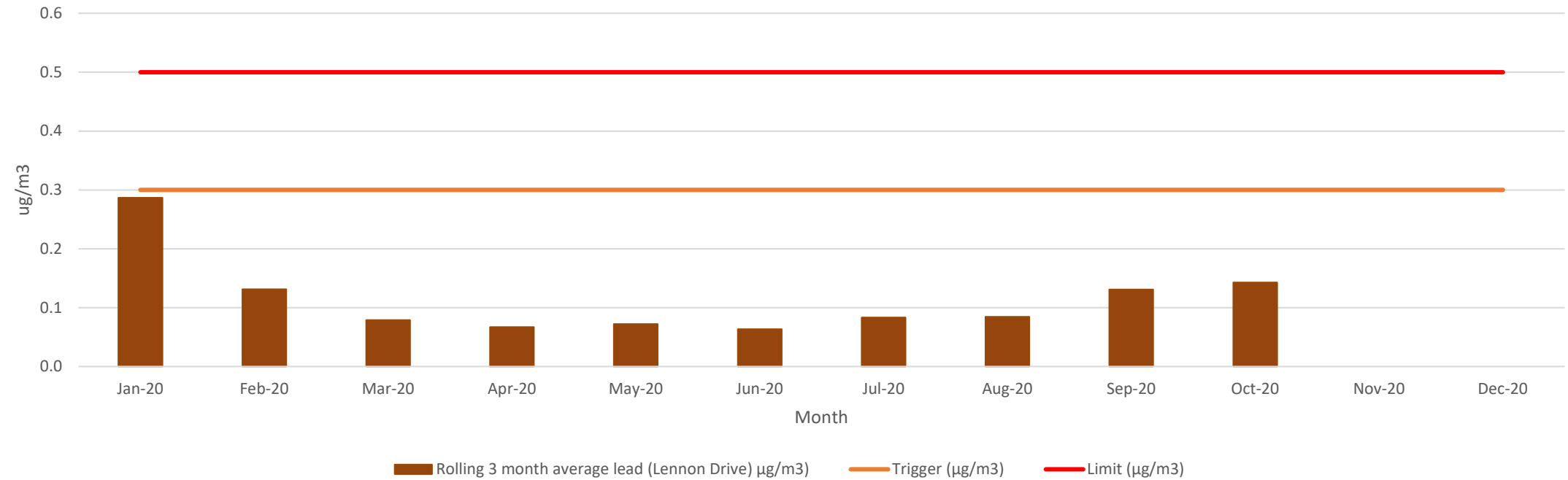


Note: TSP Concentration units = micrograms per cubic metre per 24 hour period  
Rolling annual average = the moving average of the previous 11 results and the current result

Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site  
OCTOBER 2019 – OCTOBER 2020



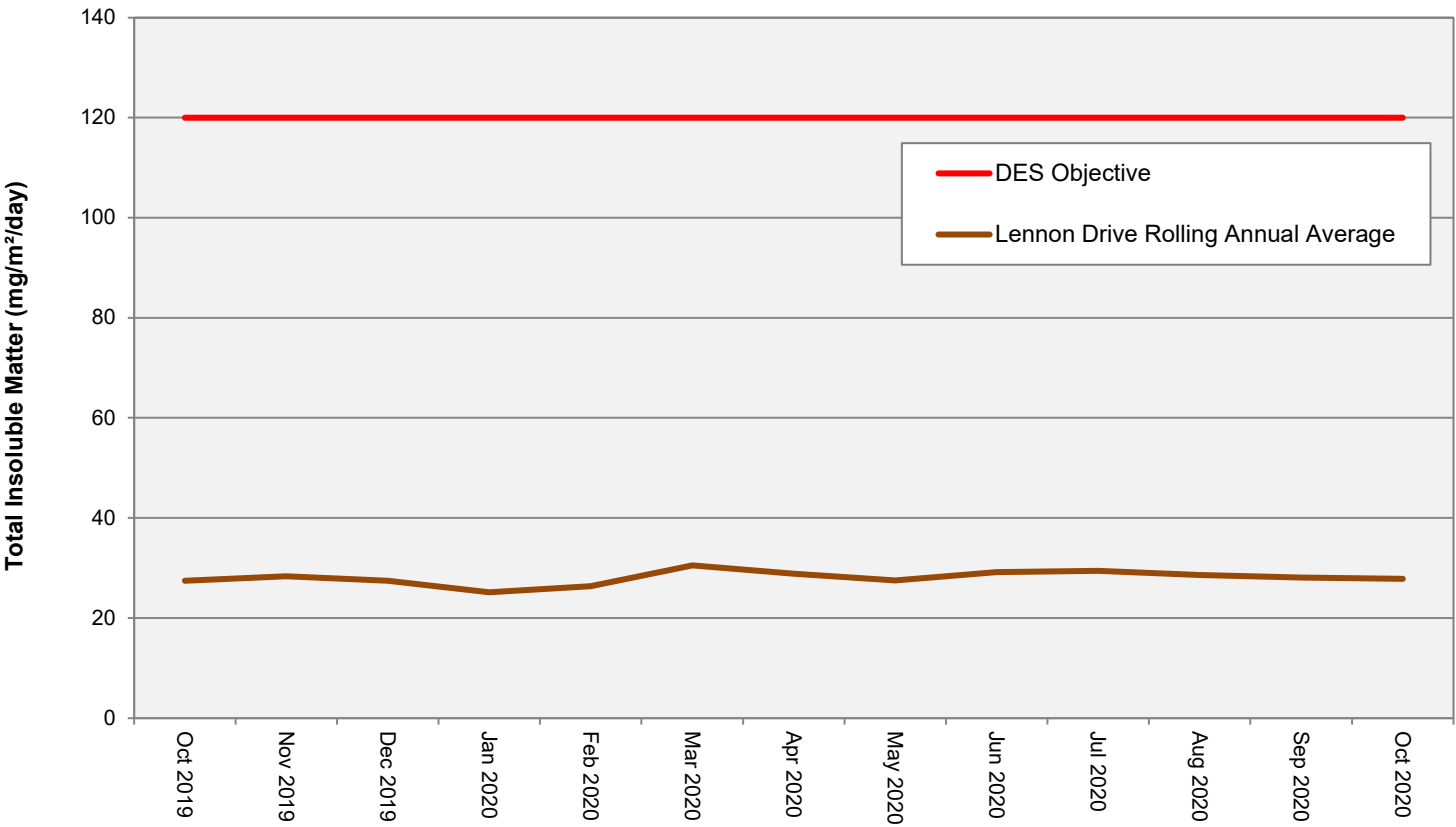
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site  
2020



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

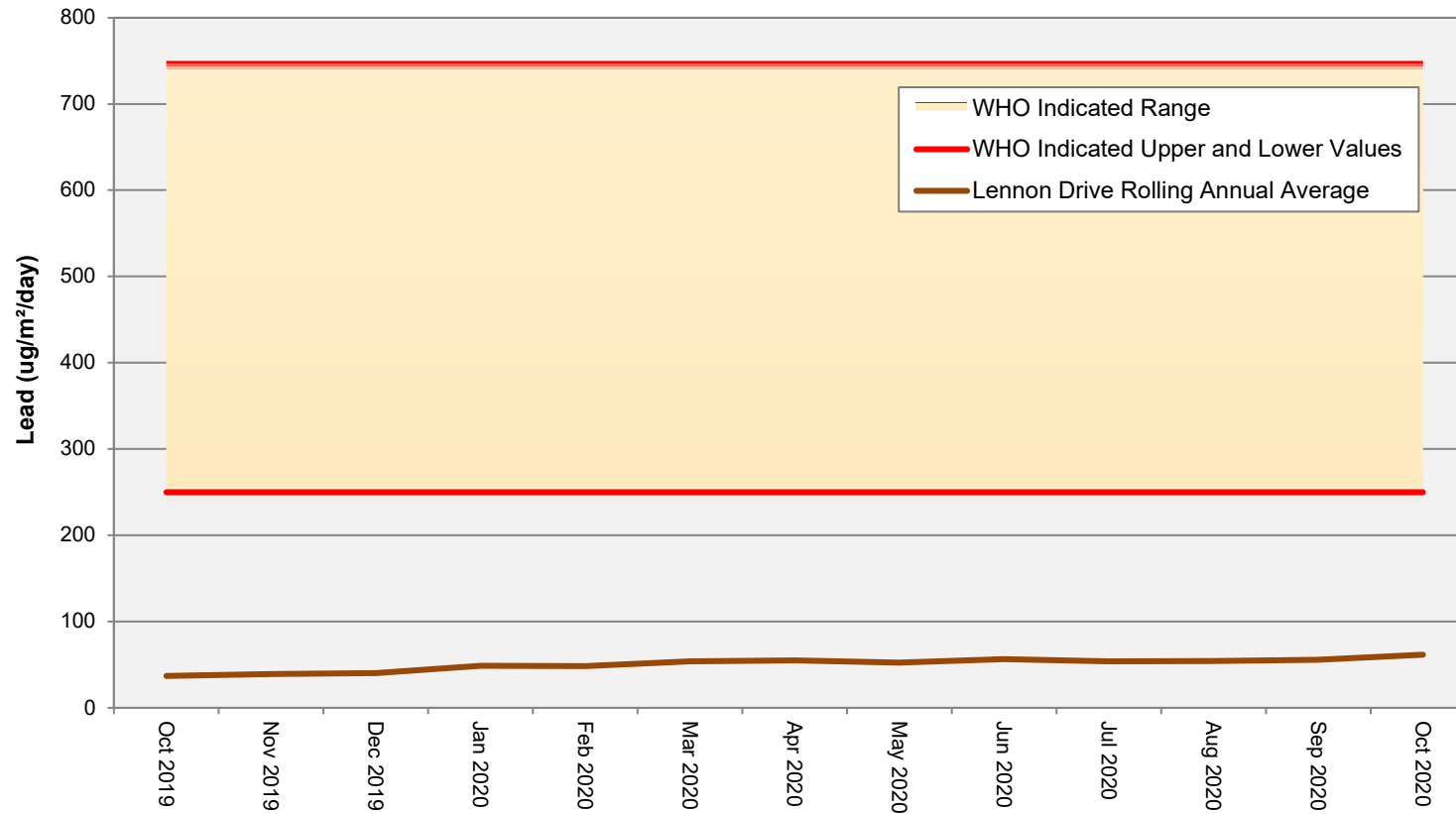


Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site  
OCTOBER 2019 – OCTOBER 2020



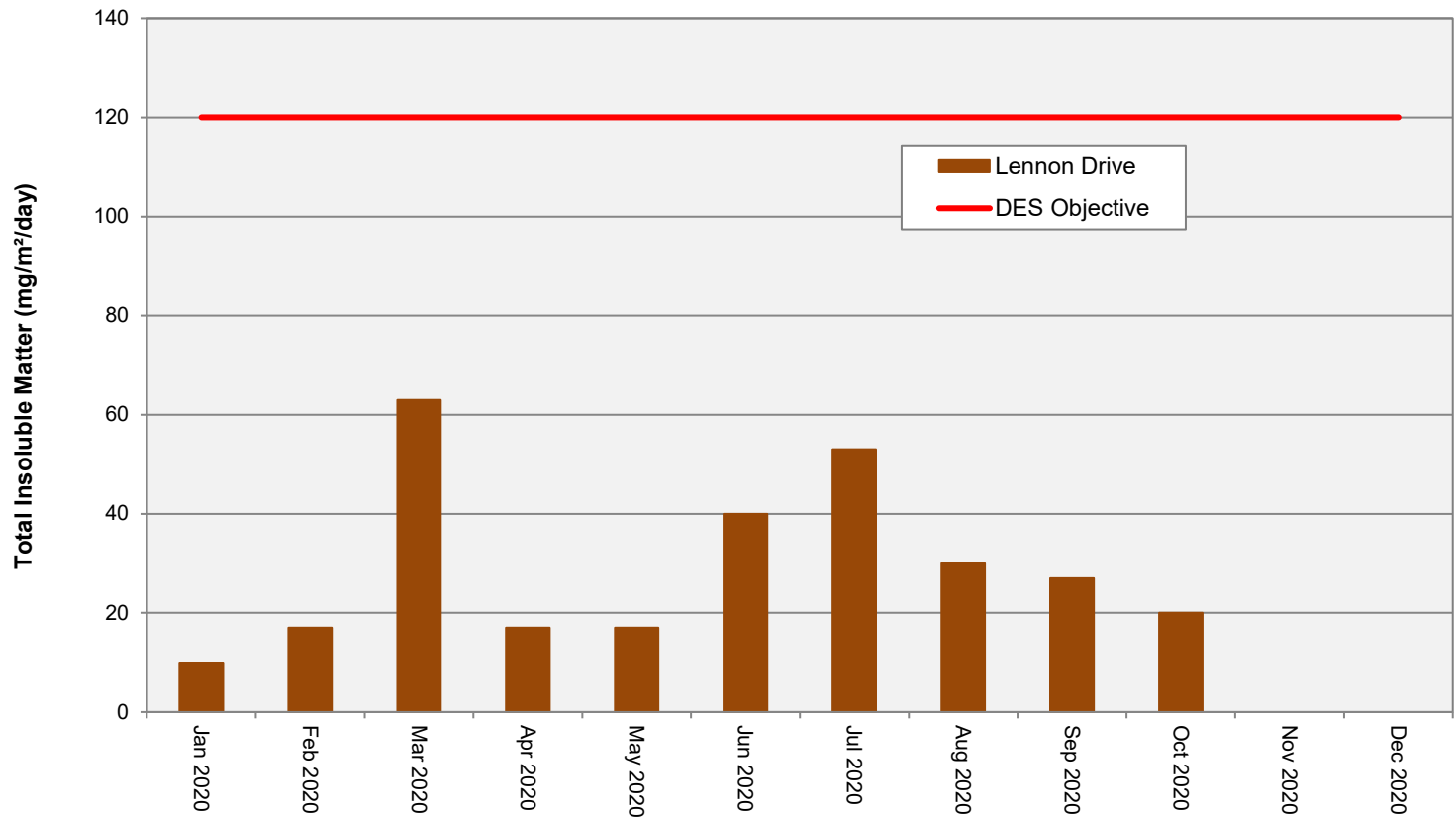
Note: Total Insoluble Matter Concentration units = micrograms per square metre per day  
Rolling annual average = the moving average of the previous 11 results and the current result

## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site OCTOBER 2019 – OCTOBER 2020



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 Lennon Drive Site  
2020



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 put. 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.