



UK Health
Security
Agency

Health Risk Assessment of air quality monitoring results from March to January 2022

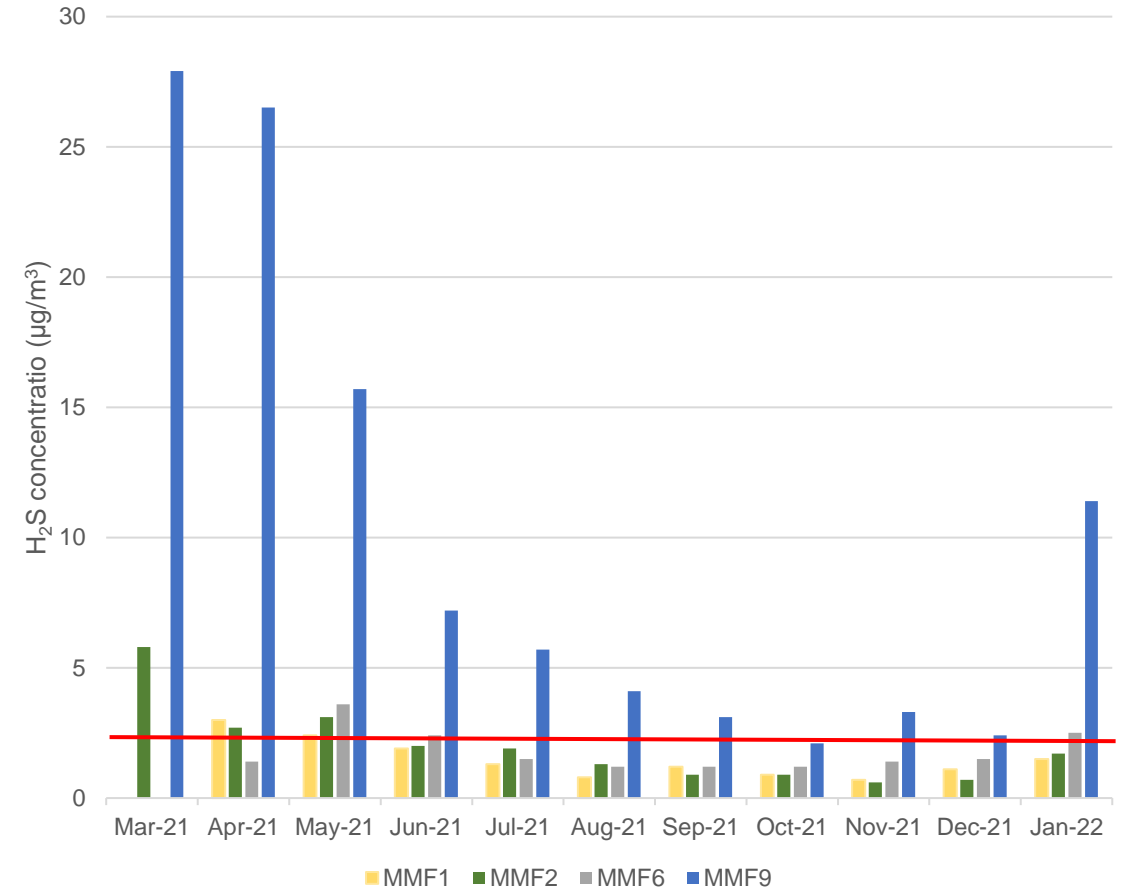
Walleys Quarry Landfill Site, Silverdale Newcastle-under-Lyme

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Walleys Quarry Landfill Risk Assessment



Monitoring Station	Cumulative concentration ($\mu\text{g}/\text{m}^3$)	Cumulative percentage time above $7 \mu\text{g}/\text{m}^3$	Monitoring dates
MMF1	1.3	3 %	14/04/2021 to 28/02/2022
MMF2	1.8	5 %	05/03/2021 to 28/02/2022
MMF6	1.8	3 %	24/04/2021 to 28/02/2022
MMF9	8.8	16 %	06/03/2021 to 28/02/2022



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From January 2022 onwards, UKHSA is only comparing the results with the United States Environmental Protection Agency long-term (lifetime) health-based ($2 \mu\text{g}/\text{m}^3$)

- (MMF1 and MMF2) concentrations are below the long-term (lifetime) health-based guidance value, as they have been since June/July 2021
- (MMF6) concentrations have been below the long-term (lifetime) health-based guidance value since July 2021, In January 2022, showed a slight exceedance; the overall cumulative average is below the long-term (lifetime) health-based guidance value
- (MMF9), concentrations in January 2022 remain above the US EPA RfC,

Summary

- Hydrogen sulphide rectified data up to the end of January 2022 shows continuing exposure to the population around the site
- Currently any risk to long-term (lifetime) physical health is likely to be small however, it is not possible to exclude a risk to long-term health
- The lower the concentrations become, the smaller any risk will be
- UKHSA continues to strongly recommend that all appropriate measures are taken to reduce the off-site odours from the landfill site as early as possible, and reduce the concentrations in the local area to levels below those health-based guidance values used to assess long-term exposure