Please complete all sections below and return to:

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| --- | --- | --- | --- |
|  |  |  | **Samples** |
|  |  |  | **Workplace** | **Ambient** | **Indoor** | **Stack Emissions** |
|  **Round**  |  **Despatch** **Date** | **Reporting****Deadline** | **1** | **1A****\*** | **2X** | **2F** |  **3** |  **4** |  **5** |  **6** |  **7** |  **8** |  **9** | **10****A\*** | **10****B\*** | **10****C\*** | **15****\*** | **16****\*** |  **NEW** **18** **\*** |  **11** | **12** | **12****A\*** | **13****\*** | **14** | **17****\*** | **21** |  **22** |  **31** |  **32** | **33** | **34** | **35** | **36** | **37** | **38****\*** | **39****\*** | **40** | **41****\*** |
|  **AR025** | 16 Apr 2018 | 11 May2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **AR026** | 30 Apr2018 | 06 Jul2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **AR027** | 16 Jul2018 | 10 Aug2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **AR028** | 24 Sep2018 | 19 Oct2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **AR029** | 19 Nov2018 | 25 Jan2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **AR030** | 21 Jan2019 | 15 Feb 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Please note that these samples are not currently within the scope of LGC’s UKAS accreditation.

|  |  |
| --- | --- |
|  | Not available |
| **1** | Please indicate the number of samples required in the relevant boxes above |

**For details on the full technical specification of the scheme please refer to the AIR Scheme Description. The scheme description is available** [**here**](https://www.lgcstandards.com/DE/en/Proficiency-Testing/Water-and-Environmental-Schemes/Air-Stack-Emissions-AIR-PT-/cat/244687)**.**

**Workplace Air**

|  |  |  |
| --- | --- | --- |
| **Sample** | **Analytes** | **Test Material** |
| **1**#Metals\*\* | Cadmium; Chromium; Cobalt; Copper; Iron; Manganese; Nickel; Lead; Zinc | 4 x spiked membrane filters 25mm Ø  |
| **1A**##Metals\*\* | Cadmium; Chromium; Cobalt; Copper; Iron; Manganese; Nickel; Lead; Zinc | 4 x spiked cassette capsules 37mm Ø  |
| **2X - XRD**Quartz | Respirable grade quartz by XRD | 4 x dynamically loaded PVC GLA5000 filters 25mm Ø  |
| **2F - FTIR**Quartz | Respirable grade quartz by FTIR | 4 x dynamically loaded PVC GLA5000 filters 25mm Ø  |
| **3**\*\*\*Dust | Dust by gravimetry (mass of solids) | 4 x spiked glass fibre filters 25mm Ø |
| **4**\*\*\*Dust | Dust by gravimetry (mass of solids) | 4 x spiked glass fibre filters 37mm Ø |
| **5**VOCs | Benzene; Toluene; Xylene; Ethyl benzene  | 4 x dynamically loaded charcoal sorbent tubes(workplace air levels) |
| **6**VOCs | 1,1,1-Trichloroethane; n-Hexane; n-Butyl acetate; Tetrachloroethene, Trichloroethylene | 4 x dynamically loaded charcoal sorbent tubes(workplace air levels) |
| **7**VOCs | Benzene; Toluene; Xylene; Ethyl benzene | 4 x dynamically loaded Tenax thermal desorption tubes (workplace air levels) |
| **8**Aldehydes | Formaldehyde, Acetaldehyde | 4 x spiked glass fibre filters 25mm Ø |
| **9**Cr (VI) | Chromium (VI) | 4 x spiked NaOH treated Millipore PVDF filters25mm Ø |
| **10A**##Metals**\*\*\*\*** | Chromium, Cobalt, Copper, Iron, Manganese, Nickel, Zinc  | 1 x bulk welding fume sample |
| **10B**##Lead | Lead | 1 x bulk lead-containing dust sample  |
| **10C**##Metals**\*\*\*\*** | Cadmium, Chromium, Cobalt, Copper, Iron, Manganese, Nickel, Lead, Zinc | 1 x bulk metal ore/refinery dust sample  |
| **15**##Lactose | Lactose (surrogate particle tracer) | 4 x spiked glass fibre filters 25mm Ø  |
| **16**## Diesel fume | Elemental carbon | 4 x spiked quartz fibre filters 25mm Ø  |
| **NEW 18##**Beryllium | Beryllium | 4 x spiked mixed cellulose ester filter 37mm Ø |

#For sample 1, the manganese measurand is not currently included in LGC’s UKAS scope of accreditation.

##Samples 1A, 10A, 10B, 10C, 15, 16 and 18 are not included in LGC’s UKAS scope of accreditation.

**\*\*** For sample 1/1A, four of the above elements will be included in each round.

**\*\*\***Filters are despatched to participants in order for them to weigh and then should be returned to LGC Standards Bury for
 spiking. LGC Standards Bury then re-send the spiked filters back to the participants for reweighing. Please see page 4
 for further details.

\*\*\*\*For samples 10A and 10C, one or more of the above elements will be included in each round.

**Indoor/Chamber Air**

|  |  |  |
| --- | --- | --- |
| **Sample** | **Analytes** | **Test Material** |
| **21**VOCs (Material Emission Testing) | Benzene; n-Hexane; Toluene; Butyl acetate; MIBK; Cyclohexanone; p-Xylene; a-Pinene; Phenol; 124-TMB; Limonene; 4-PCH; Dodecane | 4 x dynamically loaded Tenax thermal desorption tubes at chamber air levels |
| **22**##VOCs (Qualitative determination) | Qualitative determination of VOCs including alcohol, aliphatic, aromatic, ester, halocarbon and terpene compounds | 2 x dynamically loaded Tenax thermal desorption tubes at chamber air levels |

##See Appendix B in the AIR PT Scheme Description for compound listing.

**Ambient Air**

|  |  |  |
| --- | --- | --- |
| **Sample** | **Analytes** | **Test Material** |
| **11**NO2 | Nitrogen dioxide (as nitrite) | 4 x dynamically loaded Palmes type diffusion tubes |
| **12**VOCs | Benzene; Toluene; Xylene; Ethyl benzene | 4 x dynamically loaded Tenax thermal desorption tubes (ambient air levels) |
| **12A**##VOCs | Benzene; Toluene; Xylene; Ethyl benzene | 4 x dynamically loaded Carbopack thermal desorption tubes (ambient air levels) |
| **13**##Metals | Cadmium; Nickel; Lead; Arsenic | 4 x spiked quartz fibre filters 47mm Ø |
| **14**##Anions on filters | Chloride, Nitrate, Sulfate | 4 x spiked quartz fibre filters 47mm Ø |
| **17**##Dust\*\* | Dust by gravimetry (mass of solids) | 4 x spiked quartz fibre filters 47mm Ø |

##Sample 12A, 14 & 17 are not included in LGC’s UKAS scope of accreditation.

**\*\***Filters are despatched to participants in order for them to weigh and then should be returned to LGC Standards Bury for spiking. LGC Standards Bury then re-send the spiked filters back to the participants for reweighing. Please see page 4 for further details.

**Stack Emissions**

|  |  |  |
| --- | --- | --- |
| **Sample** | **Analytes** | **Test Material** |
| **31**Mercury | Volume; Mercury | 1 x potassium permanganate & sulfuric acid impinger solution containing mercury |
| **32**Mercury | Volume; Mercury | 1 or 2 x Potassium dichromate & nitric acid impinger solution containing mercury |
| **33**Metals | **AR025** – Volume; As; Cd; Cr; Pb; Ni; V**AR027** – Volume; Sb; Cd; Co; Cu; Mn; Ti**AR028** – Volume; As; Cr; Cu; Pb; Ni; V**AR030** – Volume; Sb; Cd; Co; Mn; Ti; V | 1 x nitric acid impinger solution containing up to 6 trace metals |
| **34**Sulfur dioxide | Volume; Sulfur dioxide | 1 x hydrogen peroxide impinger solution containing SO2  |
| **35**Hydrogen fluoride | Volume; Hydrogen fluoride | 1 x sodium hydroxide impinger solution containing HF  |
| **36**Hydrogen chloride | Volume; Hydrogen chloride | 1 x aqueous impinger solution containing hydrogen chloride |
| **37**Ammonia | Volume; Ammonia | 1 x sulfuric acid impinger solution containing ammonia |
| **38**##Metals | **AR025** – Sb; Cd; Co; Cu; Mn; Ti**AR027** – As; Cd; Cr; Pb; Ni; V**AR028** – Sb; Cd; Cr; Co; Mn; Ti**AR030** – As; Cr; Cu; Pb; Ni; V | 1 x quartz filter spiked with up to 6 trace elements and fly ash47mm Ø |
| **39**##Dust analysis (solution) | Total solids | 1 x rinsing solution containing dissolved and suspended solids |
| ##Samples 38 and 39 are not included in LGC Standards’ UKAS scope of accreditation. |
|  |  |  |
|  |  |  |
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| **Sample** | **Analytes** | **Test Material** |
| **40**Dust analysis (filter)\*\* | Dust analysis (mass of solids) | 4 x spiked quartz filters47 mm Ø |
| **41**##NOX | Volume; Nitrogen oxides (determined as NO2) | 2 x variable volume 4% m/m potassium permanganate/2% m/m sodium hydroxide impinger solution containing potassium nitrate |

##Sample 41 is not included in LGC Standards’ UKAS scope of accreditation.

**\*\*** Please see below for further details.

**Dust Filter Samples (3, 4, 17 and 40) Distribution Schedule**

For the dust filter samples (3, 4, 17 and 40), four quartz filters are despatched to participants in order for them to weigh. Participants then ship the filters back to LGC Standards Bury for spiking. LGC Standards Bury re-send the spiked filters back to the participants for reweighing who then report the results (initial value; reweighing value; calculated difference) to LGC Standards Bury via PORTAL for assessment. Dust filter sample specific dates:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Round** | **Despatch Date (week commencing)** | **Filters required back at LGC by** | **Filters re-despatch date (week commencing)** | **Reporting Deadline** |
| **AR026** | 30 Apr 2018 | 25 May 2018 | 18 Jun 2018 | 06 Jul 2018 |
| **AR029** | 19 Nov 2018 | 07 Dec 2018 | 07 Jan 2019 | 25 Jan 2019 |

**For details on the full technical specification of the scheme please refer to the AIR Scheme Description.
The scheme description is available** [**here**](https://www.lgcstandards.com/DE/en/Proficiency-Testing/Water-and-Environmental-Schemes/Air-Stack-Emissions-AIR-PT-/cat/244687)**.**

Please fill in your address details below:

|  |  |
| --- | --- |
| **Send Test Materials to:** | **Send Invoices to:** |
| Contact name: | Contact name: |
| Department: | Department: |
| Company: | Company: |
| Address: | Address: |
|  |  |
| Town/City: | Town/City: |
| Post/Zip Code: | Post/Zip Code: |
| Country: | Country: |
| Tel: | Tel: |
| Fax: | Fax: |
| Email: | Email: |
| Customer Number (optional): | VAT no: |
|  |  |
| **Send Report Notifications to:** | \*An email will be sent to this address to notify when the report is available to download from PORTAL, the online reporting system |
| Contact name: |
| Email\*: |

Returning customer Lab ID (optional):

Purchase order no. (optional):

For additional information and costs, please contact Customer Services by email:

sales.eu@lgcgroup.com [EU customers] or global.sales@lgcgroup.com [non-EU customers]
or by telephone: +49 (0)281 9887 250.

**Extra sample costs**

For additional samples per round please state clearly the number of samples, the sample type(s) and the rounds below.

* Additional (or repeat) samples for samples 7, 12, 12A, 21 and 22 (those with Tenax thermal desorption tubes) may be purchased but will be charged at full price (prices indicated on pages 1-3). See note below – returning tube requirements.
* Additional samples for the filter samples 3, 4, 17 and 40 may be purchased but will be charged at full price (prices indicated on pages 1-3); however, repeat samples (after the reporting deadline) cannot be purchased.
* Additional (or repeat) samples for samples 1, 1A, 5, 6, 13 and 18 may be purchased.
* Additional samples for samples 8, 9, 10A, 10B, 10C, 14, 15 and 16 may be purchased; however, repeat samples (after the reporting deadline) cannot be purchased. Samples 8, 9, 14, 15 and 16 should not be used after the reporting deadline.
* Additional (or repeat) samples for Stack emission samples 31-39 and 41 may be purchased.
* Additional (or repeat) samples for samples 2 and 11 are not available at this time.

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Please note:

* This scheme is managed and operated by LGC Standards and is supported through technical advice from HSL. LGC is the accredited PT provider of this scheme.
* Thermal desorption tubes used in samples 7, 12, 12A, 21 and 22 are the PerkinElmer type (6.4mm OD, 5 mm ID and 90 mm long); however, it may be possible to also accommodate Gerstel 6mm OD, 4 mm ID and 178 mm long. Please contact LGC Standards Proficiency Testing for further details.
* Thermal desorption tubes must be returned at the participant’s cost to LGC Standards within 2 months after receipt (including additional or repeat samples). Failure to do so will result in an additional charge per sample set being made to replace the tubes.
* When returning thermal desorption tubes, please label the parcels with the supplied label “Returned Sample tubes for laboratory proficiency testing – no commercial value” and declare a “nominal value of £1 / $1 / €1”. Failure to do so could result in any incurred excise / importation fee being passed onto the participant.
* All prices stated are exclusive of VAT and carriage.
* VAT is payable (at the prevailing rate) by all participants based in the European Union if a VAT Registration Number is not provided.
* All courier charges set by LGC Standards do not include local import charges, taxes (etc.), which will be covered by the participant.
* Participants will pay an additional fee to cover courier charges. Please contact LGC Standards for current charges.
* Do not send remittance with this form, you will be invoiced subsequently for the full year’s participation.
* No refunds will be given for failure to take part in any round of the PT scheme or for cancellation of rounds that have already been invoiced.
* LGC Standards reserves the right to not send samples or the report for previous samples to any participant that has not paid their subscriptions within the terms stated on the invoice.
* LGC Standards cannot guarantee the number of participants that will return results for any particular round.
* The prices stated are for reporting results and receiving reports electronically via PORTAL (internet reporting). If alternative data entry or reporting methods are required, further charges apply. Please contact LGC Standards for the current charges.
* By signing this application form, you are agreeing to comply by LGC Standards' Standard Terms and Conditions for the Supply of Laboratory Quality Products and Services and the AIR PT scheme specific requirements noted above.

LGC Standards would like to be able to contact you from time to time with information about the LGC Group, its activities, products and services. By completing and returning this form to us, you agree to your personal information being used by LGC Standards and other members of the LGC Group for the administration and provision of our products and services and for related marketing activities. You can change your marketing preferences at any time by emailing sales.eu@lgcgroup.com [EU customers] or global.sales@lgcgroup.com [non-EU customers].

Signature ……………………………………… Date …………………………