

Supplement Table 1 Air monitoring of different workshops and jobs in the ferro-Mn alloy production plant in 2017.

| Branch | Workshop | Job title | Number |
|--------------------------|--------------------------|----------------------|--------|
| Smelting branch | Smelting workshop No.1 | Material worker | 3 |
| | | Furnace face worker | 3 |
| | | Electrician | 3 |
| | | Scaleman | 3 |
| | | Craneman of casting | 3 |
| | | Furnaceman | 3 |
| | | Dedusting workers | 3 |
| | Smelting workshop No.2 | Material workers | 3 |
| | | Furnace face worker | 3 |
| | | Electrician | 3 |
| | | Scaleman | 3 |
| | | Craneman of casting | 3 |
| | | Furnaceman | 3 |
| | | Dedusting workers | 3 |
| | Smelting workshop No.3 | Craneman of material | 3 |
| | | Material workers | 3 |
| | | Furnace face worker | 3 |
| | | Electrician | 3 |
| | | Scaleman | 3 |
| | | Craneman of casting | 3 |
| | | Furnaceman | 3 |
| Smelting workshop No.4 | Furnace face worker | 3 | |
| | Electrician | 3 | |
| | Scaleman | 3 | |
| | Craneman of casting | 3 | |
| | Furnaceman | 3 | |
| | Dedusting workers | 3 | |
| The maintenance workshop | Welder | 3 | |
| | Fitter | 3 | |
| Logistics branch | The maintenance workshop | Welder | 3 |
| | | Fitter | 3 |

| | | | |
|--------|----------------------------|-----------------------|-----|
| | Raw material workshop | Sieving workers | 3 |
| | | Plugman | 3 |
| | Testing laboratory | Chemical analyst | 3 |
| | | Sampleman (stokehole) | 3 |
| | | Sampleman (material) | 3 |
| | Finished products workshop | Human crushing worker | 8 |
| | | Loading workmen | 2 |
| Others | Outside the office | Administration staff | 3 |
| | Inside the office | Administration staff | 3 |
| | Staff Dining Hall | Cook | 3 |
| | Switching room | Blank control group | 5 |
| <hr/> | | | |
| | Total | | 135 |
| <hr/> | | | |