## Section A: Industry Information

| | | |
|---|---|---|
| A1. | **Start Time | \|___\|___\|hrs\|___\|___\|mins |
| A2. | **Date (DD/MM/YYYY) | \|___\|___\|/\|___\|___\|/ 20\|___\|___\| |
| A3. | **Industry ID | GJS____\|___\|___\| |
| | *Display Prefilled Industry Information* | |
| | Industry Name | *industry_name* |
| | Industry Address | Industry_address |
| | Cluster | *cluster* |
| | GPCB ID | *gpcb_id* |
| A4. | Is this information correct? | □ Yes<br>□ No, Re-enter prefilled industry information |

## Section B: Survey Information

| | | | | |
|---|---|---|---|---|
| B1. | Surveyor Name | | Surveyor Code (calc field) | ___\|___\| |
| B2. | Supervisor name | | Supervisor Code (calc field) | ___\|___\| |
| B3. | Total number of respondents Present | [numeric field] | | |

| | | Name | Designation | Contact Number |
|---|---|---|---|---|
| B4. | Industry respondents (Please enter the name and contact details of any industry employees that answered questions) | | | |
| | | | | |

| | | | |
|---|---|---|---|
| B5. | Environmental Lab | Lab Name | □ S. K. Mitra<br>□ Bhagwati |
| | | Lab Code | |
| | | Representative Name | |
| | | Contact Number | |

## Section C: Technical Details

*Note: This section consists of information pertaining to industry stack characteristics.*

| | Composite ID | Dropdown menu |
|---|---|---|
| C1 | Stack Diameter | \|_____\| Meter |
| C2 | Number of parallel chains | \|_____\| |

| | Parallel Chain Module: Fill out for every parallel chain in the stack *(to be repeated "C3" number of times)* | |
|---|---|---|
| C2.1 | What is the emission source? | 1. ☐ Boiler<br>2. ☐ Thermo-Pack/Thermic Fluid Heater<br>3. ☐ HAG |
| C2.2 | How many components in the parallel chain? | \|_____\| |
| | *(C2.3 to C2.4 To be repeated "C2.2" number of times)* | |
| C2.3 | What is the 1st component in the parallel chain? | 1. ☐ Air pre-heater<br>2. ☐ Water pre-heater/economizer<br>3. ☐ Cyclone<br>4. ☐ Scrubber<br>5. ☐ Bag Filter<br>6. ☐ ESP<br>7. ☐ FD/ID Fan |
| C2.4 | Is this component common to the previous parallel chain? | ☐ Yes<br>☐ No |
| C3 | Type of Boiler | 1. ☐ Fire Tube<br>2. ☐ Water Tube<br>3. ☐ Packaged Boiler/Smoke cum water tube boiler<br>4. ☐ Others *(specify)*: _____ |
| C4 | Steam Generating Capacity | \|_____\| TPH |
| C5 | Average working load | |
| C6 | Boiler Steam Pressure | \|_____\|    ☐KPa<br>☐BAR<br>☐kg/cm$^2$<br>☐**Other** |
| C7 | Feed Water Temperature | \|_____\| °C |
| C8 | Fuel Firing Rate | \|_____\| kg/hr |
| C9 | Secondary Check (Excel) | ☐ Normal<br>☐ Abnormal |

# Section D: Iso-kinetic Sampling Module

| D1 | Checked all Lab Equipment? | ☐ Yes<br>☐ No, read note |
|---|---|---|
| | Note: If no, supervisor to contact lab team and check all sampling equipment. | |

| D2 | Any Equipment missing? | □ Yes *(specify)*: _____<br>□ No |
|---|---|---|
| D3 | Total No. of Sample Collected | |_____| |
| | *(To be repeated "D3" number of times)* | |
| D3.1 | Sample Start Time | |___|___|hrs|___|___|mins |
| D3.2 | Sample End Time | |___|___|hrs|___|___|mins |
| D3.3 | DGM Start Reading | |_____| |
| D3.4 | DGM End Reading | |_____| |
| D3.5 | LPM Set by Lab | |_____| |
| D3.6 | Flue Gas Temperature | |_____|°C |
| D3.7 | Ambient Temperature | |_____|°C |
| D3.8 | Atmospheric Pressure | |_____|mb |
| D3.9 | Relative Humidity | |_____|% |
| D3.10 | Dry Bulb Temperature | |_____|°C |
| D3.11 | Do you have any comments? | |

## Section E: Fly Ash Sampling Module
### *(to be displayed only when Boiler is selected in C2.1)*

| E1 | Sample Start Time | |___|___|hrs|___|___|mins |
|---|---|---|
| E2 | Sample End Time | |___|___|hrs|___|___|mins |
| E3 | Fly Ash Collection location | 1.  □ Air pre-heater<br>2.  □ Water pre-heater/economizer<br>3.  □ Cyclone<br>4.  □ Scrubber<br>5.  □ Bag Filter<br>6.  □ ESP<br>7.  □ Stack<br>8.  □ *No Sample Collected, skip to question E6* |
| E4 | Weight of Sample Collected | _____     □gm<br>□ kg |
| E5 | Is the Fly Ash Sample given to the Lab Representative? | □ Yes<br>□ No*, (specify)*: _____ |
| E6 | Do you have any comments? | |

## Section F: Bottom Ash Sampling Module

| | | |
|---|---|---|
| *(to be displayed only when Boiler is selected in C2.1)* |
| F1 | **Sample Start Time** | \|___\|___\|hrs\|___\|___\|mins |
| F2 | **Sample End Time** | \|___\|___\|hrs\|___\|___\|mins |
| F3 | **Bottom Ash Collection location** | 1. □ Air pre-heater<br>2. □ Water pre-heater/economizer<br>3. □ Cyclone<br>4. □ Scrubber<br>5. □ Bag Filter<br>6. *□ ESP*<br>7. *□ No Sample Collected,* skip to F6 |
| F4 | **Weight of Sample Collected** | □ gm<br>□ kg |
| F5 | **Is the Bottom Ash Sample given to the Lab Representative?** | □ Yes<br>□ No*, (specify)*: _____ |
| F6 | **Do you have any comments?** | |

| | | |
|---|---|---|
| # Section G: Flue Gas Sampling Module<br>*(to be displayed only when Boiler is selected in C2.1)* |
| G1 | **Sample Start Time** | \|___\|___\|hrs\|___\|___\|mins |
| G2 | **Sample End Time** | \|___\|___\|hrs\|___\|___\|mins |
| G3 | **Flue Gas Collection Location** | 1. Boiler Outler<br>2. APH Outlet<br>3. Cyclone<br>4. Other, specify _____<br>5. No sample collected, skip to G5 |
| G4 | **Gas Composition Reading** | 1. O2% : _____<br>2. CO2% : _____<br>3. CO% : _____<br>4. Excess Air % : _____<br>5. Flue Gas Temperature °**C**: _____ |
| G5 | **Do you have any comments?** | |

| | | |
|---|---|---|
| # Section H: Fuel Sampling Module<br>*(to be displayed only when Boiler is selected in C2.1)* |
| H1 | **Sample Fuel Type** | □ Coal (Indian); Specify Grade _____<br>□ Coal (Imported); Specify Country _____<br>□ Coke<br>□ Lignite<br>□ Pet Coke<br>□ Other Solid Fuel (specify): _____<br>□ Wood<br>□ Bagasse<br>□ Rice Husk |

| | | □ Other Biomass (specify): _____<br>□Mix Indian + Imported Coal<br>□ Mix Indian Coal + Wood<br>□ Mix Lignite + Wood<br>□ Mix Imported coal + lignite<br>□ Don't know<br>□ *No sample collected, skip to H4* |
|---|---|---|
| H2 | **Weight of Sample Collected** | □ gm<br>□ kg |
| H3 | **Is the Fuel Sample given to the Lab Representative?** | □ Yes<br>□ No*, (specify)*: _____ |
| H4 | **Do you have any comments?** | |

## Section I: Recheck Module

| | | |
|---|---|---|
| I1 | **Which Sample collected and handed over to the lab** | 1. □ Iso-kinetic Samples<br>2. □ Fly Ash Samples<br>3. □ Bottom Ash Samples<br>4. □ Flue Gas Samples<br>5. □ Fuel Samples |

## Section J: Survey Notes

| | | |
|---|---|---|
| J1. | **\*\*End Time** | \|___\|___\|hrs\|___\|___\|mins |
| J2. | **How many people were present at the time of the interview?** | \|___\|___\| |
| J3. | **Are you satisfied with the answers given by the respondent(s)?** | □ Yes<br>□ No |
| J4. | **Do you have any other comments?** | |
| J5. | **\*\*Survey Status Code** | *1. □ SS01– Complete*<br>*2. □ SS02– Partially Complete*<br>*3. □ SS03– Respondent Unavailable*<br>*4. □ SS04 – Industry Temporarily Closed*<br>*5. □ SS05– Industry Permanently Closed*<br>*6. □ SS06– Did Not Consent*<br>*7. □ SS07– Refused to Complete Survey* |