

| NO | ACTION | DUE DATE* |
|---|---|---|
| Management Systems and Assessment | | |
| 1 | <ul style="list-style-type: none"> a. Undertake a review of permits required for both the existing and the new production lines and update permits as necessary b. Designate a suitably qualified person as Environmental, Health and Safety (EHS) coordinator to manage implementation of EHS management systems and other aspects of EHS performance in compliance with local requirements and IFC's Performance Standards on environmental and social sustainability. c. Establish EHS management systems for glass manufacturing operations incorporating IFC's Performance Standards and local EHS requirements that are capable of certification compliant with internationally recognized management system standards. | <p>End 2011</p> <p>End 2011</p> <p>End 2014</p> |
| Labor and Working Conditions | | |
| 2 | Review human resources policy and procedures, establish a formal grievance procedure for the employees and ensure that all IFC's Performance Standard 2 requirements are incorporated into documented policy and procedures. | End 2012 |
| 3 | <ul style="list-style-type: none"> a. Undertake systematic, documented occupational health and safety risk assessments and develop protective measures to improve workplace safety, implementing engineering controls wherever applicable. b. Develop regular health and safety inspections at the workplaces and enforce usage of appropriate personal protective equipment. c. Establish formal lock-out / tag-out and work permit procedures for hazardous tasks to cover both routine and non-routine works on manufacturing and auxiliary equipment, chemical and energy lines and other operations presenting high risk such as confined space entry, work at height, hot work etc., involving both staff and contractors. | <p>End 2012</p> <p>End 2011</p> <p>Mid 2012</p> |
| 4 | <ul style="list-style-type: none"> a. Install containment at raw materials storage and batch areas with priority to the conveyor systems to minimize particulate matter emissions. b. As planned, improve ventilation at workplaces close to the furnace area. | <p>Mid 2012</p> <p>Mid 2012</p> |
| 5 | <ul style="list-style-type: none"> a. Commission a qualified professional to review fire detection and suppression systems, and emergency egress, lighting and signage at all buildings. b. Implement recommendations from the review process. | <p>Mid 2012</p> <p>End 2012</p> |
| 6 | Develop documented preventive maintenance program and register for all buildings, utilities, treatment systems and safety critical equipment. Define control frequencies by certified professionals. All preventive maintenance activities will be recorded. | Mid 2012 |
| Pollution Prevention and Abatement / Resource Conservation | | |
| 7 | <ul style="list-style-type: none"> a. Establish a point source air emissions monitoring program applying to all furnace exhaust stacks of GC Prim and GCC to cover all applicable parameters in line with the WBG Glass EHS Guidelines, in addition to local regulations. This will include continuous monitoring for NOx and particular matter, and periodic testing as indicated by batch composition for heavy metals. b. If monitoring shows heavy metals are present in furnace emissions, then install filtration | <p>End 2012</p> <p>End 2012</p> |

| | | |
|----|---|---|
| | <p>equipment to reduce heavy metal emissions to the lower of WBG Guideline or local regulatory values, unless elimination of heavy metals from the batch composition is made possible as per Action Item 10.</p> <p>c. Review ambient air monitoring programs conducted locally and ensure that the monitoring points are appropriately located, samples are taken in adequate number and duration, all relevant parameters are measured and results interpreted in line with the internationally agreed standards.</p> <p>d. Implement a step by step reduction program for air emissions (NOx and particulate matter in priority) from existing furnaces of GC Prim and GCC through primary control measures. First step to be to control NOx to less than 1,200 mg/Nm³ and particulate matter to less than 100 mg/Nm³ by the end of 2014 unless more stringent requirements are imposed by regulatory authorities earlier and/or the receiving capacity of ambient air has decreased.</p> <p>e. At the conclusion of step (d) above, and using the ambient air quality data arising from action (c) and point source emissions data from action (a) prepare an air emissions dispersion and ambient air quality model, using an internationally recognized model, to determine the need if any for additional air emissions controls. If further controls are needed, agree a timeline for implementation with IFC.</p> <p>f. If indicated by step (e) and in addition to step (d), introduce as necessary, secondary control mechanisms for particulate matter and NOx to the GC Prim furnace, at the next cold repair, expected to be in 2019. If successful, plan for the implementation of similar upgrades at the GCC furnace during its following cold repair.</p> | <p>End 2013</p> <p>End 2014</p> <p>End 2014</p> <p>End 2019</p> |
| 8 | Establish formally documented hazardous and non-hazardous waste management procedures. | End 2012 |
| 9 | Establish monitoring program for liquid effluents in line with the IFC/WBG requirements. | End 2012 |
| 10 | Conduct a study for the utilization of alternatives to the lead oxide and other heavy metals in the batch composition and develop lead free glass technology for the manufacturing operations. | End 2012 |