Position: Environmental Specialist – Pollution Management and Environmental Health (PMEH) Environmental Management Planning (EMP)

Grade: GF  
Duration: 2 Years Term  
Location: Washington DC

BACKGROUND/GENERAL DESCRIPTION:

Sustainable environment and natural resources management (ENRM) is at the heart of the WBG's poverty agenda. Biodiversity and natural resources constitute the social safety net of the poor, representing a food bank and often their only source of livelihood. Sustainable ENRM promotes a green, clean, and resilient world where natural resources – from forests to fisheries, freshwater, oceans, coastal zones and ecosystems – are managed to support livelihoods and strong economies. Sustainable ENRM builds a world better prepared for shocks and global challenges, helping countries limit their exposure to resource scarcity, more-volatile weather patterns, and the long-term consequences of climate change.

The Environment & Natural Resources (ENR) Global Practice (GP) has been set-up to deliver on the opportunities, benefits and outcomes offered by enhanced management of the environment and natural resources. The ENR GP has close to 300 operations under management, representing close to $7 billion, and a growing pipeline of new investments under active development. The practice consists of some 300+ staff across the world plus numerous other staff in other Practices and Cross Cutting Solution Area (CCSAs) that are professionally associated with it.

The ENR GP has three broad and distinct functions:

1) Provides clients with lending and non-lending services aimed to support the GP’s three core business lines, namely: (i) Forests, Watersheds and Sustainable Landscapes; (ii) Marine, Coastal and Aquatic Resources; and (iii) Pollution Management and Environmental Health. The GP’s activities also include a focus on Clean and Resilient Growth through its work on environmental economics and support to institutional development.

2) Supports effective environmental risk management and sustainability by managing risk at the project level and creating opportunities to advance sustainable development, in part through the implementation of the Bank’s environmental policies.

3) Works closely with other sectors, including through leveraging GEF grant financing, to mainstream environmental considerations into their policies, strategies, and operations.

The World Bank ENR GP established a Pollution Management and Environmental Health (PMEH) business line supported by a Multi-Donor Trust Fund (MDTF) in 2015. The program is made up of the following parts (see annex 1): (i) three operational components focusing on Air Quality Management Planning (AQMP), Contaminated and Toxic Sites Management (CTSM), and Integrated Solid Waste Management (ISWM) including Land-based Pollution Management to protect the Marine Environment (LBPM-ME); (ii) one underlying research component filling knowledge gaps in the fields of AQM, CTSM, and ISWM including LBPM to protect the ME as well as other interlinked PMEH subjects (like increased city competitiveness through improved PMEH); (iii) one awareness and dissemination component to
ensure broad PMEH knowledge among political and financial decision makers and the public at large; and (iv) one administration and development component of the PMEH program. All the components are technically linked to each other (see attachment).

**Geographic Context**

The program is initially designed for 6 years’ implementation (2015 – 2020)\(^1\) focusing on the locations in developing countries with most severe PMEH challenges. For AQMP, the program started out with a focus on China (i.e. Beijing, Tianjin, Hebei and surrounding provinces defined as the “expanded Jingjinji” region), India (ongoing dialogues with GoI to engage the National Capital Region – NCR, including Delhi), Egypt (Cairo), Ghana (Accra), Nigeria (Lagos), South Africa (Johannesburg) and Vietnam (larger Hanoi Metropolitan Area) as well as other selected countries and urban areas in particularly Sub-Saharan Africa (SSA) and possibly in the South Asia region (SAR).

In each of these locations, the program plan is to undertake PMEH-designed full-scale AQMP including determining the air pollution sources, air pollution concentrations (particularly fine particulate matter/PM), determining the health impacts, and the most cost effective abatement options (see annex 2). In several countries/cities, the intention is that PMEH-supported AQMPs will also develop lending proposals (either programmatic or traditional investment) for the clients to ensure actual implementation of cost effective abatement options developed as part of the AQMP process.\(^2\)

For the other components, the main geographic focus for CTSM is so far on West Africa (Nigeria and Ghana), East Africa (Tanzania), SAR region (Bangladesh and Pakistan) and China while other countries from for example Fragile, Vulnerable and Conflict (FVC) areas may also be considered. For the CTSM component, main focused area is South East Asia (China, Indonesia, Vietnam/Cambodia and the Philippines) due to its large solid waste accumulation.

**DUTIES AND ACCOUNTABILITIES:**

The ENR GP is seeking to recruit an Environmental Specialist to be based in the World Bank Office in Washington DC. Under the overall coordination by the practice manager for the global program activities within the ENR GP and the Program Manager for the PMEH MDTF program, the primary responsibility of the Environmental Specialist will be to provide technical support to the PMEH program primarily focusing on the AQM component and implementation of the PMEH AQM framework (annex 2), but also when needed provide assistance with other component activities within the PMEH program, like development of EMP templates and practices for the CTSM and ISWM components and coordination of underlying PMEH research.

The Environment Specialist will have the following responsibilities based on an annual objective agreement:

- Support and coordinate activities within the AQM component of the PMEH program particularly focusing on global coordination, but also support regional and country-focused

---

\(^1\) Actions are already initiated with selected stakeholders to extend the program to the end of 2022.

\(^2\) This is already developed through a Project for Result (P4R) lending project (i.e. programmatic lending) on AQM in Hebei province, China and support to the Developing Finance Project (DPF) on Climate Change and Green Growth in Vietnam.
coordination in close collaboration with WB regions (e.g. EAP, SAR, MENA and AFR) and country offices (COs) and country management units (CMUs).

- Based upon the AQMP template developed through the PMEH program and together with the PMEH Secretariat team to carry out PMEH secretariat functions in the AQMP process.\(^3\) This includes possible support to each of the work packages (WP) in the AQM template (annex 2), including, for example, in the design and implementation of monitoring and sampling (WPs 2 and 3), modeling (particularly WPs 5 and 8), emission inventory establishment and health impact assessment (WPs 4 and 6) and the overall AQMP finalization, including design and implementation of policy reforms linked to the abatement options outlined in the AQMPs (WP 9).

- Work closely with both international, national and local experts to further develop the overall understanding of AQMP and how the information can be best used to support client countries and cities while also ensuring that the clients (implementing countries and cities) are receiving state of the art technical support through the PMEH program.

- Based upon the AQMP framework, work with WB country offices and the regions to ensure the clients (implementing countries and cities) are fully engaged/informed and can carry out their functions as part of the AQMP process including the design, installation, operation and maintenance of air quality monitoring networks.

- In collaboration with COs and PMEH Secretariat colleagues, ensure that the leading technical experts for each of the WPs in the AQM template are identified and assigned to the program.\(^4\)

- Work on ensuring that PMEH engaging countries and cities are working closely together on AQMP, including sharing PMEH knowledge and experiences and assisting each other in each of the relevant WPs as part of the AQM template (annex 2). In addition, ensure that needed international expertise are assigned to support the South/South Collaboration (SSC) process between PMEH member countries/cities work on AQMP.

- Assist in the development of World Bank lending and investment proposals (either programmatic or traditional investment lending) that are, preferably grounded in technical assistance activities through the PMEH program (e.g. through the development of AQMPs).

- Develop AQMP knowledge from relevant sources (both globally and locally) and transcribe the knowledge into knowledge products that are being well understood and adopted by the clients/PMEH implementing countries.

- Develop and provide relevant information that may be needed for new countries to be engaged in AQMP (particularly in SSA and SAR regions), when preparation and development of the initially 7 cities & city agglomerations are well established.

- Arrange national, regional and global PMEH events that ensure that information and experiences are being cross fertilized between the countries and cities.

- Manage/coordinate PMEH research particularly related to AQMP, including research that further explains the understanding of the source contributions to air pollution.

---

\(^3\) These are initially defined in the Global Concept Note for the AQM component of the PMEH program.

\(^4\) The individual will be working with an established international network of AQM experts.
concentrations, their health effects as well as and integration of Short-lived Climate Pollutant (SLCP) and possibly Greenhouse Gas (GHG) inventories into the AQMP.

- Participates in the overall coordination of the PMEH program and, when needed, also support the development and implementation of the other components in the PMEH program (i.e. CTSM and ISWM/LBPM-EM). This can also involve development and application of environmental management planning schemes like what has been developed for the AQM component (figure 2).

- Support multi-sector pollution management (MSPM) development within the PMEH program, that may, for example, integrate the 3 components of AQMP, CTSM and ISWM. May apply Geographic Information System (GIS) tools to support the MSPM development.

- Support other activities and programs of ENR GP in one or more of its business lines as needed. The selected candidate should be willing and able to travel to other countries within and outside the PMEH geographic focus, including for training, as needed.

**SELECTION CRITERIA (FOR GF POSITION):**

- A high level of motivation and enthusiasm for EMP, including AQMP and a demonstrated vision for the relevance and criticality of EMP and AQMP in particular for selected developing countries and their urban areas and what the PMEH program can do about this.

- A PHD or Master’s level education in environmental sciences, engineering or other relevant disciplines relevant for PMEH and particularly EMP, including AQMP (e.g. environmental science, chemistry, medicine/epidemiology, econometric).

- A minimum of 5 years of relevant experience in EMP, including AQMP and/or other relevant environmental management subjects (e.g. land and water pollution), including the preparation and/or environmental management plans, capacity assessment and institutional strengthening, public consultation plans, or other related project environmental plans/studies.

- Expertise and experience in application of the PMEH AQM Framework in low and middle income countries.

- A good understanding of the key aspects of EMP, including AQMP, including analyses of pollution sources, air quality monitoring technologies, how health impacts from air pollution concentrations are being estimated, how cost effective abatement options are being determined and some understanding of how AQM models are being applied.

- A proven track record of being efficient and result oriented while at the same time being a solid team player who prioritizes the interest of the team and the organization and ability to exercise sound judgments in a work environment with tight processing constraints.

- A proven track record of working with partners in developing countries, particularly in mastering dialogues related to demanding and complex issues related to their development and environment. Being sensitive to political and cultural conditions relevant to the PMEH program in implementing countries.

- Having the necessary expertise to inform the dialogue with developing countries on the synergistic opportunities to address local pollutants, short lived climate pollutants (SLCPs) and Green House Gas (GHG) as part of AQMP.
• Comprehensive understanding of environmental policies, strategies, institutions, and regulations and ability to input into the design and implementation of policy reforms for pollution control.
• Strong World Bank operational experiences including leading projects, analytical works and knowledge products is required and preferably experience in multilateral financial institution operations and procurement practices.
• If needed, availability to participate in extensive mission travel to PMEH participating countries in order to ensure engagement sufficient engagements with counterparts.
• Excellent oral and written communications skills in English along with strong interpersonal skills. Additional language skills relevant for PMEH (e.g. Chinese, Arabic, French, Vietnamese, Spanish, Portuguese) operation would be an advantage.
Annex 1: Components in the PMEH program.

Components of Pollution Management and Environmental Health Program

- Air Quality Management (Component 1)
- Contaminated and Toxic Site Management (Component 2)
- Integrated Solid Waste Management (Component 3)
- Research (Component 4)
- Knowledge Dissemination and Public Awareness (Component 5)
- Program Development and Implementation Support (Component 6)

Annex 2: Air Quality Management (AQM) framework being applied in the PMEH program.

WP 10
Project management

- WP 1 Methods and protocols
- WP 2 PM sampling
- WP 3 AQ monitoring
- WP 4 Emission inventory
- WP 5 Source apportionment
- WP 6 Health impacts
- WP 7 Institutions and stakeholders
- WP 8 Cost-effectiveness
- WP 9 AQM planning