

# Scientific and Technical Advisory Panel



The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility (Version 5)

## STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: 25 February 2008

Screener: Guadalupe Duron and Doug Taylor

Peer review by: R.J Cooke

### I. PIF Information

**GEFSEC PROJECT ID:** 2544

**GEF AGENCY PROJECT ID:** PIMS No. 3246

**COUNTRY(IES):** Ukraine, Belarus

**PROJECT TITLE:** Implementation of The Dnipro Basin Strategic Action Program for the reduction of persistent toxics pollution

**GEF AGENCY(IES):** UNDP,

**OTHER EXECUTING PARTNERS:** UNOPS

**GEF FOCAL AREA (S):** International Waters,,

**GEF-4 STRATEGIC PROGRAM(S):** IW-SP 4,

**NAME OF PARENT PROGRAM/UMBRELLA PROJECT:**UNDP-GEF DNIPRO BASIN ENVIRONEMNT PROGRAMME

**Full size project**            **GEF Trust Fund**

### II. STAP Advisory Response *(see table below for explanation)*

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):  
**Consent**

### III. Further guidance from STAP

UNDP is invited by STAP to discuss comments and suggested improvements prior to submission of the Project Brief and when the results from the current PDF-B work are available.

In general terms, the proposed project is presented as a logical extension of the Dnipro Basin Environment Programme that GEF previously supported (2000-2005). Its specific objective is the initial implementation the Strategic Action Plan (SAP) by i) addressing persistent toxics pollution associated with small and medium size industries discharging waste water into municipal waste water treatment plants (WWTPs) or Vodokanals through application of replicable demonstration Cleaner Production (CP) techniques (Component 1), and ii) supporting institutional and regulatory measures that would harmonize response to water quality issues between Ukraine and Belarus consistent with moving to international and specifically EU standards (Components 2-4).

However, the PIF as presented would benefit from the provision of more clarity in the logic behind and interrelationship between the specific activities proposed for support within the overall context of the endorsed SAP. Additionally, more technical substance related to Component 1 would be beneficial. More specifically, the absence of technical detail on specific pollutants to be addressed, what CP measures and methodologies might be applied and where these might be directed makes any substantive technical or scientific assessment of the project based on the PIF problematic. The following elaborates on this with a number of specific questions and comments the proponent is recommended to address in the Project Brief. .

1. *Definition of Persistent Toxic Pollutants:* The proposal seems to use the terms persistent toxic pollutants (PTP) and persistent toxic substances (PTS) interchangeably but without specification of what indicative pollutants might be involved. The SAP and associated Transboundary Diagnostic Analysis (TDA) focuses on "chemical pollution" as a priority, with that term covering a broader scope, namely human generated chemical contaminants that are toxic and/or persistent and/or bioaccumulating. It is suggested that the proposal be made consistent in this area and more specific as to what pollutants are in fact likely to be targeted for investment support in Component 1. In this

regard, it may be logical to focus on those pollutants with toxic and persistent properties that are not captured by conventional biological WWTPs and/or which adversely impact the effectiveness and efficiency of such plants.

2. *Significance of Targeted PTP or PTS:* The project justification and estimation of its overall impact/benefit would be strengthened by providing some quantitative measure of the contribution that the targeted pollutants have on the overall water quality in the Dnipro River basin, and to what degree is the transfer of these pollutants transboundary in nature. In this regard, it might be pointed out that in many cases, the impact of addressing these pollutants upstream of the WWTP is to improve their overall performance and therefore other critical discharge parameters. It is noted that these Vodokanal facilities, rather than upstream industrial SME's, are the main "hot spots" identified in the SAP, and are where the major longer term investments are required to implement it. It should also be understood that in some cases, such as heavy metals, the impacts may be more local both from accumulation in sewage sludge, and in river sediment at downstream impoundment points, given the large number of reservoirs in the basin. Similarly, it would be useful to qualify the proportion of the overall PTP, PTS or chemical pollution load that comes from the targeted small and medium size enterprises (SMEs) as opposed to large industrial complexes. In this regard, the structure of many industrial sectors of interest in the region still favors large integrated complexes containing many operations that might be more common in SME's elsewhere. Therefore, exclusively targeting SMEs may miss significant opportunities to implement CP within larger enterprises where specific operations can be identified as a priority persistent or chemical pollutant sources. In this regard, the referenced similar and apparently quite effective CP initiative in the Danube Basin implemented by UNIDO within the UNDP Danube Basin project did not discriminate with respect to enterprise size and had a broader scope of targeted pollutants.

3. *Elaboration on Regulatory barriers to CP Implementation:* Regulatory changes and strengthening to address barriers to cleaner production are included in both Components 1 and 3 and should perhaps be consolidated in Component 3. This activity might be clearer by indicating generally what kinds of regulatory changes/barriers might be involved such as implementation of municipal sewer discharge limits upstream of WWTPs.

4. *Elaboration of Technical Standards Supporting Harmonization:* The present Component 3 would be enhanced with some direct reference to the application of EU IPPC approaches and specifically the body of industry/sector specific guidance available that provides Best Available Techniques Reference Documents (BREFs) (<http://eippcb.jrc.es/pages/FActivities.htm>) that would likely be relevant to pilot/demonstration initiatives undertaken in Component 1.

5. *Impact and Scale of Cleaner Production Implementation Investments in Component 1:* STAP fully supports the value of CP investments in principle but suggests that Component 1 of the proposal could be enhanced by emphasizing and perhaps illustrating experience involving relatively low cost investment in CP at source upstream of WWTPs serving to reduce the much higher capital investments required to upgrade the WWTPs themselves. For comparative purposes it would also be useful to rationalize what appears to be a higher cost per CP pilot/demonstration relative to the referenced previous MSP project in the Danube basin undertaken by UNIDO during as part of that UNDP GEF project. In the currently proposed project, a total investment of US\$4.3 million (US\$1.4 million GEF grant) will generate 4 to 6 demonstration investments pilots in SMEs (assumed to be 2-3 in each country), while the previous project is understood to have supported 17 CP demonstration investments over a wide range of industrial sectors and enterprises for a cost of US\$2.4 million (US\$990,000 GEF grant). This may be explained by a different scale of investment than previously associated with CP initiatives but noting any such distinction would be helpful in understanding the nature of the proposed CP interventions and any technical or scientific risks that might be involved.

6. *References to National Legislation and Plans:* The reference to the existing legislative and regulatory base in each country appears dated and should perhaps be reviewed in light of more recent medium or pollutant legal measures and current national environmental programs. One specific reference that would be relevant relates to the development of Stockholm Convention National

Implementation Plans (NIPs) for Persistent Organic Pollutants (POPs) that have or are being undertaken in both countries using GEF assistance. This would also strengthen the potential contribution to cross cutting issues as called for in the current GEF focal area strategy documentation. Similarly, expanding the scope of CP initiatives that might be considered to include energy conservation in association with PTP/PTS pollutant reduction/capture would be worthwhile in this context.

7. *References to Potentially Supporting Initiatives:* STAP recommends that the various references to World Bank initiatives in both Ukraine and Belarus be validated with the Bank noting that most of those cited for Ukraine have not in fact proceeded while in the case of Belarus there are more recent initiatives that might be relevant. Similarly, verification of EBRD initiatives might be validated. This is important if capital financing from these institutions, particularly for WWTP upgrading, is seen as ultimately important in sustaining the viability of the GEF's investment.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Consent</b>	STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may state its views on the concept emphasising any issues that could be improved and the proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.
<b>2. Minor revision required.</b>	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include: (i) Opening a dialogue between STAP and the proponent to clarify issues (ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review  The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.
<b>3. Major revision required</b>	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement.  The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.