



Reduction and Phaseout of PFOS in Priority Sectors (P152959)

EAST ASIA AND PACIFIC | China | Environment, Natural Resources & the Blue Economy Global Practice |
Global Environment Project | Investment Project Financing | FY 2017 | Seq No: 9 | ARCHIVED on 29-Jun-2021 | ISR46087 |

Implementing Agencies: Foreign Environmental Cooperation Center of Ministry of Ecology and Environment, PEOPLE'S REPUBLIC OF CHINA

Key Dates**Key Project Dates**

Bank Approval Date: 07-Apr-2017

Effectiveness Date: 04-Sep-2017

Planned Mid Term Review Date: 31-Jan-2021

Actual Mid-Term Review Date: 05-Feb-2021

Original Closing Date: 31-Mar-2023

Revised Closing Date: 31-Mar-2023

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project development objective is to reduce PFOS in selected sectors and enterprises in China in a sustainable manner.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1: PFOS Production Reduction:(Cost \$25.10 M)

Component 2: Reduction of PFOS Use:(Cost \$12.59 M)

Component 3: Policy and Technical Assistance:(Cost \$26.88 M)

Component 4: Project Management:(Cost \$2.65 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Unsatisfactory	<input type="checkbox"/> Moderately Unsatisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

Implementation Status and Key Decisions

The Mid-Term Review (MTR) and sixth implementation support mission for the China GEF Reduction and Phase-out of PFOS in Priority Sectors Project took place from January 26 to February 5, 2021. The mission was held virtually due to COVID-related travel restrictions. The following are key issues that are important to note:

- With only two years to project closing date, disbursements to the project's designated account stand at only 24%. Implementation of many project activities are significantly delayed. The project is thus rated as moderately unsatisfactory for implementation progress.
- While disbursement is still low, it is worth noting that there has been significant progress with procurement activities in the past year, such that at the time of the mission \$12.6 million, or 52% of project funds were committed to on-going contracts. This reflects measures taken



by the three PMOs following the recommendations of the October 2019 implementation support mission and the detailed action plan that was agreed to during the previous mission (July 2020), in particular strengthening the staffing of the three PMOs.

- To address these project performance issues, the Ministry of Finance requested the World Bank to restructure the project. Once approved by the World Bank management, the restructuring is expected to speed up implementation, improve project performance and to increase relevance and sustainability of the PDO.
- With careful monitoring of the action plan and the proposed restructuring, disbursements are expected to ramp up to reach US\$10.7 million by December 31, 2021 - a disbursement rate of 44% - with most project funds expected to be committed by the end of 2021 so that activities can be completed in advance of the closing date of March 31, 2023. In addition to completing a restructuring, the key critical steps in the coming months include the signature of contracts for production closure; for demonstrations of closed-loop systems; and with firefighting foam manufacturers.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Low	☐ Low
Macroeconomic	☐ Low	☐ Low	☐ Low
Sector Strategies and Policies	☐ Moderate	☐ Low	☐ Low
Technical Design of Project or Program	☐ Moderate	☐ Moderate	☐ Moderate
Institutional Capacity for Implementation and Sustainability	☐ Moderate	☐ Moderate	☐ Moderate
Fiduciary	☐ Moderate	☐ Low	☐ Low
Environment and Social	☐ Substantial	☐ Substantial	☐ Substantial
Stakeholders	☐ Substantial	☐ Substantial	☐ Substantial
Other	--	☐ Moderate	☐ Moderate
Overall	☐ Substantial	☐ Substantial	☐ Substantial

Results

PDO Indicators by Objectives / Outcomes

To reduce PFOS in selected sectors and enterprises in China in a sustainable manner				
▶ Amount of PFOS produced and used yearly reduced (Tones/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	44.00	44.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	This indicator measures progress towards reduction of PFOS production and use in various sectors. Target corresponds to 2015 production for exempted usage (metal plating, oil production and RIFA) as reported in the CS-1 consultant project preparation report, that will no longer be allowed after 2019. As there is no export or import of PFOSF the amount produced and amount used are equivalent. The			



baseline is zero. Target values for years 1 and 2 remain zero due to inability to verify data before 2019, though in reality production/use is expected to decrease already.

Based on project statistics and data from the National POPs Chemical Survey and Reporting Information System, as of the end of 2020, the annual use of PFOSF was reduced from the 2015 project baseline by 44 tons representing the baseline use for metal-plating, enhanced oil recovery, and pest control, thereby meeting the PDO indicator target.

► Control and monitoring system for tracking PFOSF production and sale established and operational (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023

Comments: This indicator will show that a system is in place to measure and report on sustainability of project outcomes. During the life of the project this is based on annual reporting requirement for PFOSF production and sales as part of implementation agreement with Hubei, and on project data from Ministry of Emergency Management in charge of fire protection.

► Direct project beneficiaries (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	40,500.00	6,517,000.00	7,200,000.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023

Comments: Direct beneficiaries are people or groups who directly derive benefits from an intervention. Direct beneficiaries are assumed to include the number of workers in 5 enterprises with PFOSF production in 2015; people living in the counties where these production facilities were located that are now closed (3 in Hubei/ 2 in Fujian) in 3 counties (2 in Hubei /1 in Fujian); number of workers in metal plating demonstration enterprises; number of workers in participating foam manufacturers; and number of people previously spraying sulfluramid in project areas. As noted in the PAD, the actual number of beneficiaries is expected to be higher given the transboundary nature of PFOS pollution, but is impossible to estimate given the global distribution of PFOS in the environment.

The target for this indicator is met or exceeded:

- Number of people living in the counties with production in 2015 that is now closed: 667,000 (2 counties, one in Hubei, one in Fujian).
- Number of people previously spraying sulfluramid in project areas: over 5.85 million. Based on estimate at appraisal from NATESC that 19,500 village-level cadres would be trained, each training at least 300 villagers (5.85 million in total). Given the latest report from NATESC of 32,527 people trained, it is estimated that that target is at least achieved. Given the lack of reliability of this estimate, possible achievement beyond the target is not reported.
- Total: 667,000 + 5,850,000 = 6,517,000 beneficiaries.

□ Female beneficiaries (Percentage, Custom Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	40.00	40.00	50.00

Intermediate Results Indicators by Components

Component 1: PFOS Production Reduction

► Amount of PFOSF production capacity dismantled or converted (Tones/year, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
--	----------	-------------------	------------------	------------



Value	0.00	94.00	0.00	100.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>Based on total EIA capacity of 5 PFOSF production enterprises to be dismantled plus 3 enterprises to convert capacity. The target is related to, but different than the PDO indicator, given that the EIA capacity for PFOSF production is greater than the 2015 baseline of use for exempted applications which is the basis for the PDO indicator above.</p> <p>The project had previously reported 94 tons from closure of production lines at Wuhan Chemical, Xiangshun, Anshengqi, Yingchen Sanwai and Youshida. While these production closures have taken place because of the policy environment promoted by the project, it is preferred to report only the production closure of enterprises under project sub-grants so that there is no ambiguity regarding attribution for this intermediate indicator.</p> <p>Production closure contracts for Youshida and Hengxin were signed May 28 and June 17, 2021, respectively and will lead to dismantling of 50 tons of annual production capacity. The proposed restructuring would adjust the end target accordingly.</p>			
► Number of PFOS secondary production enterprises that join stewardship program (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	10.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>This indicator will measure the number of secondary PFOS production enterprises which join the stewardship scheme that aims to promote phase-out of PFOS production, to be established by the project. The indicator (and activity) is proposed for cancellation under the forthcoming restructuring.</p>			
► Number of firefighting foam manufacturers developing non PFOS-based fire-fighting foam. (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>This indicator measures the progress towards uptake of non PFOS fire-fighting foam production. This is delayed largely due to the time and effort it took MEE to secure working agreement with the Ministry of Emergency Management, and is in progress with FECO currently in the process of reviewing and selecting applications from enterprises.</p>			
Component 2: Reduction of PFOS Use				
► Yearly reduction in water effluents containing PFOS from demonstration industrial parks (Tones/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	720,000.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>This indicator will measure success of improvement of wastewater treatment operations in at least three selected industrial parks. Based on estimated 800 m3 discharge per day per park for 300 days a year. This is delayed, reflecting delays in implementation of the Guangdong-based metal plating activities overall and the need for further expert work, underway, to guide the design of these pilots. Signature of sub-projects is expected by December 2021.</p>			
► Land area under demonstration for RIFA non-PFOS alternative treatment (Hectare(Ha), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	510.00	766.00	1,000.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>This indicator measures the area of land (in ha) in which red imported fire ant non-PFOS alternative treatment has been piloted. Based on 8 total demonstration sites in 5 provinces covering 32 ha each (500 mu) and repeated in new sites for 4 years. Baseline is zero.</p> <p>In 2020, eight demonstration sites were implemented in the five participating provinces, adding 4000 mu to the area under demonstration (approx. 256 ha), and bringing the total of demonstration sites to 24 over the period 2018-2020.</p>			
Component 3: Policy and Technical Assistance				
► Number of PFOS related environmental standards developed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	5.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>A number of standards are proposed to be developed as part of TA activities. Baseline is zero. As reported in the last February 2021 mission: no change.</p>			
► Number of contracts signed with enterprises for demonstration of PFOS phase-out in the metal plating sector (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	20.00
Date	16-Jan-2017	01-Oct-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>Representing at least 17 hard-plating, 2 closed-loop, and 1 decorative plating enterprises. Baseline is zero.</p> <p>Feb 2021: None signed yet. This indicator is proposed for significant scaling down under the proposed forthcoming restructuring.</p>			
Component 4: Project Management				
► Intended beneficiaries aware of project info. and project investments (%) (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.00	6.00	85.00
Date	16-Jan-2017	18-May-2020	05-Feb-2021	31-Mar-2023
Comments:	<p>The number of intended beneficiaries (1600) is composed of the number of workers in participating enterprises - estimated at appraisal based on 4 enterprises under Component 1 with PFOSF production in 2015, and estimate of workforce in demonstration enterprises under Component 2. The target for this indicator is therefore much smaller than the PDO level indicator for "Direct project beneficiaries" as defined. The number of male intended beneficiaries is greater than female since more men worked in these enterprises than women. This indicator intends to measure the effectiveness of consultation and communication mechanisms in terms of ensuring that information about the project and project supported investments have been communicated effectively.</p> <p>Nov 2019. The intended beneficiaries that have been targeted by the project so far are workers with PFOSF producers in Hubei province. As per social safeguards report employees have been consulted; 100 percent of 100 employee beneficiaries are therefore deemed to be aware of the project investments, from a total of 1600 (overall percentage 6%).</p> <p>June 2021 as per the last February 2021 mission: as above. This indicator is proposed to be dropped in the proposed forthcoming restructuring given it targets a small number of workers in participating enterprises that are not, in fact, the intended beneficiaries of the project.</p>			



<input type="checkbox"/> Intended beneficiaries aware of project info. and project investments - female (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	340.00
<input type="checkbox"/> Intended beneficiaries aware of project info. and project investments –male (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	1,020.00
<input type="checkbox"/> Intended beneficiaries - female (number) (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	400.00
<input type="checkbox"/> Intended beneficiaries - male (number) (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	1,200.00

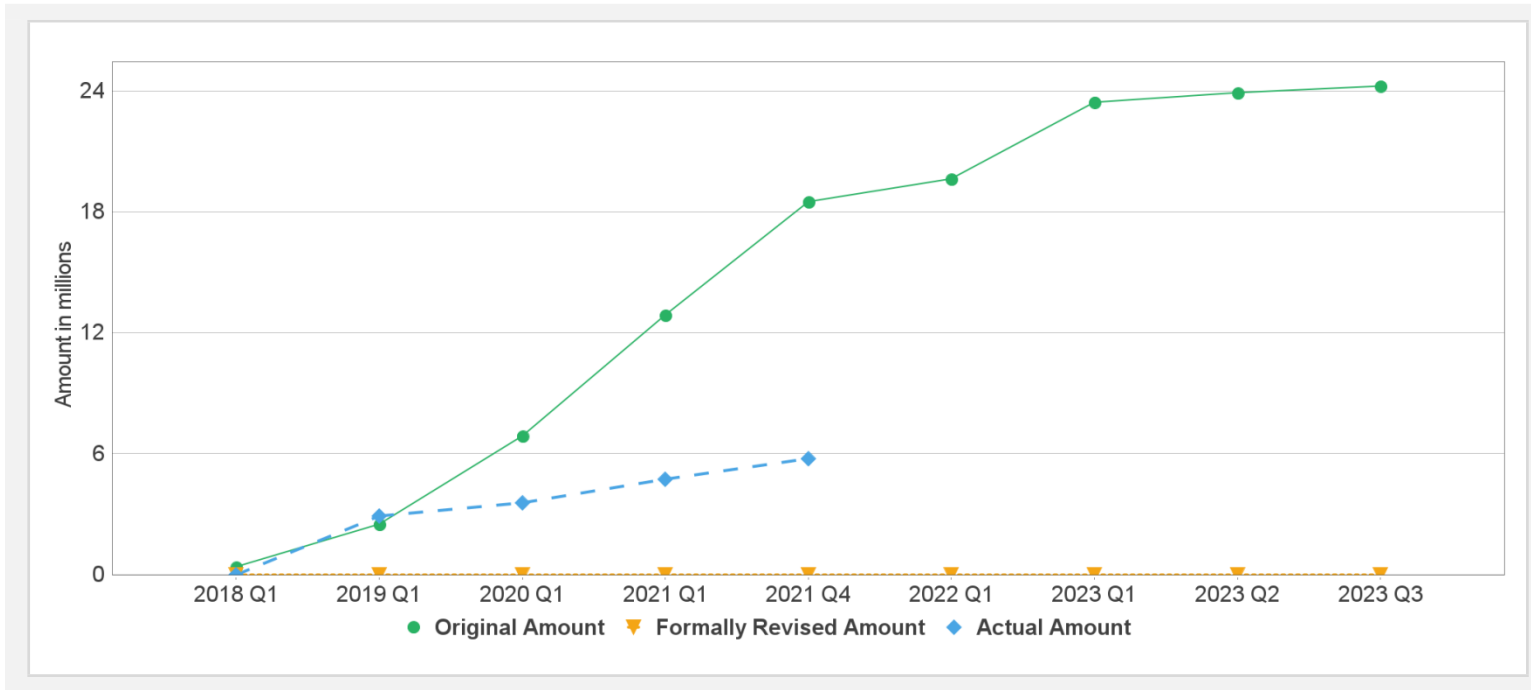
Performance-Based Conditions**Data on Financial Performance****Disbursements (by loan)**

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P152959	TF-A4337	Effective	USD	24.25	24.25	0.00	5.74	18.51	24%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P152959	TF-A4337	Effective	04-Apr-2017	06-Jun-2017	04-Sep-2017	31-Mar-2023	31-Mar-2023

Cumulative Disbursements



Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.