LOAN NUMBER 7707-CN

Project Agreement

(Shanghai Urban Environment Project, Phase III)

between

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

and

SHANGHAI MUNICIPALITY

Dated September 9, 2009

PROJECT AGREEMENT

AGREEMENT dated September 9, 2009, entered into between INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank") and SHANGHAI MUNICIPALITY ("Shanghai" or "Project Implementing Entity") ("Project Agreement") in connection with the Loan Agreement ("Loan Agreement") of the same date between PEOPLE'S REPUBLIC OF CHINA ("Borrower") and the Bank. The Bank and Shanghai hereby agree as follows:

ARTICLE I – GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to the Loan Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in the Project Agreement have the meanings ascribed to them in the Loan Agreement or the General Conditions.

ARTICLE II - PROJECT

- 2.01. Shanghai declares its commitment to the objectives of the Project. To this end, Shanghai shall: (a) carry out, and cause the Project Companies to carry out, the Project in accordance with the provisions of Article V of the General Conditions; and (b) provide, or cause to be provided, promptly as needed, the funds, facilities, services and other resources required for the Project.
- 2.02. Without limitation upon the provisions of Section 2.01 of this Agreement, and except as the Bank and Shanghai shall otherwise agree, Shanghai shall carry out, and shall cause to be carried out, the Project in accordance with the provisions of the Schedule to this Agreement.

ARTICLE III – REPRESENTATIVE; ADDRESSES

3.01. Shanghai's Representative is its Governor or a Vice Governor or such other person or persons as said Governor or a Vice Governor shall designate in writing, and Shanghai shall furnish to the Bank sufficient evidence of the authority and the authenticated specimen signature of each such person.

3.02. The Bank's Address is:

International Bank for Reconstruction and Development 1818 H Street, N.W. Washington, D.C. 20433 United States of America

Cable: Telex: Facsimile:

INTBAFRAD 248423(MCI) or 1-202-477-6391

Washington, D.C. 64145(MCI)

3.03. Shanghai's Address is:

Shanghai APL Project Management Office No. 1, Lane 1114 Liyang Road Shanghai 200081 People's Republic of China

Facsimile:

86-21 65406094

AGREED at Beijing, People's Republic of China, as of the day and year first above written.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ Hsiao-Yun Elaine Sun Authorized Representative

SHANGHAI MUNICIPALITY

By /s/ Shen Jun Authorized Representative

SCHEDULE

Execution Of The Project

Section I. <u>Implementation Arrangements</u>

A. Project Management

- 1. Shanghai shall maintain, and cause to be maintained, for purposes of carrying out the Project, the following organizations, with terms of reference, staffing and other resources acceptable to the Bank, throughout the period of implementation of the Project:
 - (a) the Program Leading Group, chaired by the Secretary General of Shanghai, to provide overall guidance and coordination in the implementation of the Shanghai Urban Environment Program and the Project and to monitor progress in the overall urban environment improvement strategy; and
 - (b) the Project Management Office to be responsible for the overall management, supervision, monitoring and evaluation of, and reporting on Project activities, including the oversight of procurement and coordination among all implementation entities.

B. Anti-Corruption

Shanghai shall carry out, and cause the Project Companies to carry out, the Project in accordance with the provisions of the Anti-Corruption Guidelines.

C. Resettlement, Environment Protection and Dam Safety

1. Shanghai shall:

- (a) take, and shall cause the Project Companies and Beneficiaries to take, all necessary actions to minimize to the extent possible any involuntary loss by persons of shelter, productive assets or access to productive assets or income or means of livelihood, temporarily or permanently, in carrying out the Project and the Related Activities;
- (b) for this purpose, prior to the commencement of any works under the Project and any Related Activity, implement, and cause the Project Companies and Beneficiaries to implement, the applicable Resettlement Action Plan in a manner satisfactory to the Bank;

- (c) prepare, or shall cause to be prepared, resettlement action plans in regard to Part 3 of the Project and the Pudong Section Related Activity, satisfactory to the Bank and in accordance with the principles and procedures set forth in the Sub-project Resettlement Policy Framework and Pudong Section Resettlement Policy Framework respectively, and carry out, and cause to be carried out, such resettlement action plans in a manner satisfactory to the Bank, before commencing works for any Sub-project or the Pudong Section Related Activity as the case may be; and
- (d) provide, and shall cause the Project Companies and Beneficiaries to provide, to the Bank for its prior concurrence any proposed modification or waiver of any Resettlement Action Plan or resettlement policy framework and put into effect only such modification or waiver as shall have been agreed by the Bank.

2. Shanghai shall:

- (a) implement and shall cause the Project Companies and Beneficiaries to implement the applicable Environment Management Plan in a manner satisfactory to the Bank and designed to ensure that the Project and the Related Activity are implemented in accordance with sound environmental practices and standards;
- (b) prepare, or shall cause to be prepared, environmental management plans in regard to Part 3 of the Project, satisfactory to the Bank, in accordance with the principles and procedures set forth in the Sub-project Environment Assessment Framework, and carry out, and cause to be carried out, such environmental management plans in a manner satisfactory to the Bank;
- (c) provide, and shall cause the Project Companies and Beneficiaries to provide, to the Bank for its prior concurrence any proposed modification or waiver of any Environment Management Plan or environment assessment framework and put into effect only such modification or waiver as shall have been agreed by the Bank.
- 3. Shanghai shall, and shall cause the Project Companies and Beneficiaries to:
 - (a) maintain policies and procedures adequate to enable them to monitor and evaluate, in accordance with guidelines acceptable to the Bank, the implementation of the Environmental Management Plans, the Resettlement Action Plans, Sub-project Environment Assessment Framework, Sub-project Resettlement Policy Framework, and Pudong Section Resettlement Policy Framework and the achievement of the objectives of said Plans and Frameworks, including the engagement of

- experienced and qualified independent monitoring agencies acceptable to the Bank;
- (b) include the results of such monitoring and evaluation activities in each report referred to in Section II, paragraph A.1 of this Schedule, together with any revisions proposed to be introduced into such plans and frameworks in order to achieve their respective objectives; and
- (c) introduce such revisions into such plans and frameworks as shall have been agreed with the Bank.
- 4. To ensure the safety of the dam to be constructed at Qing Cao Sha Reservoir in relation to Part 1 of the Project, Shanghai shall carry out, and cause QCSC to carry out, the following:
 - (a) Maintain the panel of independent dam safety experts ("Dam Safety Experts"), with qualifications, resources and experience, satisfactory to the Bank and which Dam Safety Experts are responsible for reviewing the adequacy of the design and construction procedures of the Qing Cao Sha Reservoir Dam and its associated structures and the start of its operation.
 - (b) (i) Prepare, in accordance with a framework acceptable to the Bank, detailed and time-bound plans, relating to the Qing Cao Sha Reservoir Dam, for construction supervision and quality assurance; instrumentation; operation and maintenance; and emergency preparedness; and finalize said plans and implement the same, taking into account the Bank's comment thereon.
 - (ii) Without prejudice to the provisions in sub-paragraph (b)(i), carry out workshops with the Dam Safety Experts and the Bank to discuss and finalize: (A) the emergency preparedness plan twelve (12) months prior to the filling of said reservoir; and (B) the operation and maintenance plan six (6) months prior to the filling of the Qing Cao Sha Reservoir.
 - (c) After completion of construction of said dam, have independent qualified professionals carry out periodic safety inspections of said dam.

D. Subsidiary Loan Agreements

- 1. Shanghai shall relend the proceeds of the Loan, allocated in accordance with arrangements satisfactory to the Bank for the carrying out the Respective Parts of the Project, under a subsidiary loan agreement to be entered into between Shanghai and each of the Project Companies:
 - (a) on the principal terms set forth in Section I of Annex A to this Schedule; and
 - (b) under conditions which shall have been approved by the Bank, and which shall include, without limitation, those set forth in Section II of Annex A to this Schedule.

2. Shanghai shall:

- (a) Cause each Project Company to: (i) perform, in accordance with the provisions of its Subsidiary Loan Agreement, all of the obligations of said Project Company therein set forth; (ii) take or cause to be taken all action including, the provision of funds, facilities, services and other resources, necessary or appropriate to enable such Project Company to perform such obligations; and (iii) not take or permit to be taken any action which would prevent or interfere with such performance.
- (b) Exercise its rights under each Subsidiary Loan Agreement in such manner as to protect the interests of the Borrower, the Bank and Shanghai, and to accomplish the purposes of the Loan.
- (c) Except as the Bank shall otherwise agree, not assign, amend, abrogate or waive any Subsidiary Loan Agreement or any provision thereof.

Section II. Project Monitoring, Reporting, and Evaluation

A. Project Reports

1. Shanghai shall monitor and evaluate the progress of the Project and prepare Project Reports for the Project in accordance with the provisions of Section 5.08(b) of the General Conditions and on the basis of the indicators set forth in Annex C to this Schedule. Each such Project Report shall cover a six-month period and shall be furnished to the Bank by April 30 (covering the preceding September 1 through February 28) and October 31 (covering the preceding March 1 through August 31) each year, starting April 30, 2010.

B. Financial Management, Financial Reports and Audits

- 1. Shanghai shall maintain, or cause to be maintained, a financial management system and prepare financial statements in accordance with consistently applied accounting standards acceptable to the Bank, both in a manner adequate to reflect the operations, resources and expenditures related to the Project.
- 2. Shanghai shall have the financial statements referred to above audited by independent auditors acceptable to the Bank, in accordance with consistently applied auditing standards acceptable to the Bank. Each audit of these financial statements shall cover the period of one (1) fiscal year of Shanghai. The audited financial statements for each period shall be furnished to the Borrower and the Bank not later than six (6) months after the end of the period.

Section III. <u>Procurement</u>

All goods, works and services required for the Project to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Section III of Schedule 2 to the Loan Agreement.

Section IV. Other Undertakings

Shanghai shall ensure that construction of the Pudong section of the Bailonggang Southern Trunk Conveyor (including, providing funds, facilities and other resources required for that purpose) by SMSC is completed by the time construction of the Puxi section of said conveyor is finished to enable conveyance of wastewater to the Bailonggang Wastewater Treatment Plant.

ANNEX A to SCHEDULE

Principal Terms and Conditions of the Subsidiary Loan Agreements

For the purposes of Section I, paragraph D.1 of the Schedule to this Agreement, the Subsidiary Loan Agreement shall be entered into on the terms set forth in Section I of this Annex A and on the conditions set forth in Section II of this Annex A.

Section I. Terms of Availability

- 1. The principal amount of the Subsidiary Loan made by Shanghai to each Project Company shall be the amount equivalent in Dollars (on the respective dates of withdrawal from the Loan Account) of the value of the currency or currencies so withdrawn on account of its Respective Parts of the Project.
- 2. Each Project Company shall repay: (a) such principal amount; and (b) an amount equal to one quarter of one percent (0.25%) of such principal amount, over a period of not more than thirty (30) years, inclusive of a grace period of five (5) years.
- 3. Each Project Company shall pay interest on the principal amount thereof withdrawn and outstanding from time to time at a rate not less than the rate of interest applicable from time to time to the Loan pursuant to Section 2.04 of the Loan Agreement.

Section II. Conditions

The Subsidiary Loan Agreement shall include the following principal conditions:

General

1. Each Project Company shall undertake to carry out its Respective Parts of the Project with due diligence and efficiency and in accordance with appropriate management, financial, engineering and public utility practices and social and environmental standards acceptable to the Bank (including in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of Loan proceeds other than the Borrower), and provide, promptly as needed, the funds, facilities and other resources required for the purpose; and without limitation on the foregoing, take all measures necessary to ensure that its Respective Parts of the Project shall be implemented in accordance with the applicable Resettlement Action Plan and the Environmental Management Plan.

- 2. Each Project Company shall undertake to procure the goods, works and consultants' services to be financed out of the proceeds of the Loan in accordance with the provisions of Section III of Schedule 2 to the Loan Agreement, and utilize such goods, works and consultants' services exclusively in the carrying out of its Respective Parts of the Project.
- 3. Each Project Company shall undertake to enable the Bank and Shanghai to inspect such goods and the sites and works included in its Respective Parts of the Project, the operation thereof, and any relevant records and documents.
- 4. Each Project Company shall undertake to take out and maintain with responsible insurers such insurance, against such risks and in such amounts, as shall be consistent with sound business practice including, without limitation, such insurance to cover hazards incident to the acquisition, transportation and delivery of goods financed out of the proceeds of the Loan to the place of use or installation, any indemnity thereunder to be made payable in a currency freely usable to replace or repair such goods.
- 5. Each Project Company shall undertake to:
 - (a) Maintain records and accounts adequate to reflect in accordance with sound accounting practices their operations and financial condition.
 - (b) Have its financial statements (balance sheets, statements of income and expenses and related statements) for each fiscal year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank.
 - (c) Furnish to the Bank and Shanghai, as soon as available, but in any case not later than six (6) months after the end of each such year, certified copies of said financial statements and accounts for such year as so audited; an opinion on such statements by said auditors in such scope and detail as the Bank or Shanghai shall have reasonably requested; and all such other information concerning said records, accounts and financial statements, as well as the audit thereof, as the Bank or Shanghai shall reasonably request.
 - (d) Prepare and furnish to the Bank and Shanghai all such other information concerning said records, accounts and financial statements, as well as the audit thereof, as the Bank and/or Shanghai shall reasonably request.
 - (e) Each Project Company shall undertake to:
 - (i) maintain policies and procedures adequate to enable it to monitor and evaluate on an ongoing basis, in accordance with indicators

- set forth in Annex C to the Schedule to the Project Agreement the carrying out of its Respective Parts of the Project and the achievement of the objectives thereof; and
- (ii) prepare, under terms of reference satisfactory to the Bank and Shanghai, and furnish to Shanghai for its review, consolidation and submission to the Bank in accordance with Section II paragraph A.1 of the Schedule to this Agreement on or about April 15 and October 15 each year, starting April 15, 2010, reports integrating the results of the monitoring and evaluation activities performed pursuant to clause (i) of this sub-paragraph (e) on the progress achieved in the carrying out of its Respective Parts of the Project during the preceding September 1 through February 28 period and preceding March 1 through August 31 period respectively.

Water Supply and Wastewater

- 6. (a) Except as the Bank shall otherwise agree, SMSC shall undertake to produce for each of its fiscal years beginning in FY 2010, total revenues equivalent to not less than the sum of its: (i) total operating expenses; and (ii) the amount by which debt service requirements exceed the provision for depreciation.
 - (b) Before November 1 in each of its fiscal years, SMSC shall, on the basis of forecasts prepared by SMSC and satisfactory to the Bank, review whether it would meet the requirements set forth in sub-paragraph (a) of this paragraph in respect of such year and the next following fiscal year and shall furnish to the Bank the results of such review upon its completion.
 - (c) If any such review shows that SMSC would not meet the requirements set forth in sub-paragraph (a) of this paragraph for SMSC's fiscal years covered by such review, SMSC shall promptly take all necessary measures in order to meet such requirements.
 - (d) For purposes of this paragraph 6, the following terms have the following meanings:
 - (i) The term "total revenues" means the sum of total operating revenues and net non-operating income (including subsidies).
 - (ii) The term "total operating revenues" means revenues from all sources related to operations.

- (iii) The term "net non-operating income" means the difference between: (A) revenues from all sources other than those related to operations; and (B) expenses, including taxes and payments in lieu of taxes, incurred in the generation of revenues in clause (A).
- (iv) The term "total operating expenses" means all expenses related to operations, including administration, adequate maintenance, taxes and payments in lieu of taxes, and provision for depreciation on a straight-line basis at a rate of not less than 2.5% per annum of the average current gross value of SMSC's fixed assets in operation, or other basis acceptable to the Bank, but excluding interest and other charges on debt.
- (v) The average current gross value of SMSC's fixed assets in operation shall be calculated as one half of the sum of the gross value of SMSC's fixed assets in operation at the beginning and at the end of the fiscal year, as valued from time to time in accordance with sound and consistently maintained methods of valuation satisfactory to the Bank.
- (vi) The term "debt service requirements" means the aggregate amount of repayments (including sinking fund payments, if any) of, and interest and other charges on, debt.
- 7. (a) Except as the Bank shall otherwise agree, QCSC and SMSC, each, shall not incur any debt unless a reasonable forecast of its revenues and expenditures shows that its estimated net revenues for each fiscal year during the term of the debt to be incurred shall be at least equal to its estimated debt service requirements in such year on all of its debt including, the debt to be incurred.
 - (b) For the purposes of this paragraph 7:
 - (i) The term "debt" means any indebtedness of the Project Company maturing by its terms more than one (1) year after the date on which it is originally incurred.
 - (ii) Debt shall be deemed to be incurred: (A) under a loan contract or agreement or other instrument providing for such debt or for the modification of its terms of payment on the date of such contract, agreement or instrument; and (B) under a guarantee agreement, on the date the agreement providing for such guarantee has been entered into.

- (iii) The term "net revenues" means the difference between:
 - (A) the sum of revenues from all sources related to operations and net non-operating income; and
 - (B) the sum of all expenses related to operations, including administration, adequate maintenance, taxes and payments in lieu of taxes, but excluding provision for depreciation, other non-cash operating charges and interest and other charges on debt.
- (iv) The term "net non-operating income" means the difference between:
 - (A) revenues from all sources other than those related to operations; and
 - (B) expenses, including taxes and payments in lieu of taxes, incurred in the generation of revenues in (A) above.
- (v) The term "debt service requirements" means the aggregate amount of repayments (including sinking fund payments, if any) of, and interest and other charges on, debt.
- (vi) The term "reasonable forecast" means a forecast prepared by the Project Company not earlier than twelve (12) months prior to the incurrence of the debt in question, which both the Bank and the Project Company accept as reasonable and as to which the Bank has notified the Project Company of its acceptability, provided that no event has occurred since such notification which has, or may reasonably be expected in the future to have, a material adverse effect on the financial condition or future operating results of the Project Company.
- 8. Whenever, for the purposes of this Annex, it shall be necessary to value, in terms of the currency of the Borrower, debt payable in another currency, such valuation shall be made on the basis of the prevailing lawful rate of exchange at which such other currency is, at the time of such valuation, obtainable for the purposes of servicing such debt, or, in the absence of such rate, on the basis of a rate of exchange acceptable to the Bank.

Sub-project Financing under Part 3 of the Project

9. CEAM shall finance Sub-projects on the terms and conditions set forth or referred to in Annex B to the Schedule to this Agreement.

10. CEAM shall: (a) implement Part 3 of the Project in accordance with the CEAM Operations Manual and the Anti-Corruption Guidelines; and (b) provide to the Bank for its prior concurrence, any proposed amendment to the provisions of the CEAM Operations Manual and, thereafter, put into effect such amendment as shall have been agreed with the Bank.

11. CEAM shall:

- (a) appraise and approve Sub-projects and supervise, monitor and report on the carrying out of Sub-projects, in accordance with the provisions of the CEAM Operations Manual;
- (b) in respect of each Sub-project, enter into a sub-project financing agreement with the Beneficiary of said Sub-project, on terms and conditions acceptable to the Bank including, those set forth in Annex B to the Schedule to this Agreement;
- (c) exercise its rights under each Sub-project Financing Agreements in such manner as to protect the interests of the Bank, the Borrower, Shanghai and CEAM and to achieve the purposes of the Project; and
- (d) not assign, amend, abrogate or waive any Sub-project Financing Agreement, or any provision thereof, without the prior approval of the Bank.

Other Undertakings

- 12. To ensure the safety of the dam to be constructed at Qing Cao Sha Reservoir in relation to Part 1 of the Project, QCSC shall undertake to carry out the following:
 - (a) Maintain the panel of independent dam safety experts ("Dam Safety Experts"), with qualifications, resources and experience, satisfactory to the Bank and which Dam Safety Experts are responsible for reviewing the adequacy of the design and construction procedures of the Qing Cao Sha Reservoir Dam and its associated structures and the start of its operation.
 - (b) (i) Prepare, in accordance with a framework acceptable to the Bank, detailed and time-bound plans, relating to the Qing Cao Sha Reservoir Dam, for construction supervision and quality assurance; instrumentation; operation and maintenance; and emergency preparedness; and finalize said plans and implement the same, taking into account the Bank's comment thereon.

- (ii) Without prejudice to the provisions in sub-paragraph (b)(i), carry out workshops with the Dam Safety Experts and the Bank to discuss and finalize: (A) the emergency preparedness plan twelve (12) months prior to the filling of said reservoir; and (B) the operation and maintenance plan six (6) months prior to the filling of the Qing Cao Sha Reservoir.
- (c) After completion of construction of said dam, have independent qualified professionals carry out periodic safety inspections of said dam.
- 13. SMSC shall undertake to complete construction of the Pudong section of the Bailonggang Southern Trunk Conveyor by the time that construction of the Puxi section of said conveyor is finished to enable conveyance of wastewater to the Bailonggang Wastewater Treatment Plant.
- 14. CEAM shall undertake to furnish to the Bank by December 31, 2011, a time-bound action plan, prepared in accordance with terms of reference satisfactory to the Bank (including consulting with SCC on said plan), for the strategic institutional and financial development of the District Financing Vehicle during the medium term.

Right to Suspend or Terminate

15. Shanghai shall have the right to suspend or terminate the right of a Project Company to the use of the proceeds of the loan made available under the Subsidiary Loan Agreement upon failure by the Project Company to perform its obligations under the agreement.

ANNEX B to SCHEDULE Sub-project Financing

Terms

- 1. The principal amount of each Sub-project Financing shall be:
 - (a) made available to a Beneficiary in: (A) Renminbi with the foreign exchange risk between the Dollar and Renminbi being borne by CEAM; or (b) Dollars with the foreign exchange risk between the Dollar and Renminbi being borne by the Beneficiary, depending on the financial capacity of the Beneficiary; and
 - (b) repaid within a period not exceeding thirty (30) years, inclusive of a grace period not exceeding five (5) years.
- 2. Each Sub-project Financing shall:
 - (a) subject to any relevant national and local laws and regulations, bear a one time service fee to cover the operating expenses of CEAM relating to the Sub-project;
 - (b) bear a charge in an amount equal to one quarter of one percent (0.25%) of principal amount of each Sub-project Financing; and
 - (c) bear interest, on the principal of the Sub-project Financing withdrawn and outstanding from time to time, at a rate equal to the rate applicable from time to time to the Loan pursuant to Section 2.04 of the Loan Agreement.

Eligibility and Appraisal

- 3. Each Sub-loan shall be made only to a Beneficiary which:
 - (a) is an enterprise and legal person duly established and operating under the laws of the Borrower;
 - (b) shall have established that it is creditworthy and has a sound financial structure and the organization, management, staff and other resources required for the efficient carrying out of its operations, including the Sub-project; and

- (c) purpose is the development and operation of environment-related infrastructure.
- 4. Each Sub-project Financing shall be made only for a sub-project which:
 - (a) proposes new, revenue-generating capital investments in water supply, wastewater collection and treatment, solid waste management or other similar environment-related infrastructure; or
 - (b) proposes capital investments in non revenue-generating public sector infrastructure.
- 5. Sub-projects shall be appraised and selected on the basis of technical, financial, environmental and resettlement criteria acceptable to the Bank. Such criteria shall include, without limitation:
 - (a) Environment: for each Sub-project the Beneficiary shall prepare an environmental action plan satisfactory to the Bank, on the basis of procedures and principles set forth in the Sub-project Environment Assessment Framework including, an assessment of the Beneficiary's and the Sub-project's adverse impact on the environment and appropriate mitigation measures to be carried out to remedy such impact.
 - (b) Resettlement: for each Sub-project involving the involuntary resettlement of any persons in connection therewith, the Beneficiary shall prepare, on the basis of procedures and principles set forth in the Sub-project Resettlement Policy Framework, a resettlement action plan satisfactory to the Bank, and carry out such resettlement action plan in a manner satisfactory to the Bank, before commencing works for the Sub-project.

Utilization of proceeds of Sub-project Financing

6. The proceeds of Sub-project Financing shall be withdrawn only to finance expenditures for goods, works and consultants' services required for a Sub-project.

Other conditions

- 7. No expenditures for goods, works or consultants' services required for a Subproject shall be eligible for financing out of the proceeds of the Loan unless:
 - (a) the proposed Sub-project shall have been approved by the Shanghai Development and Reform Commission and CEAM's Investment Committee; and

- (b) with respect to the proposed Sub-project Financing for the Jiading hazardous waste treatment and disposal facility sub-project, which shall not exceed \$20,000,000, the Bank shall have provided its no objection.
- 8. Each Sub-project Financing shall be made on further conditions whereby CEAM shall obtain, by written contract with the Beneficiary, rights adequate to protect the interests of the Bank and Shanghai, including:
 - (a) That the Beneficiary shall undertake: (i) to carry out and operate the Sub-project (including completion of abatement measures, the Sub-project EMP and, if applicable, the Sub-project RAP) with due diligence and efficiency and in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of the Loan proceeds other than the Borrower, with appropriate management, financial, engineering and public utility practices, and social and environmental standards acceptable to the Bank; (ii) to maintain adequate records; and (iii) to provide, promptly as needed, the funds, facilities and other resources required for the foregoing purposes.
 - (b) That the Beneficiary shall undertake to procure the goods, works and consultants' services required for the Sub-project in accordance with the provisions of Section III of Schedule 2 to the Loan Agreement, and utilize such goods and services exclusively in the carrying out of its Subproject.
 - (c) That the Beneficiary shall undertake to enable the Bank, Shanghai and CEAM to inspect such goods and the sites and works included in its Subproject, the operation thereof, and any relevant records and documents.
 - (d) That the Beneficiary shall undertake to take out and maintain with responsible insurers such insurance against such risks and in such amounts, as shall be consistent with sound business practice including, without limitation, such insurance to cover hazards incident to the acquisition, transportation and delivery of goods required for the Subproject to the place of use or on, any indemnity thereunder to be made payable in a currency freely usable by the Beneficiary to replace or repair such goods.
 - (e) That the Beneficiary shall undertake to prepare and furnish to Shanghai and/or CEAM, as the case may be, for forwarding to the Bank, if it shall so request, all such information as the Bank, Shanghai or CEAM shall reasonably request relating to the foregoing and to the administration, operations and financial condition of the Beneficiary and to the benefits to be derived from the Sub-project.

- (f) That the Beneficiary shall undertake to:
 - (i) maintain policies and procedures adequate to enable it to monitor and evaluate on an ongoing basis, in accordance with indicators set forth in Annex C to the Schedule to the Project Agreement, the carrying out of its Sub-project and the achievement of the objectives thereof; and
 - (ii) prepare, under terms of reference satisfactory to the Bank and CEAM, and furnish to CEAM for its review, consolidation and submission to the Bank in accordance with paragraph 5(e)(ii) of Section II of Annex A to the Schedule to this Agreement on or about February 1 and August 1 each year, commencing on the February 1 or August 1 following the date of the Sub-project Financing Agreement to which it is a party, semi-annual reports integrating the results of the monitoring and evaluation activities performed pursuant to clause (i) of this sub-paragraph (f) on the progress achieved in the carrying out of its Sub-project during the period preceding the date of each such report.
- (g) That the Beneficiary shall undertake to:
 - (i) produce for each fiscal year, commencing twenty-four (24) months after the date of commissioning ("Commissioning Date") of facilities constructed under its Sub-project, total revenues equivalent to not less than the sum of its total operating expenses; and the amount by which debt service requirements exceeds the provision for depreciation;
 - (ii) review by September 30 in each fiscal year commencing immediately upon the first September 30 following the Commissioning Date, on the basis of forecasts prepared in a manner satisfactory to the Bank, to what extent it would meet the requirements set forth in sub-paragraph (g)(i) above, in respect of such year and the next following fiscal year and furnish to the Bank the results of such review upon its completion; and
 - (iii) that the Beneficiary shall undertake, if any such review shows that it would not meet the requirements set forth in sub-paragraph (g)(i) above for the fiscal years covered by such review, to promptly take all necessary measures in order to meet such requirements.

- (h) For purposes of sub-paragraphs 8(g) above:
 - (i) The term "total revenues" means the sum of total operating revenues and net non-operating income.
 - (ii) The term "total operating revenues" means revenues from all sources related to operations.
 - (iii) The term "net non-operating income" means the difference between: (A) revenues from all sources other than those related to operations; and (B) expenses including, taxes and payments in lieu of taxes incurred in the generation of revenues in clause (A).
 - (iv) The term "total operating expenses" means all expenses related to operations including, administration, adequate maintenance, taxes and payments in lieu of taxes, and provision for depreciation on a straight-line basis at a rate of not less than 2.5% per annum of the average current gross value of the concerned Project Company, but excluding interest and other charges on debt.
 - (v) The average current gross value of a Beneficiary's fixed assets in operation shall be calculated as one half of the sum of the gross value of said company's fixed assets in operation at the beginning and at the end of the fiscal year, as valued from time to time in accordance with sound and consistently maintained methods of valuation satisfactory to the Bank.
 - (vi) The term "debt service requirements" means the aggregate amount of repayments (including sinking fund payments, if any) of, and interest and other charges on, debt.
 - (vii) Whenever, for the purposes of paragraph 8(g), it shall be necessary to value, in terms of the currency of the Borrower, debt payable in another currency, such valuation shall be made on the basis of the prevailing lawful rate of exchange at which such other currency is, at the time of such valuation, obtainable for the purposes of servicing such debt, or, in the absence of such rate, on the basis of a rate of exchange acceptable to the Bank.
- (i) Provisions to ensure the right of CEAM to suspend or terminate the right of the Beneficiary to the use of the proceeds of the Sub-project Financing upon failure by such Beneficiary to perform its obligations under its project Financing Agreement.

ANNEX C to SCHEDULE Indicators

| PDO | Outcome Indicators | Use of Outcome Information | | | |
|--|---|--|--|--|--|
| To improve Shanghai's resource and environmental sustainability in the core and suburban areas through | 1. Total volume of quality water supplied by Qing Cao Sha raw water system | Track progress towards achieving the PDO. | | | |
| strategic priority investments and selective | 2. Reduction of water pollution in Puxi area of the | | | | |
| institutional reforms in the water and wastewater | Upper Huangpu River (annual COD reduction) | | | | |
| sectors. | 3. Adoption of management decision by Chengtou | | | | |
| | General on DFV's future strategic evolution | | | | |
| | 4. Improvement in the water sector management in the | | | | |
| | areas supported by IST components | | | | |
| Intermediate Results – one per component | Results indicators for each component | Use of results monitoring | | | |
| Water Supply and Management Component | | | | | |
| Increased secure provision and distribution of quality raw water through the Nanhui conveyor. | 1.Total population served through the Nanhui conveyor | Track progress on and adjust physical and institutional reform aspects of the delivery of raw water supply | | | |
| | 2. Volume of raw water supplied through the Nanhui | services. | | | |
| | conveyor to receiving water treatment plants | | | | |
| | 3.Raw water quality transported through the Nanhui | | | | |
| | conveyor to receiving water treatment plants | | | | |
| Wastewater Component | | | | | |
| Increased interception of untreated wastewater through | 1.Total population served through the Bailonggang | Track progress on and adjust physical and institutional | | | |
| the Southern Trunk Sewer (Puxi section). | Southern Trunk Sewer (Puxi section) | reform aspects of the delivery of wastewater services. | | | |
| | 2.Amount of wastewater intercepted and conveyed by | | | | |
| | the Bailonggang Southern Trunk Sewer (Puxi | | | | |
| | section) to the centralized treatment system | | | | |
| District Environment Management Program | | | | | |
| Introduced short and medium-term reforms of the | 1.Number of projects approved by DFV | Track progress on and adjust institutional evolution of | | | |
| DFV. | 2.Amount of DFV loan disbursed | the DFV | | | |
| | 3. Number of DFV projects co-financed with other | | | | |
| | financial institutions | | | | |
| Institutional Strengthening and Training (IST) | | | | | |
| Implemented a range of strategic studies and capacity | 1. Number of participants trained | Track progress on and adjust institutional development | | | |
| building activities for implementing agencies. | 2. Number of courses offered | and capacity building initiatives. | | | |
| | 3. Number of study tours conducted | | | | |
| | 4. Survey results on satisfaction of participants | | | | |

Arrangements for results monitoring APL3

| Project Outcome Indicators | Unit | Base Line (2009) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Frequency and Reports | Data collection Instruments | Responsibilities for data collection |
|--|---|---------------------|----------|----------|-------------------|----------|-----------------|----------|---|--|--------------------------------------|
| Total volume of quality water supplied by Qing Cao Sha raw water system | thousand m3/ day (cumulative) | - | 3,045 | 4,112 | 4,778 | 4,854 | 4,928 | 5,003 | Annually | Semi-Annual PPR | PMO |
| Reduction of water pollution in Puxi area of the Upper Huangpu River (annual COD reduction) | 1,000 t/year | 450 | 450 | 450 | 450 | 450 | 450 | 464 | Annually | Semi-Annual PPR | PMO |
| Adoption of management decision by Chengtou General on DFV's future strategic evolution | n.a. | - | - | adopted | - | - | - | - | Annually (key action 2011) | DFV Reports | PMO |
| Improvements in the management of the water sector in the areas supported by the IST components | Report(s) | - | | | Interim Report | | Final Report | | Annually (key evaluation 2012 and 2014) | Report based on interviews/ focus group discussion | PMO |
| Intermediate Results Indicators | | | | | | | | | | | |
| Water Supply Management | | | | | | | | | | | |
| Total population served through the Nanhui conveyor | million (cumulative) | - | - | - | - | 1.5 | 1.66 | 1.81 | Semi annually | QCS Reports | PMO |
| Volume of raw water supplied through the Nanhui conveyor to receiving water treatment plant | thousand m3/day (cumulative) | - | - | - | - | 480 | 528 | 580 | Semi annually | QCS Reports | PMO |
| Raw water quality transported through the Nanhui conveyor to receiving water treatment | based on raw water quality standard | - | Class II | Class II | Class II | Class II | Class II | Class II | Semi annually | QCS Reports | PMO |
| Wastewater Management | | | | | | | | | | | |
| Total population served through the Bailonggang Southern Trunk Sewer (Puxi section) | million (cumulative) | 0 | 0 | 0 | 0 | 0 | 0 | 0.94 | Semi annually | SMSC Reports | PMO |
| Amount of wastewater intercepted and conveyed by the Bailonggang Southern Trunk Sewer (Puxi section) to the centralized treatment system | thousand m3/day (cumulative) | 0 | 0 | 0 | 0 | 0 | 0 | 195 | Semi annually | SMSC Reports | PMO |

| District Environment Management Program | | | | | | | | | | | |
|---|---|---|--|----|----|----|----|----------|---------------|---|-----|
| Number of project approved by the DFV | number of project (cumulative) | - | 1 | 1 | 2 | 2 | 3 | 3 | Semi annually | DFV Reports | PMO |
| Amount of DFV loan disbursed | million US\$ (cumulative) | - | 5 | 10 | 15 | 20 | 30 | 30 | Semi annually | DFV Reports | PMO |
| Number of DFV projects co-financed with other financial institutions | number of project (cumulative) | - | 1 | 1 | 2 | 2 | 2 | 2 | Semi annually | DFV Reports | PMO |
| Institutional Strengthening and Training | | | | | | | | | | | |
| Number of participants trained | man-day (cumulative) | - | | | | ' | | | Semi annually | IST Reports | PMO |
| Number of studies completed | Number of studies (cumulative) | - | | | | | | | | IST Reports | PMO |
| Number of study tours conducted | man-day (cumulative) | - | Baselines to be defined at the outset of each IST component. | | | | | mponent. | Semi annually | IST Reports | PMO |
| Survey results on satisfaction of participants of the training as well as the result of the studies and TA. | grade of satisfaction and usefulness (poor – excellent) | - | | | | | | | Semi annually | Evaluation sheets collected after each training | PMO |

Definitions of Selected Results Monitoring Indicators

| Indicator | Definition | | | | |
|--|--|--|--|--|--|
| Outcome Indicators | | | | | |
| Total volume of quality water supplied by Qing Cao Sha raw water system | Amount of class II or better raw water supplied through the entire Qing Cao | | | | |
| | Sha Reservoir system, including non-Bank financed components | | | | |
| Reduction of water pollution in Puxi area of the Upper Huangpu River (annual COD | Formula to calculate: Q m3/d x C mg/L | | | | |
| reduction) | Q = wastewater collected at Puxi section of the Southern Trunk Sewer in m3/d | | | | |
| | C = concentration of the influent COD in mg/L | | | | |
| Adoption of management decision by Chengtou on DFV's future strategic | A strategic report on DFV's future evolution and an action plan, endorsed by | | | | |
| evolution | management of Chengtou General (at the level of the Vice-General Manager) | | | | |
| Improvements in the management of the water sector in the areas supported by | Report on improvements in the management of the water sector in the areas | | | | |
| the IST components | supported by the IST components. | | | | |
| Intermediate Outcome and Key Output Indicators | | | | | |
| Water Supply and Management | | | | | |
| Total population served through the Nanhui conveyor | Formula to calculate: (Q m3/d x F %) / (S Lpcd) | | | | |
| | Q = raw water received by existing water supply plants in 2012 | | | | |
| | F = percentage of domestic consumption | | | | |
| | S = water consumption per person per day in Lpcd | | | | |
| Volume of raw water supply through the Nanhui conveyor to receiving water | Amount of raw water received at the water treatment plants from the Nanhui | | | | |
| treatment plants | conveyor (Bank-financed component only) | | | | |
| Raw water quality transported through the Nanhui conveyor to receiving water | Defined by the main parameters of surface water standards, i.e. pH, DO, color, | | | | |
| treatment plants | BOD, COD, N and P. | | | | |
| Wastewater Management | | | | | |
| Total population served through the Bailonggang Southern Trunk Sewer (Puxi | Formulate to calculate: (QD m3/L) / (W Lpcd) | | | | |
| section) | QD = wastewater flow from domestic discharges in m3/d | | | | |
| | W = wastewater generation per person per day in Lpcd | | | | |
| Amount of wastewater intercepted and conveyed by the Bailonggang Southern | Amount of wastewater conveyed by the Bailonggang Southern Trunk Sewer | | | | |
| Trunk Sewer (Puxi section) to the centralized wastewater system | (Puxi section) | | | | |
| Institutional Strengthening and Training | | | | | |
| Survey results on satisfaction of participants and the implementing agencies of | Satisfaction evaluated by participant and the implementing agencies after | | | | |
| TAs, | training or study tours/studies and TAs. | | | | |