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LOAN NUMBER 2237-PRC

LOAN AGREEMENT  
(Ordinary Operations)

(Shandong Hai River Basin Pollution Control Project)

between

PEOPLE'S REPUBLIC OF CHINA

and

ASIAN DEVELOPMENT BANK

DATED 15 NOVEMBER 2006

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LAL: PRC 36505



**LOAN AGREEMENT  
(Ordinary Operations)**

LOAN AGREEMENT dated 15 November 2006 between the PEOPLE'S REPUBLIC OF CHINA (hereinafter called the Borrower) and ASIAN DEVELOPMENT BANK (hereinafter called ADB).

WHEREAS

(A) the Borrower has applied to ADB for a loan for the purposes of the Project described in Schedule 1 to this Loan Agreement;

(B) the Project will be carried out by the Shandong Provincial Government (hereinafter called SPG or the Project Executing Agency) and each of the Subprojects will be implemented by the relevant IAs. For these purposes the Borrower will make available through SPG to each of the Municipal Governments who will, in turn, make available through the City and County Governments, as applicable, to the IAs the proceeds of the Loan provided for herein upon terms and conditions satisfactory to ADB, all as more fully described in Section 3.01 of this Loan Agreement; and

(C) ADB has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions set forth herein and in the Project Agreement of even date herewith between ADB and SPG;

NOW THEREFORE the parties hereto agree as follows:

**ARTICLE I**

**Loan Regulations; Definitions**

Section 1.01. All the provisions of the Ordinary Operations Loan Regulations Applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001, are hereby made applicable to this Loan Agreement with the same force and effect as if they were fully set forth herein.

Section 1.02. Wherever used in this Loan Agreement, and the Project Agreement unless the context otherwise requires, the several terms defined in the Loan Regulations have the respective meanings therein set forth, and the following additional terms have the following meanings:

(a) "Anticorruption Policy" means ADB's *Anticorruption Policy*, June 1998;

(b) "Binzhou MWM IA" means the Binzhou Development Zone Kaichuang Water Purification Limited Liability Company, established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Binzhou MWM Subproject;

(c) “Binzhou MWM Subproject” means the municipal wastewater treatment plant to be constructed in Binzhou City and to be operated and managed by the Binzhou MWM IA;

(d) “CDM” means the Clean Development Mechanism established under the 1997 Kyoto Protocol;

(e) “CDM Representation Agreement” means the agreement as described in paragraph 28 of the Schedule to the Project Agreement;

(f) “Changyuan IWM IA” means the Changyuan Company Project Implementation Unit, established to oversee the construction and operation and maintenance of, and act as the implementing agency for, the Changyuan IWM Subproject;

(g) “Changyuan IWM Subproject” means the industrial wastewater treatment plant to be constructed under the Project at the Changyuan Paper Mill Company in Linyi County and to be operated and managed by the Changyuan IWM IA;

(h) “Changyuan Paper Mill Company” means the Dezhou Changyuan Paper Mill Company, established in 1977 as a 100% state-owned limited liability company;

(i) “City Government” means either the Binzhou City Government or the Linqing City Government, as applicable;

(j) “City Government Onlending Agreement” means the agreement pursuant to which a Municipal Government makes the proceeds of the Loan available to a City Government for purposes of the Project in accordance with Section 3.01(c) and (e) of this Loan Agreement;

(k) “Company Law” means the Company Law of the PRC;

(l) “Corporate Structuring and Human Resources Development Plan” means the plan as described in paragraph 13 of the Schedule to the Project Agreement;

(m) “County Government” means any of the Gaotang County Government, Linyi County Government, Shanghe County Government or Zouping County Government;

(n) “County Government Onlending Agreement” means the agreement pursuant to which a Municipal Government makes the proceeds of the Loan available to a County Government for purposes of the Project in accordance with Section 3.01(c) and (e) of this Loan Agreement;

(o) “EIA” means each of the nine Environmental Impact Assessments prepared by (i) the Binzhou Environmental Protection Science and Research Institute for the Binzhou MWM Subproject, (ii) the Jinan City Environmental Project Design Institute for the Shanghe MWM Subproject, and (iii) the Shandong Provincial Environmental Protection Science Research and Design Institute for the IWM Subprojects, the Linqing MWM Subproject, the Gaotang MWM Subproject, and the SWM Subprojects;

(p) “EMP” means each of the nine Environmental Management Plans prepared by (i) the Binzhou Environmental Protection Science and Research Institute for the

Binzhou MWM Subproject, (ii) the Jinan City Environmental Project Design Institute for the Shanghe MWM Subproject, and (iii) the Shandong Provincial Environmental Protection Science Research and Design Institute for the IWM Subprojects, the Linqing MWM Subproject, the Gaotang MWM Subproject, and the SWM Subprojects;

(q) “Gaotang MWM IA” means the Gaotang County Water Quality Purification Limited Liability Company, established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Gaotang MWM Subproject;

(r) “Gaotang MWM Subproject” means the municipal wastewater treatment plant to be constructed in Gaotang County and to be operated and managed by the Gaotang MWM IA;

(s) “IA” means each of the IWM IAs; MWM IAs; and SWM IAs;

(t) “IA Onlending Agreement” means the agreement pursuant to which a City or County Government makes the proceeds of the Loan available to an IA for purposes of the Project in accordance with Section 3.01(d) and (e) of this Loan Agreement;

(u) “Institutional Development Plans” means, collectively, the Corporate Structuring and Human Resources Development Plan, the Private Sector Participation Action Plan, the Sector and Asset Integration Plan, and the Tariff and Regulatory Reform Plan;

(v) “IWM” means industrial wastewater management;

(w) “IWM IAs” means each of the Changyuan IWM IA and Quanlin IWM IA;

(x) “IWM Subprojects” means each of the Changyuan IWM Subproject and the Quanlin IWM Subproject;

(y) “IWM LPMOs” means the Board of Directors of the Changyuan Paper Mill Company and Quanlin Paper Mill Company, respectively;

(z) “Linqing MWM IA” means the Linqing City Bibo Wastewater Disposal Company, Ltd., established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Linqing MWM Subproject

(aa) “Linqing SWM IA” means the Linqing City Yunhe Domestic Solid Waste Disposal Company, Ltd., established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Linqing SWM Subproject;

(bb) “Linqing MWM Subproject” means the municipal wastewater treatment plant to be constructed under the Project in Linqing City and to be operated and managed by the Linqing MWM IA;

(cc) “Linqing SWM Subproject” means the solid waste treatment facility to be constructed under the Project in Linqing City and to be managed and operated by the Linqing SWM IA;

(dd) “Linyi SWM IA” means the Linyi County Kangmin Solid Waste Management Limited Liability Company, established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Linyi SWM Subproject;

(ee) “Linyi SWM Subproject” means the solid waste treatment facility to be constructed under the Project in Linyi County and to be managed and operated by the Linyi SWM IA;

(ff) “Local Project Leading Group” or “Local PLG” means each of the City and County Governments;

(gg) “Local Project Management Office” or “LPMO” means each of the IWM LPMOs, MWM LPMOs, and SWM LPMOs;

(hh) “Municipal Governments” means each of the Binzhou Municipal Government, the Dezhou Municipal Government, the Jinan Municipal Government and the Liaocheng Municipal Government;

(ii) “Municipal Government Onlending Agreement” means the agreement pursuant to which SPG makes the proceeds of the Loan available to a Municipal Government for purposes of the Project in accordance with Section 3.01(b) and (e) of this Loan Agreement;

(jj) “MWM” means municipal wastewater management;

(kk) “MWM IAs” means each of the Binzhou MWM IA, Gaotang MWM IA, Linqing MWM IA, and Shanghe MWM IA;

(ll) “MWM LPMOs” means each of the Binzhou City Development Zone Management Committee, Gaotang Environment Protection Bureau, Linqing City Government Environment Protection Bureau, and Shanghe County Government Office and Construction Bureau;

(mm) “MWM Subprojects” means each of the Binzhou MWM Subproject, the Gaotang MWM Subproject, the Linqing MWM Subproject and the Shanghe MWM Subproject;

(nn) “Onlending Agreements” means, collectively, the SPG Onlending Agreement, the Municipal Government Onlending Agreements, the City Government Onlending Agreements, the County Government Onlending Agreements, and the IA Onlending Agreements;

(oo) “PPMS” means the Project Performance Management System to be established in accordance with paragraph 44 of the Schedule to the Project Agreement;

(pp) “PRC” means the People’s Republic of China;

(qq) “Private Sector Participation Action Plan” means the plan as described in paragraph 17 of the Schedule to the Project Agreement;

(rr) “Procurement Plan” means the procurement plan for the Project, dated 19 May 2006, agreed between the Borrower and ADB, as may be amended from time to time in agreement between the Borrower and ADB;

(ss) “Project Area” means the Hai River Basin, Shandong Province, including Gaotang County, Linyi County, Shanghe County, Zouping County, Binzhou City and Linqing City;

(tt) “Project Executing Agency” for the purposes of, and within the meaning of, the Loan Regulations means the Shandong Provincial Government which is responsible for carrying out of the Project;

(uu) “Project facilities” means the equipment and facilities provided and constructed under the Project, respectively;

(vv) “Quanlin IWM IA” means the Quanlin Company Project Implementation Unit, established to oversee the construction and operation and maintenance of, and act as the implementing agency for, the Quanlin IWM Subproject;

(ww) “Quanlin IWM Subproject” means the industrial wastewater treatment plant to be constructed under the Project at the Quanlin Paper Mill Company in Gaotang County and to be operated and managed by the Quanlin IWM IA;

(xx) “Quanlin Paper Mill Company” means the Gaotang Quanlin Paper Mill Company, established in 2000 as a 100% state-owned limited liability company;

(yy) “RP” means each of the seven resettlement plans prepared by the MWM and SWM LPMOs for each of the MWM and SWM Subprojects, respectively;

(zz) “SDRC” means the Shandong Provincial Development and Reform Commission;

(aaa) “Sector and Asset Integration Plan” means the plan as described in paragraph 15 of the Schedule to the Project Agreement;

(bbb) “SEIA” means the Summary Environment Impact Assessment, approved by ADB on 24 September 2004;

(ccc) “SEPB” means Shandong Provincial Environmental Protection Bureau;

(ddd) “Shandong Project Leading Group” or “SPLG” means the group headed by the Vice Governor of Shandong Province and comprised of the Deputy Director General of each of the SDRC, SEPB, SPFB and the Shandong Construction Bureau;

(eee) “Shanghe MWM IA” means the Shanghe County Zhengyuan Water Quality Purification Limited Liability Company, established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Shanghe MWM Subproject;

(fff) “Shanghe MWM Subproject” means the municipal wastewater treatment plant to be constructed under the Project in Shanghe County and to be operated and managed by the Shanghe MWM IA;

(ggg) “SPFB” means the Shandong Provincial Finance Bureau;

(hhh) “SPG” means the Shandong Provincial Government;

(iii) “SPG Onlending Agreement” means the agreement pursuant to which the Borrower makes the proceeds of the Loan available to SPG for purposes of the Project in accordance with Section 3.01(a) and (b) of this Loan Agreement;

(jjj) “SPMO” means the Shandong Project Management Office headed by the Deputy Director General of Shandong Provincial Construction Bureau and comprised of members from the SPFB, SDRC and SEPB;

(kkk) “Subprojects” means each of the IWM Subprojects, MWM Subprojects, and SWM Subprojects;

(lll) “SWM” means solid waste management;

(mmm) “SWM IAs” means each of the Linqing SWM IA, the Linyi SWM IA and the Zouping SWM IA;

(nnn) “SWM LPMOs” means each of the Linqing City Government Environment and Sanitation Department, Linyi County Government Urban Management Bureau, and the Zouping Urban Management Bureau;

(ooo) “SWM Subprojects” means each of the Linqing SWM Subproject, the Linyi SWM Subproject and the Zouping SWM Subproject;

(ppp) “Tariff and Regulatory Reform Plan” means the plan as described in paragraph 22 of the Schedule to the Project Agreement;

(qqq) “Tariff Structure Study” means the study as described in paragraph 21 of the Schedule to the Project Agreement;

(rrr) “Yinhe Paper Mill” means the privately held paper mill company located in Linqing City;

(sss) “Zouping SWM IA” means the Zouping County Domestic Solid Waste Disposal Limited Liability Company, established to oversee the construction of and operation and maintenance of, and act as the implementing agency for, the Zouping SWM Subproject;

(ttt) “Zouping SWM Subproject” means the solid waste treatment facility to be constructed under the Project in Zouping County and to be managed and operated by the Zouping SWM IA.

## ARTICLE II

### The Loan

Section 2.01. (a) ADB agrees to lend to the Borrower from ADB's ordinary capital resources an amount of Eighty Million Dollars (\$80,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.06 of this Loan Agreement.

(b) The Loan has a term of 25 years, including a grace period of 5 years, as provided in Schedule 2 to this Loan Agreement.

Section 2.02. The Borrower shall pay to ADB interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate for each Interest Period equal to the sum of LIBOR and 0.60% as provided by Section 3.02 of the Loan Regulations.

Section 2.03. (a) The Borrower shall pay a commitment charge at the rate of three-fourths of one percent (0.75%) per annum. Such charge shall accrue on amounts of the Loan (less amounts withdrawn from time to time), during successive periods commencing sixty (60) days after the date of this Loan Agreement, as follows:

during the first twelve-month period, on \$12,000,000;  
during the second twelve-month period, on \$36,000,000;  
during the third twelve-month period, on \$68,000,000; and  
thereafter, on the full amount of the Loan.

(b) If any amount of the Loan is cancelled, the amount of each portion of the Loan stated in paragraph (a) of this Section shall be reduced in the same proportion as the cancellation bears to the full amount of the Loan before such cancellation.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 15 December and 15 June in each year.

Section 2.05. The Borrower shall repay the principal amount of the Loan withdrawn from the Loan Account in accordance with the provisions of Schedule 2 to this Loan Agreement.

Section 2.06. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management:

- (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, whether withdrawn and outstanding or unwithdrawn, to an Approved Currency;
- (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan from a Floating Rate to a Fixed Rate, or vice versa; and
- (iii) the setting of limits on the Floating Rate applicable to all or any portion of the principal amount of the Loan withdrawn and

outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on said Floating Rate.

(b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by ADB shall be considered a "Conversion," as defined in Section 2.01(6) of the Loan Regulations, and shall be effected in accordance with the provisions of Article V of the Loan Regulations and the Conversion Guidelines.

### ARTICLE III

#### Use of Proceeds of the Loan

Section 3.01. (a) The Borrower shall make available the proceeds of the Loan to SPG upon terms and conditions satisfactory to ADB. Except as ADB may otherwise agree, the terms for making available to SPG the proceeds of the Loan shall include (i) interest at the same rate as the Loan; (ii) a repayment period including a grace period identical to those of the Loan; (iii) a commitment charge identical to that of the Loan; and (iv) SPG bearing the foreign exchange and interest variation risks of such proceeds of the Loan relented thereto.

(b) The Borrower shall cause SPG to onlend the proceeds of the Loan to the Municipal Governments under the following arrangements:

- (i) under a Municipal Government Onlending Agreement between SPG and the Binzhou Municipal Government in an amount of \$16,041,000 equivalent (for purposes of the Binzhou MWM Subproject and the Zouping SWM Subproject);
- (ii) under a Municipal Government Onlending Agreement between SPG and the Dezhou Municipal Government in an amount of \$12,587,000 equivalent (for purposes of the Linyi SWM Subproject and the Changyuan IWM Subproject);
- (iii) under a Municipal Government Onlending Agreement between SPG and the Jinan Municipal Government in an amount of \$6,580,000 equivalent (for purposes of the Shanghe MWM Subproject); and
- (iv) under a Municipal Government Onlending Agreement between SPG and the Liaocheng Municipal Government in an amount of \$44,792,000 equivalent (for purposes of the Gaotang MWM Subproject, the Quanlin IWM Subproject, the Linqing MWM Subproject and the Linqing SWM Subproject).

(c) The Borrower shall cause SPG to ensure that the Municipal Governments onlend the proceeds of the Loan to the City and County Governments under the following arrangements:

- (i) under a City Government Onlending Agreement between Binzhou Municipal Government and Binzhou City Government in an amount of \$9,517,000 equivalent (for purposes of the Binzhou MWM Subproject);

- (ii) under a County Government Onlending Agreement between Binzhou Municipal Government and Zouping County Government in an amount of \$6,524,000 equivalent (for purposes of the Zouping SWM Subproject);
  - (iii) under a County Government Onlending Agreement between Dezhou Municipal Government and Linyi County Government in an amount of \$12,587,000 equivalent (for purposes of the Linyi SWM Subproject and the Changyuan IWM Subproject);
  - (iv) under a County Government Onlending Agreement between Jinan Municipal Government and Shanghe County Government in an amount of \$6,580,000 equivalent (for purposes of the Shanghe MWM Subproject);
  - (v) under a County Government Onlending Agreement between Liaocheng Municipal Government and Gaotang County Government in an amount of \$29,442,000 equivalent (for purposes of the Gaotang MWM Subproject and the Quanlin IWM Subproject); and
  - (vi) under a City Government Onlending Agreement between Liaocheng Municipal Government and Linqing City Government in an amount of \$15,350,000 equivalent (for purposes of the Linqing MWM Subproject and the Linqing SWM Subproject).
- (d) The Borrower shall cause SPG to ensure that the City and County Governments, through the Municipal Governments, onlend the proceeds of the Loan to the IAs under the following arrangements:
- (i) under an IA Onlending Agreement between Gaotang County Government and the Quanlin IWM IA in an amount of \$22,402,000 equivalent (for purposes of the Quanlin IWM Subproject);
  - (ii) under an IA Onlending Agreement between the Linyi County Government and the Changyuan IWM IA in an amount of \$10,055,000 equivalent (for purposes of the Changyuan IWM Subproject);
  - (iii) under an IA Onlending Agreement between Binzhou City Government and the Binzhou MWM IA in an amount of \$9,517,000 equivalent (for purposes of the Binzhou MWM Subproject);
  - (iv) under an IA Onlending Agreement between Gaotang County Government and the Gaotang MWM IA in an amount of \$7,040,000 equivalent (for purposes of the Gaotang MWM Subproject);
  - (v) under an IA Onlending Agreement between Linqing City Government and Linqing MWM IA in an amount of \$9,340,000 equivalent (for purposes of the Linqing MWM Subproject);

- (vi) under an IA Onlending Agreement between Linqing City Government and Linqing SWM IA in an amount of \$6,010,000 equivalent (for purposes of the Linqing SWM Subproject);
- (vii) under an IA Onlending Agreement between Linyi County Government and Linyi SWM IA in an amount of \$2,532,000 equivalent (for purposes of the Linyi SWM Subproject);
- (viii) under an IA Onlending Agreement between Shanghe County Government and Shanghe MWM IA in an amount of \$6,580,000 equivalent (for purposes of the Shanghe MWM Subproject); and
- (ix) under an IA Onlending Agreement between Zouping County Government and Zouping SWM IA in an amount of \$6,524,000 equivalent (for purposes of the Zouping SWM Subproject).

(e) The Onlending Agreements shall contain terms and conditions satisfactory to ADB. Except as ADB may otherwise agree, (i) the terms and conditions in each of the Onlending Agreements for the MWM and SWM Subprojects shall include (A) interest at the same rate as the Loan; (B) a repayment period including a grace period identical to those of the Loan; and (C) a commitment charge identical to that of the Loan, and (ii) the terms and conditions in each of the IA Onlending Agreements for the IWM Subprojects shall include (A) interest at the same rate as the Loan; (B) a repayment period of 12 years, including a grace period of four years; and (C) a commitment charge identical to that of the Loan. For each of the Subprojects, each IA shall bear the foreign exchange and interest variation risks of such proceeds of the Loan onlent thereto. An annual service charge of 0.2% shall be charged by SPG in connection with the Onlending Agreements for the MWM and SWM Subprojects and an annual service charge of 0.5% shall be charged by SPG in connection with the Onlending Agreements for the IWM Subprojects. The Onlending Agreements shall also contain provisions for ensuring that the Municipal, City and County Governments and the IAs comply with their respective obligations as set forth in the Project Agreement.

(f) The Borrower shall cause SPG, and shall ensure that SPG causes each of the Municipal Governments, the City and County Governments and the IAs, to apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of this Loan Agreement and the Project Agreement.

Section 3.02. The goods and services and other items of expenditure to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan among different categories of such goods and services and other items of expenditure shall be in accordance with the provisions of Schedule 3 to this Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.

Section 3.03. Except as ADB may otherwise agree, all goods and services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where goods or services have not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 3.04. Except as ADB may otherwise agree, the Borrower shall cause all goods and services financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The closing date for withdrawals from the Loan Account for the purposes of Section 9.02 of the Loan Regulations shall be 30 June 2012 or such other date as may from time to time be agreed between the Borrower and ADB.

## **ARTICLE IV**

### **Particular Covenants**

Section 4.01. (a) The Borrower shall cause SPG to carry out the Project with due diligence and efficiency and in conformity with sound administrative, financial, engineering, environmental, IWM, MWM, and SWM practices.

(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this Loan Agreement and the Schedule to the Project Agreement.

Section 4.02. The Borrower shall, through SPG, the Municipal Governments and the City and County Governments, make available to the IAs promptly as needed and on terms and conditions acceptable to ADB, the funds, facilities, services, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 4.03. The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.

Section 4.04. The Borrower shall take all action which shall be necessary on its part to enable each of the SPG, the Municipal Governments, the City and County Governments and the IAs to perform their respective obligations under the Project Agreement including the establishment and maintenance of tariffs as stipulated in paragraphs 21 through 24 of the Schedule to the Project Agreement, and shall not take or permit any action which would interfere with the performance of such obligations.

Section 4.05. (a) The Borrower shall (i) exercise its rights under the SPG Onlending Agreement and (ii) cause SPG to ensure that the Municipal Governments, City Governments, County Governments and IAs exercise their respective rights under the Municipal Government Onlending Agreements, the City Government Onlending Agreements, the County Government Onlending Agreements and the IA Onlending Agreements, respectively, in each case, in such a manner as to protect the interests of the Borrower and ADB and to accomplish the purposes of the Loan.

(b) The Borrower shall cause SPG to ensure that no rights or obligations under any of the Onlending Agreements are assigned, amended, abrogated or waived without the prior concurrence of ADB.

## ARTICLE V

### Effectiveness

Section 5.01. A date ninety (90) days after the date of this Loan Agreement is specified for the effectiveness of the Loan Agreement for the purposes of Section 10.04 of the Loan Regulations.

## ARTICLE VI

### Miscellaneous

Section 6.01. The Minister of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 12.02 of the Loan Regulations.

Section 6.02. The following addresses are specified for the purposes of Section 12.01 of the Loan Regulations:

#### For the Borrower

Ministry of Finance  
Sanlihe, Xicheng District  
Beijing 100820  
People's Republic of China

Telex Number:

22486 MFPRC CN

Facsimile Number:

(86-10) 6855-1125

#### For ADB

Asian Development Bank  
P.O. Box 789  
0980 Manila, Philippines

Cable Address:

ASIANBANK  
MANILA

Telex Numbers:

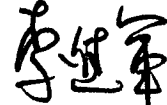
29066 ADB PH (RCA)  
42205 ADB PM (ITT)  
63587 ADB PN (ETPI)

Facsimile Numbers:

(632) 636-2444  
(632) 636-2407.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names and to be delivered at the principal office of ADB, as of the day and year first above written.

PEOPLE'S REPUBLIC OF CHINA



By \_\_\_\_\_

LI JINJUN

Ambassador Extraordinary  
and Plenipotentiary of the  
People's Republic of China  
to the Republic of the Philippines

ASIAN DEVELOPMENT BANK



By \_\_\_\_\_

HARUHIKO KURODA  
President

## SCHEDULE 1

### Description of the Project

#### Impact and Outcome

1. The impact of the Project is to improve the urban environment and public health in Shandong province by reducing pollution loading from different sources into the Hai River Basin through (a) improving municipal wastewater collection, treatment and reuse; (b) providing municipal solid waste collection and disposal; (c) adopting clean industrial processes and improving waste management; and (d) institutional development of utilities. The outcomes of the Project are to (a) provide improved and sustainable wastewater and SWM services on economically and environmentally sound principles and practices and (b) implement an integrated approach for the management of each of (i) municipal wastewater and (ii) solid waste point and non-point pollution sources.

#### Project Scope

2. The Project consists of nine subprojects to be implemented in cities and counties within the Project Area and is grouped into four components: (a) institutional development; (b) MWM; (c) SWM; and (d) IWM as follows:

#### **Component 1: Institutional Development**

(a) development of financially sustainable, operationally efficient and managerially autonomous utility companies for each of the MWM and SWM Subprojects to effectively manage and utilize Project created assets and provide efficient services;

(b) development and implementation of strategic action plans for strengthening the institutional development of the MWM and SWM IAs.

#### **Component 2: Municipal Wastewater Management**

(a) Binzhou MWM Subproject: construction of (i) a 40,000 tons per day (t/d) capacity secondary wastewater treatment plant; (ii) 30,000 t/d capacity tertiary reuse water treatment plant; (iii) approximately 65 kilometers (km) of sewer and 17 km of reuse water piping; and (iv) 30,000 t/d capacity lift station in Binzhou City;

(b) Gaotang MWM Subproject: construction of (i) a 40,000 t/d capacity secondary wastewater treatment plant; (ii) 40,000 t/d capacity reuse water treatment plant; and (iii) 23 km of sewer, trunk sewer; and reuse water piping in Gaotang County;

(c) Linqing MWM Subproject: construction of (i) a 100,000 t/d capacity secondary wastewater treatment plant; (ii) 50,000 t/d capacity tertiary water reuse treatment plant; and (iii) 12 km of trunk sewer, reuse water piping, and treatment effluent discharge lines in Linqing City; and

(d) Shanghe MWM Subproject: construction of (i) a 40,000 t/d capacity secondary wastewater treatment plant; (ii) 21 km of sewer; and (iii) two lift stations, one with a 10,000 t/d capacity and one with a 30,000 t/d capacity in Shanghe County.

### **Component 3: Solid Waste Management**

(a) Linqing SWM Subproject: construction of a lined sanitary landfill with leakage collection and treatment systems and associated machinery and equipment with 400 t/d capacity and 15-year design life in Linqing City;

(b) Linyi SWM Subproject: construction of a lined sanitary landfill with leachate collection and treatment systems and associated machinery and equipment with 200 t/d capacity and 20-year design life in Linyi County; and

(c) Zouping SWM Subproject: construction of a lined sanitary landfill with leachate collection and treatment systems and associated machinery and equipment with 400 t/d capacity and 15-year design life and construction of a transfer station with a 100 t/d capacity and leachate collection and treatment systems in Zouping County.

### **Component 4: Industrial Wastewater Management**

(a) Changyuan IWM Subproject: upgrading the existing waste treatment discharge systems through the construction of (i) 1,800 m<sup>3</sup>/day black liquor recovery system with a 200 t/d of solid capacity and 43 t/d sodium hydroxide recovery; (ii) a 45,000 m<sup>3</sup>/day middle-wastewater treatment system; (iii) 15,000 m<sup>3</sup>/day white liquor recycling system; and (iv) associated structures at the Changyuan Paper Mill; and

(b) Quanlin IWM Subproject: upgrading the existing waste treatment discharge system through the construction of (i) a 11,470 m<sup>3</sup>/day black liquor recovery system with 2,440-t/d of solid capacity; (ii) 536 t/d sodium hydroxide and 485 t/d lime recovery systems; and (iii) associated structures at the Quanlin Paper Mill.

3. The Project is expected to be completed by 31 December 2011.

**SCHEDULE 2****Amortization Schedule****(Shandong Hai River Basin Pollution Control Project)**

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (Installment Share). If the proceeds of the Loan shall have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by ADB by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

<u>Period</u>	<u>Date Payment Due</u>			<u>Installment Share</u> <u>(expressed in Percentage)</u>
1	15	December	2011	0.83
2	15	June	2012	0.87
3	15	December	2012	0.91
4	15	June	2013	0.96
5	15	December	2013	1.01
6	15	June	2014	1.06
7	15	December	2014	1.11
8	15	June	2015	1.16
9	15	December	2015	1.22
10	15	June	2016	1.28
11	15	December	2016	1.35
12	15	June	2017	1.42
13	15	December	2017	1.49
14	15	June	2018	1.56
15	15	December	2018	1.64
16	15	June	2019	1.72
17	15	December	2019	1.81
18	15	June	2020	1.90
19	15	December	2020	1.99
20	15	June	2021	2.09
21	15	December	2021	2.20
22	15	June	2022	2.31
23	15	December	2022	2.42
24	15	June	2023	2.54
25	15	December	2023	2.67
26	15	June	2024	2.80
27	15	December	2024	2.94
28	15	June	2025	3.09
29	15	December	2025	3.25
30	15	June	2026	3.41
31	15	December	2026	3.58
32	15	June	2027	3.76

33	15	December	2027	3.94
34	15	June	2028	4.14
35	15	December	2028	4.35
36	15	June	2029	4.57
37	15	December	2029	4.79
38	15	June	2030	5.03
39	15	December	2030	5.29
40	15	June	2031	5.54
				<u>100.00</u>

If the proceeds of the Loan shall not have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by ADB by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. Withdrawals made within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by ADB by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by ADB under the Currency Hedge Transaction relating to said Conversion; or (ii) if ADB so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

### **SCHEDULE 3**

#### **Allocation and Withdrawal of Loan Proceeds**

##### General

1. The table attached to this Schedule sets forth the Categories of goods, services and other items to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan to each such Category (hereinafter called the Table). (Reference to "Category" or "Categories" in this Schedule is to a Category or Categories of the Table and reference to "Subcategory" or "Subcategories" in this Schedule is to a Subcategory or Subcategories of a Category.)

##### Percentages of ADB Financing

2. Except as ADB may otherwise agree, the items of the Categories and Subcategories listed in the Table shall be financed out of the proceeds of the Loan on the basis of the percentages set forth in the Table.

##### Commitment Charge

3. The amount allocated to Category 5 is for financing commitment charges on the Loan during the implementation period of the Project. ADB shall be entitled to withdraw from the Loan Account and pay to itself, on behalf of the Borrower, the amounts required to meet payments, when due, of such commitment charges.

##### Reallocation

4. Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the Table,

(a) if the amount of the Loan allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, by notice to the Borrower, (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Loan which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures, and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures thereunder shall have been made; and

(b) if the amount of the Loan then allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, by notice to the Borrower, reallocate such excess amount to any other Category.

##### Imprest Account; Statement of Expenditures

5. (a) Except as ADB may otherwise agree, the Borrower shall cause SPFB, on behalf of SPG, to establish immediately after the Effective Date, an imprest account at a commercial bank selected by the Borrower and acceptable to ADB. The imprest account shall be established, managed, replenished and liquidated in accordance with ADB's "Loan Disbursement Handbook" dated January 2001, as amended from time to time, and detailed

arrangements agreed upon between the Borrower and ADB. The initial amount to be deposited into the imprest account shall not exceed the lesser of (i) six (6) months of estimated expenditures or (ii) eight million Dollars (\$8,000,000).

(b) The statement of expenditures (SOE) procedure may be used for reimbursement of eligible expenditures and to liquidate advances provided into the imprest account, in accordance with ADB's "Loan Disbursement Handbook" dated January 2001, as amended from time to time, and detailed arrangements agreed upon between the Borrower and ADB. Any individual payment to be reimbursed or liquidated under the SOE procedure shall not exceed \$200,000.

#### Retroactive Financing

6. Withdrawals from the Loan Account may be made for reimbursement of reasonable expenditures incurred under the Project before the Effective Date, but not earlier than 2 November 2005, or a maximum of 12 months prior to signing of this Loan Agreement, whichever is later, in connection with the early recruitment of consultants, subject to a maximum amount equivalent to \$1,000,000.

#### Condition of Withdrawals from Loan Account

7. Notwithstanding any other provision of this Loan Agreement, no withdrawal shall be made from the Loan Account for the ultimate benefit of any Subproject until the following condition shall have been met: the Borrower shall have caused the Shandong Provincial Finance Bureau to certify to ADB that each of the IA Onlending Agreements related to any such Subproject, which shall include the terms and conditions as referred to in Section 3.01(d) and (e) of this Loan Agreement, shall have been duly executed and delivered on behalf of the City Governments or the County Governments and the IAs, as applicable, and shall have become fully effective and binding upon the parties thereto in accordance with their respective terms.

TABLE

<b>ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Shandong Hai River Basin Pollution Control Project)</b>				
<b>CATEGORY</b>				<b>ADB FINANCING</b>
<b>Number</b>	<b>Item</b>	<b>Amount Allocated [ \$ ]</b>		<b>Percentage and Basis for Withdrawal from the Loan Account</b>
		<b>Category</b>	<b>Subcategory</b>	
1	Civil Works	18,865,000		55 percent of total expenditure
1A	Changyuan IWM Subproject		2,284,000	56 percent of total expenditure
1B	Quanlin IWM Subproject		2,500,000	56 percent of total expenditure
1C	Binzhou MWM Subproject		3,333,000	55 percent of total expenditure
1D	Gaotang MWM Subproject		2,335,000	57 percent of total expenditure
1E	Linqing MWM Subproject		2,938,000	57 percent of total expenditure
1F	Shanghe MWM Subproject		2,481,000	57 percent of total expenditure
1G	Linqing SWM Subproject		958,000	44 percent of total expenditure
1H	Linyi SWM Subproject		634,000	56 percent of total expenditure
1I	Zouping SWM Subproject		1,402,000	56 percent of total expenditure
2	Equipment and Materials	59,294,000		100 percent of total expenditure
2A	Changyuan IWM Subproject		7,610,000	100 percent of total expenditure
2B	Quanlin IWM Subproject		19,721,000	100 percent of total expenditure
2C	Binzhou MWM Subproject		5,993,000	100 percent of total expenditure
2D	Gaotang MWM Subproject		4,525,000	100 percent of total expenditure
2E	Linqing MWM Subproject		6,220,000	100 percent of total expenditure
2F	Shanghe MWM Subproject		3,921,000	100 percent of total expenditure
2G	Linqing SWM Subproject		4,790,000	100 percent of total expenditure
2H	Linyi SWM Subproject		1,655,000	100 percent of total expenditure

2I	Zouping SWM Subproject		4,859,000	100 percent of total expenditure
3	CDM Implementation and Marketing	200,000		100 percent of total expenditure
3A	Linqing SWM Subproject		75,000	100 percent of total expenditure
3B	Linyi SWM Subproject		50,000	100 percent of total expenditure
3C	Zouping SWM Subproject		75,000	100 percent of total expenditure
4	Capacity Building and Consulting Services	1,511,000		100 percent of total expenditure
5	Commitment Charge	130,000		100 percent of amounts due
	Total	80,000,000		

## SCHEDULE 4

### Provisions on Procurement and Services of Consultants

#### A. General

1. **Goods and Works.** All goods and works required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in the Procurement Guidelines (April 2006), as amended from time to time (hereinafter called the Procurement Guidelines), the Procurement Plan and with the provisions of this Schedule.

2. **Consultants' Services.** All consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in the Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (2006), as amended from time to time (hereinafter called the Consultant Guidelines), the Procurement Plan and with the provisions of this Schedule.

3. **Definitions.** The capitalized terms used in this Schedule to describe particular methods of procurement by the Borrower or review by ADB of particular contracts refer to the corresponding method described in the Procurement Guidelines, or Consultant Guidelines, as the case may be.

#### B. Particular Methods of Procurement of Goods and Works

4. **International Competitive Bidding.** Except as otherwise provided in paragraph 5 below or in the Procurement Plan, including any revisions thereto after the Effective Date, goods and works shall be procured under contracts awarded on the basis of International Competitive Bidding procedures.

5. **Other Methods of Procurement of Goods and Works.** The following provisions specify the methods of procurement, other than International Competitive Bidding, which may be used for goods and works. The Procurement Plan shall specify the circumstances under which such methods may be used.

(a) Civil works contracts estimated to cost the equivalent of less than \$10,000,000 may be awarded on the basis of National Competitive Bidding.

(b) Contracts for goods estimated to cost the equivalent of less than \$1,000,000 (other than minor items) may be awarded on the basis of Limited International Bidding and/or National Competitive Bidding.

(c) Contracts for goods and works estimated to cost the equivalent of less than \$100,000 may be awarded on the basis of Shopping.

#### C. Particular Methods of Procurement of Consultants' Services

6. **Quality-and Cost-based Selection.** Consultants' services shall be procured under contracts awarded on the basis of (a) Quality and Cost-based Selection for implementation consultants and (b) Least Cost Selection and/or Consultants' Qualifications

selection for CDM implementation and marketing. The Procurement Plan shall specify the circumstances under which such methods may be used.

D. ADB's Review of Procurement Decisions

7. The Procurement Plan shall set forth those contracts which shall be subject to ADB's Post Review. All other contracts shall be subject to Prior Review by ADB.

E. Procurement Plan

8. The Borrower shall update the Procurement Plan as needed throughout implementation of the Project, and on each anniversary of the Effective Date, the Borrower shall in consultation with ADB determine whether the Procurement Plan needs to be updated. The Borrower shall implement the Procurement Plan in the manner in which it has been approved by ADB.

F. Domestic Preference

9. The Borrower may provide a margin of preference in accordance with paragraphs 2.55(a) and 2.56 of the Procurement Guidelines for Domestically Manufactured Goods and paragraph 2.55(b) and 2.56 of the Procurement Guidelines for Domestic Works in comparing bids under international competitive bidding.

G. Industrial or Intellectual Property Rights

10. The Borrower shall ensure that all ADB-financed goods and works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.

11. The Borrower shall ensure that all ADB-financed contracts for the procurement of goods and works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in paragraph 10 above.

12. The Borrower shall ensure that all ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the consulting services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.

## SCHEDULE 5

### **Implementation Arrangements; Financial Matters, and Other Matters**

#### Implementation Arrangements

1. SPG, as the Project Executing Agency for the Project, shall be responsible for overall Project implementation. To ensure coordination at the central level, the Project Executing Agency shall be assisted by the Shandong Project Leading Group (SPLG) and the Shandong Provincial Government Project Management Office (SPMO). To ensure coordination at the local level, the Project Executing Agency shall be assisted by the Local PLGs. The SPLG shall be responsible for overall policy oversight and guidance for the Project and the Local PLGs shall be responsible for policy matters at the local levels in the Project Areas. The SPMO shall be responsible for (a) guiding the strategic direction of the Project, (b) coordinating uniform policy reform among all Project components and Subprojects in each of the Project Areas, (c) coordinating communication and interaction between the IAs and ADB, (d) leading all committees for procurement and consulting services, (e) monitoring and reviewing Project implementation, (f) representing the interests of the SWM IAs in CDM matters, and (g) providing necessary guidance as appropriate. The SPLG shall meet on a yearly basis, or more frequently as required for Project implementation. Each of the SPLG and the SPMO shall be maintained until Project completion.

2. Each LPMO shall oversee the Project preparation and implementation activities for the Subprojects in their respective Project Areas, as applicable. The LPMOs are comprised of local governmental representatives, including those from the relevant construction bureau, development and reform commission, finance bureau, price bureau, and environmental protection bureau, among others. The LPMOs shall be responsible for (a) coordinating with the SPMO until Project completion, (b) monitoring and reviewing Project implementation in their respective Project Areas, (c) participating in all committees for procurement and consulting services, (d) overseeing the formation and institutional development of the MWM and SWM IAs, and (e) monitoring the activities of the MWM and SWM IAs. Each City and County Government, as applicable, shall allocate additional key staff, particularly in the areas of finance and engineering, to participate in the LPMO activities for the MWM and SWM Subprojects as required for Project implementation. The LPMOs shall (a) meet on a monthly basis, or more frequently as required for Project implementation and (b) be maintained until Project completion.

3. Each IA shall be responsible for (a) implementing the Subprojects in their respective Project Areas, as applicable, (b) operating and managing the Project facilities and (c) in the case of the MWM and SWM Subprojects, providing the MWM or SWM services, as applicable. In particular, the IAs shall be responsible for (a) direct day-to-day Project management, (b) construction supervision, (c) preparing semi-annual progress reports for submission to the LPMOs and (d) planning the strategic direction of the MWM and SWM services and operations as well as the opportunities for institutional reform and development among each of the IAs.

Counterpart Financing

4. The Borrower shall cause SPG to ensure that (a) each of the City and County Governments provide to the IAs all counterpart funds committed by the relevant local governments as necessary for timely and successful Project implementation and (b) each IA utilizes all such counterpart funds so as to ensure that the Project is implemented effectively, and in a timely manner.

Tariff Rates

5. The Borrower shall cause SPG to ensure that no entity, agency, or institution of any City or County Government, nor any enterprise, regardless of ownership, shall be granted (a) an exemption from the tariffs established pursuant to paragraphs 21 and 24 of the Schedule to the Project Agreement, (b) a preferential tariff rate or (c) excused for delays in payment of such MWM and/or SWM tariffs, as applicable, without penalty.

Change in Ownership Structure

6. The Borrower shall cause SPG to ensure that each IA obtains the prior written consent of ADB in the event that any such IA plans to (a) change the ownership structure of any of the Project facilities, (b) sell, transfer or assign any of its shares or (c) otherwise make any material organizational change, either financial or operational, where such change may have an adverse effect on such IA's ability to perform its obligations in respect of the relevant Subproject, the Project Agreement or any IA Onlending Agreement. In the event any such change is approved by ADB, the Borrower shall cause SPG, through the relevant IA, to ensure that the change in ownership structure is carried out in a transparent manner and does not affect repayment of the Loan made under the Loan Agreement. Depending on the nature of the approved change in ownership structure, ADB shall have the right to modify the repayment terms of the Loan.

Mid-Term Review

7. The Borrower, SPG, the City and County Governments, the IAs, and ADB shall, during the third year of Project implementation, jointly undertake a comprehensive mid-term review of the Project. The mid-term review will cover the items to be addressed during the annual reviews as well as (a) undertake a comprehensive and detailed discussion on the progress of the institutional development component of the Project, including progress made under each of the Institutional Development Plans, (b) discuss the results of the Tariff Structure Study, and (c) undertake a comprehensive review of potential loan savings, identify areas for reallocation of loan proceeds, and change disbursement percentages, as appropriate.