

REQUEST FOR PROPOSALS

Issued on: September 2016

**Millennium Challenge Account - Benin II
(MCA-BENIN II)**

On Behalf of:

The Government of Benin

**Millennium Challenge Account – Benin II
Program**

Funded by

THE UNITED STATES OF AMERICA

through

**THE MILLENNIUM CHALLENGE
CORPORATION**

for

Procurement of Consultant Services

**Selection of Consultant for Hazardous Materials
Assessment**

RFP/QCBS/PP2-CIF/ESP-01

Letter of Invitation Requesting Proposals

Cotonou, Benin
September 19, 2016

Re: Selection of Consultant for Hazardous Materials Assessment

RFP Ref: PP2-CIF-ESP-01

Dear Madam/Sir:

The United States of America, acting through the Millennium Challenge Corporation (“MCC”) and the Government of Benin (the “Government” or “GoB”) have entered into a Millennium Challenge Compact for Millennium Challenge Account assistance to help facilitate poverty reduction through economic growth in **Benin** (the “Compact”) in the amount of approximately **375 000 000 USD** (“MCC Funding”). The Government, acting through **Millennium Challenge Account – Benin II** (the “MCA Entity”), intends to apply a portion of the MCC Funding to eligible payments under a contract for which this Request for Proposals (“RFP”) is issued. Any payments made by the MCA Entity under the proposed contract will be subject, in all respects, to the terms and conditions of the Compact and related documents, including restrictions on the use and distribution of MCC Funding. No party other than the Government and the MCA Entity shall derive any rights from the Compact or have any claim to the proceeds of MCC Funding. The Compact and its related documents can be found on the MCC website (www.mcc.gov) and on the website of the MCA Entity.

The objective of the Benin Power Program is to expand business production and productivity, generate greater economic opportunities for households and improve the capacity to provide public and social services by improving the quantity and quality of the supply of electricity. The Benin Program is comprised of the following four projects:

- **Policy Reform and Institutional Strengthening Project:** This project will advance far-reaching policy reforms and strengthen institutions through improved regulation, utility operations and management, energy efficiency, and private investment in power generation. The project advances the compact’s policy reform agenda, including planned conditions precedent.
- **Electricity Generation Project:** This project will increase the amount of installed generating capacity in Benin by 78 megawatts (MW) – equivalent in capacity to one-third of the country’s current peak demand – while helping the country decrease its reliance on unreliable energy imports. This will be achieved through the installation of 45 MW of solar photovoltaic generation and the rehabilitation of 33 MW of thermal and hydroelectric generation infrastructure that will complement the solar investment.
- **Electricity Distribution Project:** This project will modernize Benin’s electricity distribution infrastructure to expand grid capacity to accommodate future growth, improve reliability, and reduce losses and outages. The project will improve the grid serving Cotonou, the commercial

capital, selected regional networks as a complement to proposed solar generation investments, as well as on a national level by building a modern distribution dispatch and control center to more effectively manage the network, including intermittent power from renewable sources.

- Off-grid Electricity Access Project: This project will expand access to electricity through financing of an off-grid energy grant facility along with policy and institutional strengthening to support the entire off-grid power sector in Benin.

This RFP follows the General Procurement Notice N°2 and its amendment N°3 that appeared in dgMarket and UNDB Online on **August 24, 2016** and the MCA Entity website **www.mcabenin2.bj** on **August 25, 2016**, and local newspaper “**la Nation**” on **August 29, 2016**.

The MCA Entity now invites proposals from legally constituted consulting firms to provide the consultant services referenced above (“Proposals”). More details on these consultant services are provided in the Terms of Reference.

This RFP is open to all eligible entities (“Consultants”) who wish to respond. Subject to restrictions noted in the RFP, consultants may associate with other consultants to enhance their capacity to successfully carry out the assignment.

The services under this contract are anticipated to be conducted during a period of **eight (8) calendar months**.

A Consultant will be selected under the **Quality and Cost Based Selection (QCBS)**, the evaluation procedure for which is described in sections of the RFP in accordance with “MCC Program Procurement Guidelines” which are provided on the MCC website (www.mcc.gov/ppg). The selection process, as described, will include a review and verification of qualifications and past performance, including a reference check, prior to the contract award.

The RFP includes the following Sections:

PART 1 – PROPOSAL AND SELECTION PROCEDURES

Section I Instructions to Consultants

This section provides information to help potential Consultants prepare their Proposals; it also provides information on the submission, opening, and evaluation of Proposals and on the award of the proposed contract.

Section II Proposal Data Sheet

This section includes provisions that are specific to this procurement and that supplement Section I, Instructions to Consultants.

Section III Qualification and Evaluation Criteria

This section specifies the qualifications required of the Consultant and the criteria to be used to evaluate the Proposal.

Section IV A Technical Proposal Forms

This section provides the Technical Proposal Forms which are to be completed by a potential Consultant and submitted in a separate envelope as part of a potential

Consultant's total Proposal.

Section IV B Financial Proposal Forms

This section provides the Financial Proposal Forms which are to be completed by a potential Consultant and submitted in a separate envelope as part of a potential Consultant's total Proposal.

Section V Terms of Reference

This Section includes the detailed Terms of Reference that describe the nature, tasks, and duties of the consulting services to be procured.

PART 2 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VI Contract Agreement and General Conditions of Contract

This section contains the form of Contract proposed to be entered into between the MCA Entity and Consultant.

Section VII Special Conditions of Contract and Annexes to Contract

This section contains the form of those clauses of the Contract that supplement the GCC and that are to be completed by MCA Entities for each procurement of Consulting Services. This section also includes an Annex to the Contract (Annex B: Additional Provisions) that contains provisions that are a part of the Government's and the MCA Entity's obligations under the Compact and related documents which, under the terms of the Compact and related documents, are required to be transferred onto any Consultant, Sub-Consultant or Associate who partakes in any MCC-funded procurement.

Please note that a Pre-Proposal Conference **will** be held as described in the Proposal Data Sheet ("PDS"), Section II of this RFP.

Consultants interested in submitting a Proposal should register their interest by sending an e-mail, giving full contact details of the Consultant, to the following. This will ensure that the Consultants receive updates regarding this RFP.

MCA-BENIN II

Attn: The Procurement Agent

Immeuble KOUGBLENOU, 3ème Etage,

Domaine de l'OCBN

Derrière la Compagnie Territoriale de Gendarmerie du Littoral

01 BP 101 Cotonou, Republic of Benin

Tel (229) 21 31 78 25

Fax: +229 21 31 96 42

E-mail: info-benin@charleskendall.com

and copy : info@mcabenin2.bj

Proposals must be delivered to the address and in the manner specified in the PDS ITC 17.5, no later than **November 02, 2016 at 10:00 a.m. local time in Benin.**

Consultants should be aware that distance and customs formalities may require longer than expected delivery time. Late Proposals will not be accepted under any circumstances and will be returned unopened at the written request and cost of the Consultant.

Please note that electronic Proposals shall not be accepted. However, an electronic version of the technical proposal shall be submitted on a CD or on a thumb drive.

Yours sincerely,

Samuel Olukayodé BATCHO
National Coordinator of MCA-BENIN II

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PART 1:
PROPOSAL AND SELECTION
PROCEDURES

Section I. Instructions to Consultants

A. General

In Part 1 (Proposal and Selection Procedures) of this Request for Proposals, the following words and expressions shall have the meanings stated. These definitions shall not apply to any words or expressions in the sections that make up Part 2 (Conditions of Contract and Contract Forms) of this RFP, in which such words and expressions shall have the meanings stated in GCC Sub-Clauses 1.1 and 2.1 unless otherwise specified.

- (a) “Addendum” or “Addenda” means a modification to this RFP issued by the MCA Entity.
- (b) “Associate” means any entity that is a member of the Association that forms the Consultant. A Sub-Consultant is not an Associate.
- (c) “Association” or “association” means an association of entities that forms the Consultant.
- (d) “Compact” means the Millennium Challenge Compact **identified in the PDS**.
- (e) “confirmation” means confirmation in writing.
- (f) “Consultant” means any legal entity that may provide or provides the Services to the MCA Entity under the Contract.
- (g) “Contract” means the contract proposed to be entered into between the MCA Entity and the Consultant, including all attachments, annexes, and all documents incorporated by reference therein, a form of which is included in Part 2 of this RFP.
- (h) “days” refers to calendar days.
- (i) “FBS” means Fixed Budget Selection method as defined in the MCC PPG.
- (j) “Financial Proposal” has the meaning given the term in ITC Sub-Clause 12.5.
- (k) “Fiscal Agent” means any entity that provides services to the MCA Entity under the terms of the Fiscal Agent Agreement.
- (l) “GCC” means the General Conditions of Contract.
- (m) “Government” means the Government **identified in the PDS**.
- (n) “Instructions to Consultants” or “ITC” means

Section I of this RFP, including any amendments, which provides Consultants with all information needed to prepare their Proposals.

- (o) "Key Professional Personnel" means the Key Professional Personnel identified pursuant to ITC Sub-Clause 12.3(d).
- (p) "LCS" means Least Cost Selection method as defined in the MCC PPG.
- (q) "Millennium Challenge Corporation" or "MCC" means a United States Government corporation, acting on behalf of the United States Government.
- (r) "MCA Entity" means the accountable entity **identified in the PDS.**
- (s) "MCC Funding" means the funding MCC has made available to the Government pursuant to the terms of the Compact.
- (t) "MCC Program Procurement Guidelines" or "MCC PPG" means the MCC Program Procurement Guidelines and its amendments posted from time to time on the MCC website at www.mcc.gov/ppg.
- (u) "PDS" means the Proposal Data Sheet, in Section II of this RFP, used to reflect specific requirements and/or assignment conditions.
- (v) "Personnel" means Key Professional Personnel and additional staff provided by the Consultant, or by any Sub-Consultants, or Associates that are assigned to perform the Services or any part thereof.
- (w) "Pre-Proposal Conference" means the pre-proposal conference specified in PDS ITC 1.4, if any.
- (x) "Program Implementation Agreement" means the Program Implementation Agreement to be entered into, or that has been entered.
- (y) "Proposal" means the Technical Proposal and the Financial Proposal for the provision of the Services submitted by a Consultant in response to this RFP.
- (z) "QBS" means Quality-Based Selection method as defined in the MCC PPG.
- (aa) "QCBS" means Quality and Cost-Based Selection

method as defined in the MCC PPG.

- (bb) “RFP” means this Request for Proposals, including any amendments that may be made, prepared by the MCA Entity for the selection of the Consultant.
- (cc) “SCC” means the Special Conditions of Contract.
- (dd) “Services” means the tasks to be performed by the Consultant pursuant to the Contract.
- (ee) “Sub-Consultant” means any person or legal entity with whom the Consultant subcontracts any part of the Services.
- (ff) “Taxes” has the meaning given the term in the Compact.
- (gg) “TEP” means the Technical Evaluation Panel, selected for the purpose of evaluating the Proposals received, that submits a report with recommendation for award of the Contract for which this RFP is being issued.
- (hh) "Technical Proposal" has the meaning given the term in ITC Sub-Clause 12.3.
- (ii) “Terms of Reference” or “TOR” means the document included in this RFP as Section V which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the MCA Entity and the Consultant, and expected results and deliverables of the assignment.
- (jj) “Trafficking in Persons” or “TIP” has the meaning given to the term in the MCC Program Procurement Guidelines.

- 1. Scope of RFP
 - 1.1 The MCA Entity will select a Consultant in accordance with the selection method **specified in the PDS**.
 - 1.2 Throughout this RFP except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and the feminine means the masculine and vice versa.
 - 1.3 Consultants are invited to submit a Technical Proposal and a Financial Proposal for consulting services required for this assignment as **named in the PDS**. The Proposal will be the basis for contract negotiations and ultimately

for a signed Contract with the selected Consultant.

- 1.4 Consultants should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Consultants are encouraged to attend a Pre-Proposal Conference if one is **specified in the PDS**. Attending any Pre-Proposal Conference is strongly advised, but not mandatory. Attending any Pre-Proposal Conference and/or a site visit shall not be taken into account for the purpose of evaluation of Proposals.
- 1.5 The MCA Entity will timely provide, at no cost to the Consultant, the inputs and facilities **specified in the PDS**, assist the firm in obtaining licenses and permits needed to carry out the Services, and make available relevant project data and reports. No other inputs will be provided. Therefore, a Consultant shall plan to cover all incurred expenses that may be foreseen to initiate and sustain the Services in a timely manner, including but not limited to office space, communication, insurance, office equipment, travel, etc. not otherwise **specified in the PDS**.
- 1.6 The MCA Entity is not bound to accept any Proposal, and reserves the right to cancel the procurement at any time prior to Contract award, without thereby incurring any liability to any Consultant.

2. Source of Funds

- 2.1 The United States of America, acting through MCC and the Government have entered into the Compact. The Government, acting through the MCA Entity, intends to apply a portion of the MCC Funding to eligible payments under the Contract. Any payments made under the Contract with MCC Funding will be subject, in all respects, to the terms and conditions of the Compact and related documents, including restrictions on the use and distribution of MCC Funding. No party other than the Government and the MCA Entity shall derive any rights from the Compact or have any claim to any proceeds of MCC Funding. The Compact and its related documents can be found on the MCC website (www.mcc.gov) or on the website of the MCA Entity.

3. Corrupt and

- 3.1 MCC requires that all beneficiaries of MCC Funding,

Fraudulent
Practices

including the MCA Entity and any applicants, bidders, suppliers, contractors, subcontractors, Consultants, and Sub-Consultants under any MCC-funded contracts, observe the highest standards of ethics during the procurement and execution of such contracts. MCC's Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations ("MCC's AFC Policy") is applicable to all procurements and contracts involving MCC Funding and can be found on the MCC website. MCC's AFC Policy requires that companies and entities receiving MCC funds acknowledge notice of MCC's AFC Policy and certify that they have acceptable commitments and procedures in place to address the potential for fraudulent and corrupt practices. In pursuance of this policy, the following conditions shall apply:

- (a) For the purposes of these provisions, the terms set forth below are defined as follows, and sometimes referred to collectively in this document as "Fraud and Corruption":
 - (i) ***"coercive practice"*** means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of any party, to influence improperly the actions of a party in connection with the implementation of any contract supported, in whole or in part, with MCC Funding, including such actions taken in connection with a procurement process or the execution of a contract;
 - (ii) ***"collusive practice"*** means a tacit or explicit agreement between two or more parties to perform a coercive, corrupt, fraudulent, obstructive or prohibited practice, including any such agreement designed to fix, stabilize, or maintain prices or to otherwise deprive the MCA Entity of the benefits of free and open competition;
 - (iii) ***"corrupt practice"*** means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of a public official, MCA Entity staff, MCC staff, consultants, or employees of other entities engaged in work supported, in whole or in part, with MCC Funding, including such work

involving taking or reviewing selection decisions, otherwise advancing the selection process, or contract execution, or the making of any payment to any third party in connection with or in furtherance of a contract;

- (iv) “***fraudulent practice***” means any act or omission, including any misrepresentation, that knowingly or recklessly misleads or attempts to mislead a party in order to obtain a financial or other benefit in connection with the implementation of any contract supported, in whole or in part, with MCC Funding, including any act or omission designed to influence (or attempt to influence) a selection process or the execution of a contract, or to avoid (or attempt to avoid) an obligation;
- (v) “***obstructive practice***” means any act taken in connection with the implementation of any contract supported, in whole or in part, with MCC Funding:
 - (aa) that results in the deliberate destroying, falsifying, altering or concealing of evidence or making false statement(s) to investigators or any official in order to impede an investigation into allegations of a coercive, collusive, corrupt, fraudulent or prohibited practice;
 - (bb) that threatens, harasses or intimidates any party to prevent him or her from either disclosing his or her knowledge of matters relevant to an investigation or from pursuing the investigation; and/or
 - (cc) intended to impede the conduct of an inspection and/or the exercise of audit rights of MCC and/or an authorized Inspector General of MCC provided under the Compact and related agreements; and
- (vi) “***prohibited practice***” means any action that violates Section E (Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions) of Annex B (Additional Provisions) of the Contract.

- (b) The MCA Entity will reject a Proposal (and MCC will deny approval of a proposed Contract award) if it determines that the Consultant recommended for award has, directly or through an agent, engaged in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices in competing for the Contract.
- (c) MCC and the MCA Entity have the right to sanction a Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded an MCC-funded contract if at any time either MCC or the MCA Entity determines that the Consultant has, directly or through an agent, engaged in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices in competing for, or in executing, such a contract.
- (d) MCC and the MCA Entity have the right to require that a provision be included in the Contract requiring the selected Consultant to permit the MCA Entity, MCC, or any designee of MCC, to inspect the Consultant's, or any of the Consultant's suppliers or Sub-Consultants on the Contract, accounts, records and other documents relating to the submission of its Proposal or performance of the Contract and to have such accounts, records and other documents audited by auditors appointed by MCC or by the MCA Entity with the approval of MCC.
- (e) In addition, MCC has the right to cancel any portion of the MCC Funding allocated to the Contract if it determines at any time that any representative of a beneficiary of MCC Funding engaged in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices during the selection process or the execution of any MCC-funded Contract, without the MCA Entity having taken timely and appropriate action satisfactory to MCC to remedy the situation.

4. Trafficking in
Persons

- 4.1 MCC has a zero tolerance policy with regard to Trafficking in Persons. Trafficking in Persons ("TIP") is the crime of using force, fraud, and/or coercion to exploit another person. Trafficking in Persons can take the form of domestic servitude, peonage, forced labor, sexual servitude, bonded labor, and the use of child soldiers. This practice deprives people of their human rights and freedoms, increases global health risks, fuels growing

networks of organized crime, and can sustain levels of poverty and impede development. MCC is committed to ensuring appropriate steps are taken to prevent, mitigate, and monitor TIP risks in the projects it funds.

4.2 The Description of Services (Annex A of the Contract) sets out certain prohibitions, Consultant requirements, remedies and other provisions that will be made a binding part of any Contract that may be entered into.

4.3 Additional information on MCC's requirements aimed at combating trafficking in persons can be found in MCC's Counter-Trafficking in Persons Policy that can be found on MCC's website (<https://www.mcc.gov/resources/doc/policy-counter-trafficking-in-persons-policy>). All contracts funded by MCC are required to comply with MCC's Counter-Trafficking in Persons requirements as described in the Counter-Trafficking in Persons Policy. Contracts for projects categorized by MCC as high-risk for TIP are required to implement a TIP Risk Management Plan (which is to be developed by the MCA Entity and implemented by the corresponding contractor).

5. Qualification and Eligibility of Consultants

5.1 The qualification and eligibility criteria set out in this section will apply to the Consultant, including all parties constituting the Consultant, for any part of the Contract, including related services.

Qualification of Consultants

5.2 Consultants must satisfy the legal, financial and litigation criteria requirements stated in Paragraphs 3.1 to 3.3 of Section III of this RFP.

Eligibility of Consultants

5.3 Consultants must also satisfy the eligibility criteria set forth in this RFP and as contained in the MCC Program Procurement Guidelines governing MCC-funded procurements under the Compact.

Qualification and Eligibility of Joint Ventures or Associations

5.4 In the case where a Consultant is, or proposes to be, a joint venture or other Association (a) all members of the joint venture or Association must satisfy the legal, financial, litigation, eligibility and other requirements set out in this RFP; (b) all members of the joint venture or Association will be jointly and severally liable for the execution of the Contract; and (c) the joint venture or Association will nominate a representative who will have the authority to conduct all business for and on behalf of any and all the members of the joint venture or the

Association is awarded the Contract, during Contract performance.

Conflict of Interest

- 5.5 A Consultant shall not have a conflict of interest. All Consultants found to have a conflict of interest shall be disqualified, unless the conflict of interest has been mitigated and the mitigation is approved by MCC. The MCA Entity requires that Consultants hold the MCA Entity's interests paramount at all times, strictly avoid conflicts of interest, including conflicts with other assignments or their own corporate interests, and act without any consideration for future work. Without limitation on the generality of the foregoing, a Consultant, including all parties constituting the Consultant and any Sub-Consultants and suppliers for any part of the Contract, including related services, and their respective Personnel and affiliates, may be considered to have a conflict of interest and disqualified or terminated if they:
- (a) have at least one controlling partner in common with one or more other parties in the process contemplated by this RFP; or
 - (b) have the same legal representative as another Consultant for purposes of this Proposal; or
 - (c) have a relationship, directly or through common third parties, that puts them in a position to have access to information about or influence over the Proposal of another Consultant, or influence the decisions of the MCA Entity regarding the selection process for this procurement; or
 - (d) participate in more than one Proposal in this process; participation by a Consultant in more than one Proposal will result in the disqualification of all Proposals in which the party is involved; however, this provision does not limit the inclusion of the same Sub-Consultant in more than one Proposal; or
 - (e) are themselves, or have a business or family relationship with, (i) a member of the MCA Entity's board of directors or staff, (ii) the Procurement Agent, Fiscal Agent, or Auditor (as defined in the Compact or related agreements) hired by the MCA Entity in connection with the Compact, any of whom is directly or indirectly involved in any part of (A) the

preparation of this RFP, (B) the selection process for this procurement, or (C) supervision of the Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to MCC; or

- (f) any of their affiliates have been or, at present, are engaged by the MCA Entity in the capacity of the Procurement Agent or Fiscal Agent under the Compact.

5.6 A Consultant that has been engaged by the MCA Entity to provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a Consultant hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods, works or services other than consulting services resulting from or directly related to such consulting services for such preparation or implementation. For example, a Consultant hired to prepare terms of reference for an assignment should not be hired for the assignment in question. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measureable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.

5.7 [Intentionally Deleted.]

5.8 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the MCA Entity, or that may be reasonably perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of the Contract.

Government
Employees

5.9

- (a) No member of the MCA Entity's board of directors or current employees of the MCA Entity (whether part time, or full time, paid or unpaid, in leave status, etc.) shall be proposed or work as, or on behalf of, any Consultant.

- (b) Except as provided in Sub-Clause 5.9(d), no current employees of the Government shall work as

Consultants or as Personnel under their own ministries, departments or agencies.

- (c) Recruiting former MCA Entity or Government employees to perform services for their former ministries, departments or agencies is acceptable provided no conflict of interest exists.
- (d) If a Consultant proposes any Government employee as Personnel in their Technical Proposal, such Personnel must have written certification from the Government confirming that: (i) they will be on leave without pay from the time of their official Proposal submission and will remain on leave without pay until the end of their assignment with the Consultant and they are allowed to work full-time outside of their previous official position; or (ii) they will resign or retire from Government employment on or prior to the Contract award date. Under no circumstances shall any individuals described in (i) and (ii) be responsible for approving the implementation of this Contract. Such certification shall be provided to the MCA Entity by the Consultant as part of its Technical Proposal.
- (e) In the case where a Consultant seeks to engage the services of any person falling under ITC Sub-Clauses 5.9(a) – 5.9(d), who may have left the MCA Entity within a period of less than twelve (12) months of the date of this RFP, it must obtain a “no-objection” from the MCA Entity for the inclusion of such a person, prior to the Consultant’s submission of its Proposal.

Ineligibility and
Debarment

- 5.10 A Consultant, all parties constituting the Consultant, and any Sub-Consultants and suppliers for any part of the Contract, including related services, and their respective Personnel and affiliates, will not be any person or entity under (a) a declaration of ineligibility for engaging in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices as contemplated by ITC Sub-Clause 3.1 above, or (b) that has been declared ineligible for participation in a procurement in accordance with the procedures set out in Part 10 of MCC’s Program Procurement Guidelines (Eligibility Verification Procedures) that can be found on MCC’s website at www.mcc.gov/ppg. This would also remove from

eligibility for participation in this procurement any entity that is organized in, or has its principal place of business or a significant portion of its operations in, any country that is subject to sanctions or restrictions by law or policy of the United States.

5.11 A Consultant, all parties constituting the Consultant, and any Sub-Consultants and suppliers for any part of the Contract, including related services, and their respective Personnel and affiliates not otherwise made ineligible for a reason described in this ITC 5 will nonetheless be excluded if:

- (a) as a matter of law or official regulation, the Government prohibits commercial relations with the country of the Consultant (including any Associates, Sub-Consultants, and suppliers and any respective affiliates); or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government prohibits any import of goods from the country of the Consultant (including any Associates, Sub-Consultants, and suppliers and any respective affiliates) or any payments to entities in such country; or
- (c) such Consultant, any parties constituting the Consultant, any Sub-Consultant or supplier or their respective Personnel or affiliates are otherwise deemed ineligible by MCC pursuant to any policy or guidance that may, from time to time, be in effect as posted on MCC's website.

Evidence of Continued Eligibility

5.12 Consultants shall provide such evidence of their continued eligibility in a manner satisfactory to the MCA Entity, as the MCA Entity shall reasonably request.

Unfair Advantage

5.13 If a Consultant could derive an unfair competitive advantage from having provided consulting services related to the assignment in question, the MCA Entity shall make available to all Consultants, together with this RFP, all information that would in that respect give such Consultant any unfair competitive advantage over competing Consultants.

Commissions and Gratuities

5.14 A Consultant will furnish information on commissions and gratuities, if any, paid or to be paid relating to this

procurement or its Proposal and during performance of the Contract if the Consultant is awarded the Contract, as requested in the Financial Proposal Form FIN-1 of Section IV B.

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| 6. Origin of Goods and Consulting Services | 6.1 Goods supplied and consulting services provided under the Contract may originate from any country, subject to the same restrictions specified for Consultants (including their Associates, if any), their Personnel and Sub-Consultants set forth in ITC Sub-Clause 5.10. |
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B. Contents of RFP

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| 7. Sections of RFP | 7.1 This RFP consists of Parts 1 and 2, which include all the sections indicated below and should be read in conjunction with any Addenda issued in accordance with ITC Clause 9. |
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Part 1 Proposal and Selection Procedures

- Section I. Instructions to Consultants
- Section II. Proposal Data Sheet
- Section III. Qualification and Evaluation Criteria
- Section IV. A. Technical Proposal Forms
- Section IV. B. Financial Proposal Forms
- Section V. Terms of Reference

Part 2 Conditions of Contract and Contract Forms

- Section VI. Contract Agreement and General Conditions of Contract
- Section VII. Special Conditions of Contract and Annexes to Contract

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| 7.2 | The Request for Proposals letter issued by the MCA Entity is not part of the RFP. |
| 7.3 | The MCA Entity is not responsible for the completeness of this RFP and its Addenda if they were not obtained directly from the source stated by the MCA Entity in the Request for Proposals Letter. |
| 7.4 | The Consultant is expected to examine all instructions, forms, terms, and Terms of Reference in this RFP. Failure to furnish all information or documentation required by |

this RFP may result in the rejection of the Proposal.

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| 8. Clarification of RFP | <p>8.1 A prospective Consultant requiring any clarification of this RFP shall contact the MCA Entity in writing, or by email or fax at the MCA Entity's address indicated in the PDS. The MCA Entity will respond to any request for clarification, provided that such a request is received no later than the number of days indicated in the PDS prior to the deadline for submission of Proposals. The MCA Entity shall send written copies of the responses, including a description of the inquiry but without identifying its source, to all shortlisted Consultants or Consultants who have registered or obtained the RFP directly from the MCA Entity, as the case may be, by the date specified in the PDS. The MCA Entity will also post a copy of the responses and inquiry descriptions to the MCA Entity's website indicated in the PDS. Should the clarification result in changes to the essential elements of this RFP, the MCA Entity shall amend this RFP following the procedure under ITC Clause 9.</p> <p>8.2 The Consultant's designated representative is invited to attend a Pre-Proposal Conference, if provided for in PDS ITC 1.4. The purpose of the conference will be to clarify issues and to answer questions on any matter that may be raised at that stage.</p> <p>8.3 Minutes of the Pre-Proposal Conference, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the conference, will be posted on the MCA Entity's website as indicated in PDS ITC 8.1, and shall be transmitted in writing to all shortlisted Consultants or Consultants who have registered or obtained the RFP directly from the MCA Entity, as the case may be. Any modification to this RFP that may become necessary as a result of the Pre-Proposal Conference shall be made by the MCA Entity exclusively through the issue of an Addendum and not through the minutes of the Pre-Proposal Conference.</p> |
| 9. Amendment of the RFP | <p>9.1 At any time prior to the deadline for submission of Proposals, the MCA Entity may amend this RFP by issuing Addenda.</p> <p>9.2 All Addenda issued shall be part of this RFP, posted on</p> |

the MCA Entity's website, and shall be communicated in writing to all shortlisted Consultants or Consultants who have registered or obtained the RFP directly from the MCA Entity, as the case may be.

- 9.3 To give prospective Consultants reasonable time in which to take an Addendum into account in preparing their Proposals, the MCA Entity may extend the deadline for the submission of Proposals at its sole discretion.

C. Preparation of Proposals

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| 10. Cost of Proposal | 10.1 Except as otherwise provided in the PDS , the Consultant shall bear all costs associated with the preparation and submission of its Proposal, and the MCA Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Proposal process. |
| 11. Language of Proposal | 11.1 If Proposals are to be submitted in both English and/or any other language, as stated in the PDS , the English version shall govern. |
| 12. Preparation of Proposal | <p>12.1 In preparing their Proposal, Consultants are expected to examine in detail the documents comprising the RFP. Failure to provide the information requested may result in rejection of a Proposal.</p> <p>12.2 While preparing the Technical Proposal, Consultants must give particular attention to the following:</p> <p>(a) In the case where there has been no shortlisting of Consultants, if a Consultant considers that it may enhance its expertise for the assignment, it may associate with another Consultant. In the case where a Consultant is, or proposes to be, a joint venture or other association (i) all members of the joint venture or Association must satisfy the legal, financial, litigation and other requirements set out in this RFP; (ii) all members of the joint venture or Association will be jointly and severally liable for the execution of the Contract; and (iii) the joint venture or Association will indicate the authorized representative who will have the authority to conduct all business for and on behalf of any and all the members of the joint venture or the Association during the bidding process and, in the event the joint venture or Association is awarded the</p> |

Contract, during Contract performance.

- (b) In the case where there has been shortlisting of Consultants, if a shortlisted Consultant considers that it may enhance its expertise for the assignment by associating with other Consultants in a joint venture or Sub-Consultancy, it may associate with either (a) non-shortlisted Consultant(s), or (b) shortlisted Consultant(s) if so **indicated in the PDS**. A shortlisted Consultant must first obtain the approval of the MCA Entity if it wishes to enter into a joint venture with non-shortlisted or shortlisted Consultant(s). In case of association with non-shortlisted Consultant(s), the shortlisted Consultant shall act as the authorized representative of the association. In case of a joint venture, all partners shall be jointly and severally liable and shall indicate who will act as the leader of the joint venture.
- (c) The RFP may provide either, but never both, the estimated budget or the estimated level of effort of key staff. The estimated budget or the estimated number of person-months for Key Professional Personnel envisaged to execute the assignment may be **provided in the PDS**. However, the evaluation of the Proposal shall be based on the price and number of person-months estimated by the Consultant.
- (d) For FBS-based assignments, the available budget is provided in PDS ITC 12.2(c), and the Financial Proposal shall not exceed this budget, while the estimated number of Professional staff-months shall not be disclosed.
- (e) Alternative Key Professional Personnel shall not be proposed, and only one curriculum vitae (“CV”) may be submitted for each position indicated in the TOR.

Technical Proposal
Format and Content

12.3 Consultants are required to submit a Technical Proposal, which shall provide the information indicated in the following paragraphs (a) through (g) using the standard forms provided in Section IV A (the “Technical Proposal”). A page is considered to be one printed side of A4 or US letter-size paper.

- (a) Information on the Consultant’s financial capacity is required (Form TECH-2A of Section IV A). Information on current or past proceedings, litigation, arbitration, action claims, investigations or disputes is

required (Form TECH-2B of Section IV A). A brief description of the Consultants' organization and an outline of recent experience of the Consultant and of each Associate, if any, on assignments of a similar nature is required (Form TECH-3 and TECH-4 of Section IV A). For each assignment, the outline should indicate the names of Associates or Key Professional Personnel who participated, duration of the assignment, contract amount, and Consultant's involvement. Information should be provided only for those assignments for which the Consultant was legally contracted as a corporation or as one of the major firms within a joint venture. Assignments completed by individual professional staff working privately or through other consultants cannot be claimed as the experience of the Consultant, or that of an Associate, but can be claimed by the professional staff themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the MCA Entity. References of the Consultant are required (Forms TECH-5A and B of Section IV A).

- (b) Comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the assignment; and on requirements for counterpart staff and facilities including: administrative support, office space, local transportation, equipment, data, etc. to be provided by the MCA Entity (Form TECH-7 of Section IV A).
- (c) A description of the approach, methodology and work plan for performing the assignment covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposal is provided (Form TECH-6 of Section IV A). The work plan should be consistent with the Work and Deliverables Schedule (Form TECH-10 of Section IV A) which will show in the form of a bar chart the timing proposed for each activity.
- (d) The list of the proposed Key Professional Personnel by area of expertise, the position that would be assigned to each person, and their tasks (Form

TECH-8 of Section IV A).

- (e) Estimates of the staff input (person-months of foreign and local professionals) needed to carry out the assignment (Form TECH-9 of Section IV A). The person-months input should be indicated separately for home office and field activities, and for foreign and local professional staff.
- (f) CVs of the Key Professional Personnel signed by the staff themselves and/or by the authorized representative (Form TECH-11 of Section IV A).
- (g) A detailed description of the proposed methodology and staffing for training, if training is **identified in the PDS** as a specific component of the assignment (Form TECH-6 of Section IV A).

12.4 The Technical Proposal shall not include any financial information other than the required information in Form TECH-2A. A Technical Proposal containing financial information will constitute grounds for declaring the Proposal non-responsive.

Financial Proposals

12.5 The Consultant's Financial Proposal shall be prepared using the forms provided in Section IV B (the "Financial Proposal"). It shall list all prices associated with the assignment, including remuneration for Personnel (foreign and local, in the field and at the Consultants' home office) and travel expenses, if **indicated in the PDS**. All activities and items described in the Technical Proposal shall be assumed to be included in the price offered in the Financial Proposal.

13. Taxes

13.1 GCC 18 sets forth the Tax provisions of the Contract. Consultants should review this clause carefully in preparing their Proposal.

14. Only One Proposal

14.1 Consultants may only submit one Proposal. If a Consultant submits or participates in more than one Proposal, all such Proposals shall be disqualified. However, this does not preclude the participation of the same Sub-Consultants, including individual experts, in more than one Proposal.

15. Currencies of Proposal

15.1 Consultants must submit their Financial Proposals in the currency or currencies **specified in the PDS**.

16. Period of Proposal

16.1 Proposals shall remain valid for the period **specified in**

Validity

the PDS after the Proposal submission deadline date prescribed by the MCA Entity. A Proposal valid for a shorter period may be rejected by the MCA Entity as non-responsive.

- 16.2 During the period of proposal validity, Consultants shall maintain the availability of Key Professional Personnel identified in the Proposal. The MCA Entity will make its best effort to complete negotiations within this period. Should the need arise, however, the MCA Entity may request Consultants to extend the validity period of their Proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Key Professional Personnel nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants could submit new Key Professional Personnel in replacement, which would be considered in the final evaluation for Contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

D. Submission and Opening of Proposals

17. Sealing and Marking of Proposals

- 17.1 The following applies to the “**ORIGINAL**” of the Technical Proposal, and of the Financial Proposal. The “**ORIGINAL**” shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person signing the Proposal must initial such corrections, as well as initial each page of the relevant “**ORIGINAL**”. The submission letters for the Technical Proposal and for the Financial Proposal should respectively be in the format shown in (Form TECH-1) and (Form FIN-1).
- 17.2 If **required in the PDS**, the authorized representative of the Consultant signing the “**ORIGINAL**” of the Technical and the Financial Proposals shall provide within the Technical Proposal an authorization in the form of a written power of attorney demonstrating that the person signing has been duly authorized to sign the “**ORIGINAL**” on behalf of the Consultant, and its Associates. The signed Technical Proposals and the signed Financial Proposals shall be clearly marked “**ORIGINAL**”.
- 17.3 Copies of the Technical Proposal and the Financial Proposal shall be made, in the number **stated in the PDS**,

and each shall be clearly marked “COPY”. If discrepancies are found between the original and any of the copies of the relevant documents, then the “ORIGINAL” shall govern.

17.4 The “ORIGINAL” and each “COPY” of the Technical Proposal shall be placed in a sealed envelope/parcel clearly marked “TECHNICAL PROPOSAL”. Similarly, the “ORIGINAL” and each “COPY” of the Financial Proposal shall be placed in a separate sealed envelope/parcel clearly marked “FINANCIAL PROPOSAL”.

17.5 Each envelope/parcel shall bear the name and address of the MCA Entity as **stated in the PDS**, the name and address of the Consultant (in case they have to be returned unopened), and the Name of the Assignment as stated in PDS ITC 1.3.

17.6 In addition, the envelope/parcel containing the original and copies of the Financial Proposal shall be marked with a warning “DO NOT OPEN WITH THE TECHNICAL PROPOSAL”. If the Financial Proposal is not submitted in a separate sealed envelope/parcel duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.

17.7 The two envelopes/parcels containing the Technical Proposal and the Financial Proposal shall then be placed into one outer envelope or carton (as appropriate) and securely sealed to prevent premature opening. This outer envelope/carton shall bear the submission address, name and address of the Consultant, name of the assignment reference number, and be clearly marked with the statement **indicated in the PDS** and bear the name and address of the MCA Entity as stated in PDS ITC 17.5. The MCA Entity shall not be responsible for misplacement, losing or premature opening if the outer envelope/carton is not sealed and/or marked as stipulated. This circumstance may be cause for Proposal rejection.

18. Deadline for Submission of Proposals

18.1 Proposals must be received by the MCA Entity before the submission deadline **specified in the PDS**.

18.2 The MCA Entity may, at its discretion, extend the deadline for the submission of Proposals by amending this RFP in accordance with ITC 9, in which case all rights and obligations of the MCA Entity and the Consultants previously subject to the original deadline

shall thereafter be subject to the new deadline as extended.

18.3 Any Proposal received by the MCA Entity after the deadline for submission shall be declared late and rejected. The Consultant shall be notified of such rejection.

19. Late Proposals

19.1 The MCA Entity shall not consider any Proposal that arrives after the deadline for submission of Proposals in accordance with ITC 18. Any Proposals received by the MCA Entity after the deadline for submission of Proposals shall be declared late, rejected, and returned unopened to the Consultant at the request and cost of the Consultant.

20. Proposal Opening

20.1 The MCA Entity shall open the outer envelopes/cartons in a public meeting at the address, date and time **specified in the PDS** as soon as possible after the deadline for submission and sort the Proposals into Technical Proposals or Financial Proposals as appropriate. The MCA Entity shall ensure that the Financial Proposals remain sealed and securely stored until such time as the public opening of Financial Proposals takes place.

E. Evaluation of Proposals

21. Confidentiality

21.1 Information relating to the evaluation of Proposals and recommendations of Contract award shall not be disclosed to Consultants or any other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its Proposal or may invalidate the entire procurement process.

21.2 Any attempt or effort by a Consultant to influence the MCA Entity in the examination, evaluation, and ranking of Proposals or Contract award decisions may result in the rejection of its Proposal and may subject the Consultant to the provisions of the Government's, the MCA Entity's, and MCC's AFC Policy and the application of other sanctions and remedies to the extent applicable

21.3 From the time Proposals are opened to the time the Contract is awarded, Consultants shall not contact the

MCA Entity on any matter related to its Technical Proposal or Financial Proposal except in writing to the Procurement Agent.

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| 22. Clarification of Proposals | of | <p>22.1 To assist in the examination and evaluation of Proposals, the MCA Entity may, at its discretion, ask any Consultant for clarification of its Proposal. Any clarification submitted by a Consultant that is not in response to a request by the MCA Entity shall not be considered. The MCA Entity's request for clarification and the Consultant's response shall be in writing. No change in the prices or substance of the Proposal shall be sought, offered, or permitted except to confirm the correction of arithmetic errors discovered by the MCA Entity in the evaluation of the Proposals.</p> <p>22.2 If a Consultant does not provide clarifications of its Proposal by the date and time set in the MCA Entity's request for clarification, its Proposal may be rejected.</p> |
| 23. Evaluation of Technical Proposals | of | <p>23.1 The TEP shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in Section III. Each responsive Proposal will be given a technical score (St). A Proposal may be rejected at this stage if it does not respond to the RFP or if it fails to achieve the minimum technical score indicated in the PDS.</p> <p>23.2 In exceptional circumstances, if none of the scores awarded by the TEP reach or exceed the minimum technical score (St), the MCA Entity reserves the right to invite the Consultant receiving the highest technical score (St) to negotiate both its Technical and Financial Proposals. If the negotiations fail to result in an acceptable contract within a reasonable time, the MCA Entity reserves the right to terminate the negotiations, at its sole discretion, and to invite—again, at its sole discretion—the Consultant receiving the next highest technical score (St) to negotiate both its Technical and Financial Proposals.</p> |
| 24. Evaluation of Financial Capacity | of | <p>24.1 The Consultant's financial capability to mobilize and sustain the Services is imperative. In its Proposal, the Consultant is required to provide information on its financial and economic status. The information required</p> |

should be completed using the Form TECH-2A.

24.2 A Consultant that fails to demonstrate through its financial records that it has the economic and financial ability to perform the required services as described in the respective Terms of Reference may be disqualified. In the circumstance of a disqualification the Technical Proposal will not be evaluated further and the Financial Proposal shall be returned unopened at the cost and request of the Consultant.

24.3 The MCA Entity, at its discretion, may ask for clarifications or additional information regarding the information provided in Form TECH-2A.

24.4 The outcome of the Financial Capacity evaluation is a **clear YES or NO**. Any Consultant that receives a NO shall not be evaluated further and its Financial Proposal shall be returned unopened. The Proposals that receive a YES at this stage will be evaluated further according to the technical scoring methodology described in Section III.

Financial Proposals (only for QBS) 24.5 Following the ranking of Technical Proposals, and after receiving a “no objection” from MCC (if applicable), when selection is based on quality only (QBS), the first ranked Consultant will be invited to negotiate its Technical and Financial Proposals and the Contract in accordance with the instructions given under ITC Sub-Clause 26.1.

Financial Proposals (only for QCBS, FBS, LCS) 24.6 Following completion of the evaluation of Technical Proposals, and after receiving a “no objection” from MCC (if applicable), the MCA Entity shall inform the Consultants who have submitted Proposals of the technical points (total score only) assigned to each Consultant. The MCA Entity shall simultaneously notify the Consultants that have secured at least the minimum qualifying mark of the date, time, and place set for opening the Financial Proposals and notify them that their attendance at the opening of the Financial Proposals is not mandatory. The Financial Proposal opening shall take place at the location **indicated in the PDS**. The date and time scheduled for the Financial Proposal opening shall be specified on the MCA Entity’s website **provided in the PDS**. The MCA Entity shall promptly respond in writing to any Consultant who, after receiving

notification of the procurement results, makes a written request for a debriefing as provided in the MCC Program Procurement Guidelines, or submits a formal Bid Challenge.

24.7 The notification shall also advise those Consultants whose Technical Proposals did not meet the minimum qualifying mark, or which were considered non-responsive, that their Financial Proposals will be returned unopened after the MCA Entity has completed the selection process at the cost and request of the Consultant.

24.8 The MCA Entity shall open the Financial Proposals in a public meeting at the address, date and time specified in the notification described in ITC Sub-Clause 24.6. All Financial Proposals will first be inspected to confirm that they have remained sealed and unopened. Only the Financial Proposals of those Consultants who met the minimum qualifying mark following the Technical Evaluation stage will be opened. The Technical Score (St) and only the Total Proposal Price, as stated in the Financial Proposal Submission Form (Form FIN-1) shall be read out aloud and recorded. A copy of the record shall be posted on the MCA Entity's website.

24.9 The TEP will correct any computational errors, and in cases of a discrepancy between a partial amount and the total amount, or between words and figures the former will prevail. In addition to the above corrections, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In cases where an activity or line item is quantified differently in the Financial Proposal from the Technical Proposal, no corrections will be applied to the Financial Proposal in this respect. If Consultants are not required to submit financial proposals in a single currency, prices shall be converted to a single currency for evaluation purposes using the selling rates of exchange, source and date **indicated in the PDS.**

24.10 For Quality and Cost Based Selection (QCBS), the lowest evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be

computed as indicated in Section III: Qualification and Evaluation Criteria. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; F = the weight given to the Financial Proposal; T + F = 1) **indicated in the PDS**. $S = St \times T\% + Sf \times F\%$. The Consultant achieving the highest combined technical and financial score will be invited for negotiations.

24.11 In the case of Fixed-Budget Selection (FBS), the MCA Entity will select the firm that submitted the highest ranked Technical Proposal within the budget. Proposals that exceed the indicated budget will be rejected. In the case of the Least-Cost Selection (LCS), the MCA Entity will select the lowest priced Proposal among those that passed the minimum technical score. In both cases, the evaluated Proposal price according to ITC Sub-Clause 24.9 shall be considered, and the selected firm invited for negotiations.

24.12 Prior to execution of a contract, the MCA Entity shall conduct a verification of the market-reasonableness of the prices offered. A negative determination (either unreasonably high or unreasonably low) could be a reason for rejection of the proposal at the discretion of the MCA Entity. The Consultant shall not be permitted to revise its submission after a determination that its offered price is unreasonable. In addition, the MCA Entity may also verify any information provided on the TECH Forms submitted in the Proposal. A negative determination in the post-qualification could lead to the rejection of the Proposal and the MCA Entity may, at its discretion, move to invite the next-ranked Consultant for negotiation.

25. Past Performance and Reference Check	25.1	In accordance with the MCC PPG, the Consultant's performance on earlier contracts will be considered a factor in the MCA Entity's qualification of the Consultant's evaluation. The MCA Entity reserves the right to check the performance references provided by the Consultant or to use any other source at the MCA Entity's discretion. If the Consultant (including any of its Associates or joint venture/association members) is or has been party to an MCC-funded contract (either with MCC directly or with any MCA Entity, anywhere in the world), whether as lead Consultant, affiliate, Associate, subsidiary, Sub-Consultant, or in any other role, the
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Consultant must identify the contract in its list of references submitted with its Proposal using Technical Form TECH-5B: References of MCC-Funded Contracts. Failure to include any such contracts may be used to form a negative determination by the MCA Entity on the Consultant's record of performance in prior contracts. However, the failure to list any contracts because the Consultant (including any of its Associates or joint venture/association members) has not been a party to any such contract will not be grounds for a negative determination by the MCA Entity on the Consultant's record of performance in prior contracts. That is, prior performance in connection with an MCC-funded contract is not required. The MCA Entity will check the references, including the Consultant's past performance reports filed in MCC's Contractor Past Performance Reporting System ("CPPRS"). A negative determination by the MCA Entity on the Consultant's record of performance in prior contracts may be a reason for disqualification of the Consultant, or lowered evaluation scores, at the discretion of the MCA Entity. However, before rejecting the Proposal, the MCA Entity shall give the Consultant one opportunity to respond to the negative determination.

F. Award of Contract

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| 26. Negotiations | 26.1 Negotiations will be held at the address indicated in the PDS . The invited Consultant will, as a pre-requisite for attendance at the negotiations, confirm the availability of all the Key Professional Personnel listed in the Technical Proposal. Failure to confirm such Personnel may result in the MCA Entity proceeding to negotiate with the next-ranked Consultant. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude the Contract on behalf of the Consultant. |
| Technical Negotiations | 26.2 Negotiations will commence with a discussion of the Technical Proposal, including (a) proposed technical approach and methodology, (b) workplan, (c) organization and staffing, and (d) any suggestions made by the Consultant to improve the Terms of Reference. |
| | 26.3 The MCA Entity and the Consultant will then finalize the Terms of Reference, staffing schedule, work |

schedule, logistics, and reporting. These documents will then be incorporated in the Contract under “Description of Services.” Special attention will be paid to clearly defining the inputs and facilities required from the MCA Entity to ensure satisfactory implementation of the assignment. The MCA Entity shall prepare minutes of negotiations which will be signed by the MCA Entity and the Consultant.

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| Financial Negotiations | 26.4 | It is the responsibility of the Consultant, before starting financial negotiations, to determine the relevant local Tax amount to be paid by the Consultant under the Contract. In no event shall the MCA Entity be responsible for the payment or reimbursement of any Taxes. Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff nor other proposed unit rates. |
| Availability of Professional Staff/Experts | 26.5 | Having selected the Consultant on the basis of, among other things, an evaluation of proposed Key Professional Personnel, the MCA Entity expects to negotiate a Contract on the basis of those Personnel named in the Technical Proposal. |
| | 26.6 | During Contract negotiations, the MCA Entity will not consider substitution of any Key Professional Personnel unless both parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity of one of the Personnel. If this is not the case and if it is established that any Key Professional Personnel were offered in the Proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate. |
| Conclusion of the Negotiations | 26.7 | Negotiations will conclude with a review of the draft Contract and Annexes, following which the MCA Entity and the Consultant will initial the agreed Contract. If negotiations fail, the MCA Entity will invite the Consultant whose Proposal received the second highest score to negotiate a Contract. |
| 27. Notice of Award of Contract | 27.1 | Upon conclusion of successful negotiations, the MCA Entity shall also notify, in writing, all other Consultants who submitted Proposals of the award decision. The |

MCA Entity shall promptly respond in writing to any unsuccessful Consultant who, after receiving notification of the procurement results, makes a written request for a debriefing as provided in the MCC Program Procurement Guidelines, or submits a formal Bid Challenge.

27.2 After the award of Contract, the MCA Entity shall publish on its website, at dgMarket and at UNDB online, the results identifying the procurement, the name of the winning Consultant and the price, duration, and summary scope of the Contract. The same information shall be sent to all Consultants who have submitted Proposals.

28. Bid Challenges

28.1 Consultants may challenge the results of a procurement only according to the rules established in the Interim Bid Challenge System developed by MCC. The Interim Bid Challenge System is not intended to examine or review the implementation or conduct of any contract once awarded. A bid challenge shall:

- a. Identify the procurement out of which the bid challenge arises;
- b. Describe the nature of the bid challenge and supporting facts, including the bidding documents or portion of the procurement process that was allegedly in non-compliance;
- c. Identify the specific provision(s), as set forth in the bidding documents, which were allegedly breached;
- d. Indicate the requested remedy or relief, which may include compensation for any reasonable and verifiable cost of bid preparation and appeal, excluding attorney fees or lost profits;
- e. Explain why the bid challenge was timely (see para 2. below); and
- f. Include the name, address, telephone and facsimile numbers, as well as the email address of the challenger.

28.2 A bidder or potential bidder that claims to have suffered or claims that it may suffer loss or injury because of an alleged decision or action of MCA Entity that is not in compliance with the bidding documents, may challenge the decision or action concerned, except for:

- a. The selection of a method of procurement or selection procedures (e.g., shopping or competitive bidding etc.);
- b. The selection of the type of procurement (e.g., goods, works, non-consultant services etc.);
- c. The decision by MCA Entity to reject all bids, proposals, offers or quotations; and
- d. Allegations of fraud or corruption or intent of wrong doing in the procurement process, which shall be processed in accordance with MCC's Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations, a copy of which is available on MCC's Website (www.mcc.gov).

28.3 An "Intent to Award" notice will be published in the national daily newspaper and a copy will be sent¹ to all bidders who have submitted a bid/proposal. MCA Entity will also send this letter to the winning bidder, and to all losing bidders informing them of the reasons for not awarding the contract.

28.4 Any losing bidder, if it wishes to, may submit a bid challenge to MCA Entity, in writing (can be submitted electronically), within three (3) working days after the publication of the "Intent to Award" notice. All challenges will be submitted to the following address:

Samuel O. BATCHO
National Coordinator
MCA-BENIN II
Immeuble KOUGBLENOU, 3ème Etage,
Domaine de l'OCBN

¹e-mail and/or paper mail

Derrière la Compagnie Territoriale
de Gendarmerie du Littoral
01 BP 101 Cotonou, Republic of Benin
Tel (229) 21 31 78 25
Fax: +229 21 31 96 42
E-mail : info@mcabenin2.bj

28.5 The MCA Entity shall, within five (5) working days after submission of the bid challenge, issue a written decision to the challenger (“Challenger”) stating the reasons for the decision and, if the bid challenge is upheld in whole or in part, indicating the corrective measures that are to be taken.

Appeals

28.6 In certain cases, the Challenger may seek review by MCC if it is not satisfied with the decision of MCA Entity as above. Please note that MCC’s review is not the review of the procurement process or the evaluation of a particular bid, but is limited to claims that (a) MCA Entity failed to entertain its bid challenge, (b) MCA Entity failed to issue a written decision on the bid challenge within the time specified in this system, or (c) claims that MCA Entity violated the procedures set out in the bidding documents. The appeal to MCC must be received in writing (may be in electronic form) within five (5) working days of the date the Challenger learned or should have learned of an adverse decision by MCA Entity as above. MCC will issue a final decision within fifteen (15) working days of the submission of the appeal.

28.7 A bid appeal shall:

- a. Identify the procurement out of which the bid challenge arises;
- b. Describe the nature of the appeal and supporting facts, including full correspondence and decision of MCA Entity;
- c. Indicate the requested remedy or relief, which may include compensation for any reasonable and verifiable cost of bid preparation and appeal,

excluding attorney fees or lost profits;

- d. Explain why the appeal is timely (see paragraph 6. above); and
- e. Include the name, address, telephone and facsimile numbers, as well as the email address of the appellant.

28.8 The appeal should be addressed to:

Millennium Challenge Corporation
Attention: Vice President, Department of Compact Operations
(with a copy to the Vice President and General Counsel)
1099 14th Street NW; Suite 700
Washington, DC 20005-3550
United States of America
Fax: (202) 521-3700
Email: VPOperations@mcc.gov (Vice President for Compact Operations)
VPGeneralCounsel@mcc.gov (Vice President and General Counsel)

- | | |
|---|---|
| 29. Return of Unopened Financial Proposals | 29.1 After Contract signature, the MCA Entity shall return the unopened Financial Proposals to the unsuccessful Consultants at the cost and request of the Consultant. |
| 30. Commencement Date | 30.1 The Consultant is expected to commence the assignment on the date and at the location specified in the PDS . |
| 31. Inconsistencies with MCC Program Procurement Guidelines | 31.1 The Procurement that is the subject of this RFP is being conducted in accordance with and is subject in all respects to the MCC PPG. In the event of any conflict between any section or provision of this RFP (including any Addenda that may be issued to this RFP) and the MCC PPG, the terms and requirements of the MCC PPG shall prevail, unless MCC has granted a waiver of the guidelines. |
| 32. Applicable Compact Conditions | 32.1 Consultants are advised to examine and consider carefully the provisions that are set forth in Annex B (Additional Provisions) attached to and made part of the Special Conditions of the Contract, as these are a part of |

the Government's and the MCA Entity's obligations under the Compact and related agreements which, under the terms of the Compact and related documents are required to be transferred onto any Consultant or Sub-Consultant who partakes in procurement or subsequent contracts in which MCC Funding is involved.

Section II. Proposal Data Sheet

A. General	
ITC Definitions	“Compact” means the Millennium Challenge Compact between the United States of America, acting through the Millennium Challenge Corporation, and the Government of Benin, signed on September 9, 2015, as may be amended from time to time. “Government” means the Government of Benin. “MCA Entity” means Millennium Challenge Account - Benin II, the accountable entity designated by the Government to implement the Compact.
ITC 1.1	The method of selection is the Quality and Cost Based Selection (QCBS) method.
ITC 1.3	The Name of the assignment is: Selection of Consultant for Hazardous Materials Assessment .
ITC 1.4	A Pre-Proposal Conference will be held at 10:00 am (local time) on October 04, 2016 at MCA-Benin II Conference room . Attendance is strongly advised for all prospective Consultants or their representatives but is not mandatory.
ITC 1.5	The MCA Entity will provide the following inputs and facilities: All existing documentation related to the assignment are as indicated in the Terms of Reference (See paragraphs 7.3, 7.4 and 7.5).
B. Contents of the RFP	
ITC 8.1	Clarifications may be requested by e-mail not later than fifteen (15) business days e.g., October 11, 2016 before the deadline for submission of the Proposals, so that responses can be issued to all Consultants not later than ten (10) business days e.g., October 18, 2016 prior to the deadline for submission of Proposals. The address for requesting clarifications is: MCA-BENIN II Attn : The Procurement Agent Immeuble KOUGBLENOU, 3ème Etage, Domaine de l’OCBN Derrière la Compagnie Territoriale de Gendarmerie du Littoral 01 BP 101 Cotonou, Republic of Benin

	Tel (229) 21 31 78 25 Fax: +229 21 31 96 42 E-mail: info-benin@charleskendall.com and copy : info@mcabenin2.bj Website: www.mcabenin2.bj																				
C. Preparation of Proposals																					
ITC 10.1	If MCA Entity shall pay any costs associated with the preparation and/or submission of the Proposal, those are listed below: NONE																				
ITC 11.1	The Proposal shall be written in French .																				
ITC 12.2(a)	Consultants may associate with other Consultants.																				
ITC 12.2(c)	The estimated total number of person-months for Key Professional Personnel required for the assignment by labor category is: 28 person-months. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Category of Consultant</th><th>Staff Months</th></tr> </thead> <tbody> <tr style="background-color: #d3d3d3;"> <td colspan="2"></td></tr> <tr> <td>Head of mission & Specialist in hazardous material management in the power sector</td><td style="text-align: center;">5</td></tr> <tr> <td>Specialist in soil & water contamination and remediation</td><td style="text-align: center;">4</td></tr> <tr> <td>Geohydrologist</td><td style="text-align: center;">4</td></tr> <tr> <td>Specialist for oil management / elimination</td><td style="text-align: center;">5</td></tr> <tr> <td>Civil engineer</td><td style="text-align: center;">3</td></tr> <tr> <td>Cartographer</td><td style="text-align: center;">3</td></tr> <tr> <td>Logistics / transport expert (transport of hazardous wastes)</td><td style="text-align: center;">4</td></tr> <tr style="background-color: #d3d3d3;"> <td>TOTAL STAFF MONTHS</td><td style="text-align: center;">28</td></tr> </tbody> </table>	Category of Consultant	Staff Months			Head of mission & Specialist in hazardous material management in the power sector	5	Specialist in soil & water contamination and remediation	4	Geohydrologist	4	Specialist for oil management / elimination	5	Civil engineer	3	Cartographer	3	Logistics / transport expert (transport of hazardous wastes)	4	TOTAL STAFF MONTHS	28
Category of Consultant	Staff Months																				
Head of mission & Specialist in hazardous material management in the power sector	5																				
Specialist in soil & water contamination and remediation	4																				
Geohydrologist	4																				
Specialist for oil management / elimination	5																				
Civil engineer	3																				
Cartographer	3																				
Logistics / transport expert (transport of hazardous wastes)	4																				
TOTAL STAFF MONTHS	28																				
ITC 12.3(g)	Training is a specific component of this assignment. The Consultant shall provide on-the-job training in hazardous materials assessment and management (including methods and tools to analyse data)																				

	to SBEE and the “Direction Générale de l’Energie” (DGE, a governmental entity) staff.
ITC 12.5	Per diem and in-country travel will be included in the total price in form FIN-2.
ITC 15.1	The currency (ies) of the Proposal shall be as follows: USD <u>or</u> XOF <u>or</u> a combination of the two at the discretion of the Consultant. The currency (ies) of the payment shall be as follows: USD <u>or</u> XOF <u>or</u> a combination of the two at the discretion of the Consultant.
ITC 16.1	Proposals must remain valid for One hundred and twenty (120) days after the deadline for the submission of Proposals specified in PDS ITC 18.1.
D. Submission and Opening of Proposals	
ITC 17.2	Written Power of Attorney is required.
ITC 17.3	A Consultant must submit one (1) original and four (4) copies of both the Technical Proposal and the Financial Proposal, in the language(s) specified in PDS ITC 11.1.
ITC 17.5	The address for the submission of Proposals is: MCA-Benin II Attn : The Procurement Agent Immeuble KOUGBLENOU, 3 ^{ème} étage, Domaine de l’OCBN Derrière la Compagnie Territoriale de Gendarmerie du Littoral 01 BP 101 Cotonou, Republic of Benin Tel (229) 21 31 78 25 Fax: +229 21 31 96 42 E-mail: info-benin@charleskendall.com and copy : info@mcabenin2.bj Submission of proposals by e-mail is not allowed. However, an electronic version of the technical proposal shall be submitted on a CD or on a thumb drive.
ITC 17.7	Ensure the outer label (or carton) of the Proposal includes this statement: “Do NOT Open Before 10:00 a.m. local time on November 02, 2016. On or after 10:00 a.m. local time on November 02, 2016, Open ONLY In Presence of the Official Appointed.”
ITC 18.1	Proposals must be submitted no later than 10:00 a.m. local time of Cotonou, Benin on November 02, 2016.-+

ITC 20.1	The Proposal opening shall take place at Immeuble KOUGBLENOU, 3^{ème} étage, Domaine de l'OCBN, Derrière la Compagnie Territoriale de Gendarmerie du Littoral on November 02, 2016 at 10:15 am Cotonou time, Benin.
E. Evaluation of Proposals	
ITC 23.1	The minimum technical score (St) required to pass is 80 out of 100 possible points. For detailed scoring criteria, see Section III.
ITC 24.6	The Financial Proposal opening shall take place at Immeuble KOUGBLENOU, 3^{ème} étage, Domaine de l'OCBN, Derrière la Compagnie Territoriale de Gendarmerie du Littoral at the date and time specified on the MCA Entity's website: www.mcabenin2.bj.
ITC 24.9	The single currency for price conversions is US Dollar for the purposes of evaluation. The source of official selling rates for evaluation purposes is: Central Bank of West African States (BCEAO). The date of the exchange rate for evaluation purposes is the date thirty (30) days prior to the deadline for submission of the Proposal.
ITC 24.10	The weight given to the Technical Proposal, T = 80 The weight given to the Financial Proposal, F = 20
F. Award of Contract	
ITC 26.1	The expected date for Contract negotiations is thirty (30) days after the opening of the Financial Proposals and will be held in Cotonou (Benin).
ITC 30.1	The date for commencement of the Services is twenty-one (21) days after the effective date of the Contract and the location is Cotonou (Benin).

Section III. Qualification and Evaluation Criteria

3.1 Legal Status

Each entity forming the Consultant shall attach to Form TECH-1 a copy of its letter of incorporation, or other such document, indicating its legal status. In the event the Consultant is an Association of entities, the Consultant shall include any other document showing that it intends to associate, or it has associated with, the other entity or entities that are jointly submitting a Proposal. Each Associate must provide the information required in Form TECH-1.

3.2 Financial Criteria

The Consultant shall provide evidence showing that it has the sufficient financial capacity needed for this Contract, as required in Form TECH-2A. Each Associate must provide the information required in TECH-2A.

3.3 Litigation Criteria

The Consultant shall provide accurate information on any current or past litigation or arbitration resulting from contracts completed, terminated, or under execution by the Consultant over the last five (5) years, as indicated in Form TECH-2B. A consistent history of awards against the Consultant or existence of high value disputes may lead to the rejection of the Proposal. Each Associate must provide the information required in TECH-2B.

3.4 Evaluation Criteria

A Proposal may be rejected if it does not earn a total minimum score of **80% of points**.

A Proposal may be rejected, at the discretion of the MCA Entity, if the firm does not satisfy the mandatory criteria as per table below. In addition, Proposals may be rejected, at the discretion of the MCA Entity, if any of the Key Personnel fails to satisfy the mandatory requirements.

The Consultant will be rejected if its Proposal does not clearly demonstrate that it meets the following Minimum Mandatory Criteria:

Ref	Item
Mandatory Criterion 1	Previous experience of minimum of 2 (Two) projects during the last 5 (five) years in the assessment of hazardous materials.

Criteria, sub-criteria, and point system for the evaluation of Technical Proposals.		
ITC 23.1	Criteria, sub-criteria	Points
	1. Organizational Capability and Experience of the Consultant Evidence of organizational capability and relevant experience in the execution of projects of a similar nature, including the nature and value of the relevant contracts, as well as works in hand and contractually committed provided in Form TECH-4. The evidence shall include successful experience as the prime consultant in the execution of at least 2 projects of a similar nature and complexity. In accordance with the MCC Program Procurement Guidelines, the Consultant's past performance on MCC-funded contracts will be considered as a criterion in the MCA Entity's evaluation of the Consultant's Technical Proposal. The MCA Entity reserves the right to contact the Form Tech-5 References as well as other sources to check references and past performance.	25
	Total Points for This Criterion	25
	2. Approach, Methodology and Work Plan	
	Proposed approach, methodology and work plan demonstrate a clear understanding of the technical contract requirements and appreciation for the work required in all the various aspects of the Terms of Reference • Proposed approach : 15 • Work plan : 10 • Organization and staffing plan : 5	
	Total Points for This Criterion	30
	3. Key Professional Personnel Qualifications for the Assignment	
	Head of mission and specialist in hazardous material management in the power sector	10

	Specialist in soil & water contamination and remediation	08
	Geohydrologist	07
	Specialist for oil management / elimination	06
	Civil engineer	06
	Cartographer	04
	Logistics / transport expert (transport of hazardous wastes)	04
	The number of point to be assigned to each of the above positions shall be determined considering the following five sub-criteria and relevant percentage weights:	
	Education and training as called for in positions description	30%
	Demonstrated successful experience and past performance in accomplishment of similar projects (at least 2)	40%
	Demonstrated experience to support sampling and analysis the import/export equipment of hazardous materials (at least 1)	10%
	Experience in Sub-Saharan and Francophone Africa	10%
	Fluency in French	10%
	Total Points for This Criterion	45
	Total Points for All Criteria	100
	The minimum technical score St required to pass is	80
	If none of the scores awarded by the TEP reach or exceed the minimum technical score (St), the MCA Entity reserves the right to invite the Consultant receiving the highest technical score (St) to negotiate both its Technical and Financial Proposals. If the negotiations fail to result in an acceptable contract within a reasonable time, the MCA Entity reserves the right to terminate the negotiations, at its sole discretion, and to invite—again, at its sole	

	discretion—the Consultant receiving the next highest technical score (St) to negotiate both its Technical and Financial Proposals.	
ITC 24.10	The formula for determining the financial scores is the following: $S_f = 100 \times F_m / F$, in which S_f is the financial score, F_m is the lowest price and F the price of the Proposal under consideration. The weights given to the Technical and Financial Proposals are: $T = 0.80$ and $F = 0.20$	

Section IV. A. Technical Proposal Forms

1. Technical Proposal Forms in English

Disclosure in these technical forms of any proposed prices will constitute grounds for declaring the Proposal non-responsive; see ITC Sub-Clause 12.4.

TECH-1	Technical Proposal Submission Form
TECH-2A	Financial Capacity of the Consultant
TECH-2B	Current and Past Proceedings, Litigation, Arbitration, Actions, Claims, Investigations and Disputes of the Consultant
TECH-3	Organization of the Consultant
TECH-4	Experience of the Consultant
TECH-5A	References of the Consultant
TECH-5B	References of MCC-Funded Contracts
TECH-6	Description of Approach, Methodology and Work Plan for Performing the Assignment
TECH-7	Comments and Suggestions on the Terms of Reference & Assignment
TECH-8	Team Composition and Task Assignments
TECH-9	Staffing Schedule
TECH-10	Work and Deliverables Schedule
TECH-11	Curriculum Vitae (CV) of Proposed Key Professional Personnel

Note: Comments in brackets on the following pages serve to provide guidance for the preparation of the Technical Proposal and therefore should not appear on the Technical Proposal to be submitted.

Form TECH-1.A. Technical Proposal Submission Form

[Location, Date]

To: Mr. Samuel O. BATCHO, National Coordinator of Millennium Challenge Account – Benin II (MCA-BENIN II)

Address: Immeuble KOUGBLENOU, 3^{ème} étage
Domaine de l'OCBN, Quartier Zongo Nima
Derrière Compagnie Territoriale de la Gendarmerie du Littoral
01 BP 101 Cotonou, Republic du Benin

Email : info@mcabenin2.bj

Ladies and Gentlemen:

Re: Selection of Consultant for Hazardous Materials Assessment

RFP Ref: PP1-CIF-ESP-01

We, the undersigned, offer to provide the consulting services for the above mentioned assignment in accordance with your Request for Proposal (RFP) dated **[Insert Date]** and our Proposal.

We hereby certify that we are not engaged in, facilitating, or allowing any of the prohibited activities described in Part 15 of the MCC Program Procurement Guidelines and that we will not engage in, facilitate, or allow any such prohibited activities for the duration of the Contract. Further, we hereby provide our assurance that the prohibited activities described in Part 15 of the MCC Program Procurement Guidelines will not be tolerated on the part of our employees, or any Sub-Consultants, or Sub-Consultant employees. Finally, we acknowledge that engaging in such activities is cause for suspension or termination of employment or of the Contract.

We acknowledge notice of MCC's Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations². We have taken steps to ensure that no person acting for us or on our behalf has engaged in any corrupt or fraudulent practices described in ITC Clause 3. As part of this, we certify that:

- (a) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to—
 - (i) Those prices;
 - (ii) The intention to submit an offer; or
 - (iii) The methods or factors used to calculate the prices offered.

² Available at www.mcc.gov/resources/doc/policy-fraud-and-corruption

- (b) The prices in this offer have not been and will not be knowingly disclosed by us, directly or indirectly, to any other offeror or competitor before Proposal opening or Contract award unless otherwise required by law; and
- (c) No attempt has been made or will be made by us to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal, each sealed in separate and clearly marked envelope/parcel.

We are submitting our Proposal in Association with:

[Insert a list with full name and address of each associated Consultant].³

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

We are attaching herewith information to support our eligibility in accordance with Section III of the RFP.

If negotiations are held during the initial period of validity of the Proposal, we undertake to negotiate on the basis of the nominated Key Professional Personnel.

Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations, and we undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in this RFP.

We understand and accept without condition that, in accordance with ITC Clause 28.1, any challenge or protest to the process or results of this procurement may be brought only through the MCA Entity's Interim Bid Challenge System (BCS).

We understand you are not bound to accept any Proposal that you may receive.

Yours sincerely,

[Authorized Signatory]

[Name and Title of Signatory]

[Name of Consultant]

[Address of Consultant]

³ [Delete in case no Association is foreseen.]

Annexes:

1. Power of Attorney demonstrating that the person signing has been duly authorized to sign the Proposal on behalf of the Consultant and its Associates;
 - (a) Letter(s) of Incorporation (or other documents indicating legal status); and
 - (b) Joint Venture or Association Agreements (if applicable, but without showing any Financial Proposal information).

Form TECH-2A. Financial Capacity of the Consultant

[The Consultant's financial capacity to mobilize and sustain the Services is imperative. The Consultant is required to provide information on its financial status. This requirement can be met by submission of one of the following: audited financial statements for the last three (3) years, supported by audit letters, OR certified financial statements for the last three (3) years, supported by tax returns.

Failure to submit either of the documents as evidence of financial capacity will result in the rejection of the Proposal.

If the Proposal is submitted by a joint venture, all parties of the joint venture are required to submit their financial statements. The reports should be submitted in the order of the Associate's significance in the joint venture, greatest to least.

The MCA Entity reserves the right to request additional information about the financial capacity of the Consultant. A Consultant that fails to demonstrate through its financial records that it has the financial capacity to perform the required Services may be disqualified.]

Form TECH-2B. Current and Past Proceedings, Litigation, Arbitration, Actions, Claims, Investigations and Disputes of the Consultant

[Provide information on current or past proceedings, litigation, arbitration, action claims, investigations or disputes over the last five (5) years as shown in the form below.]

The Consultant, or a related company or entity or affiliate, has been involved in any proceeding, litigation, arbitration, action, claim, investigation or dispute within the past five (5) years the process or outcome of which the MCA Entity could reasonably interpret may impact or have the potential to impact the financial or operational condition of the Consultant in a manner that may adversely affect the Consultant's ability to satisfy any of its obligations under the Contract:
No:_____ Yes:_____ (See below)

Litigation, Arbitration, Actions, Claims, Investigations, Disputes During Last Five (5) Years

Year	Matter in Dispute	Value of Award Against Consultant in US\$ Equivalent
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Form TECH-3. Organization of the Consultant

[Provide a brief description of the background and organization of your firm/entity and of each Associate for this assignment. Include the organization chart of your firm/entity. The Proposal must demonstrate that the Consultant has the organizational capability and experience to provide home office project management of the contract as well as the necessary administrative and technical support to the Consultant's Project Team in country. The Proposal shall further demonstrate that the Consultant has the capacity to field and provide experienced replacement Personnel on short notice.

Maximum 10 pages

Form TECH-4. Experience of the Consultant

[Using the format below, provide information on each relevant assignment for which your firm, and each Associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under the Terms of Reference included in this RFP. **This shall include all MCC-funded assignments of a similar nature.** Failure to include experience in any project where MCC funds were used may result in disqualification of the Proposal. The Proposal must demonstrate that the Consultant has a proven track record of successful experience in executing projects similar in substance, complexity, value, duration, and volume of services sought in this procurement.

Maximum 20 pages]

Assignment name:	Approx. value of the contract (in current US\$):
Country: Location within country:	Duration of assignment (months):
Name of client:	Total No. of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current US\$):
Start date (month/year): Completion date (month/year):	No. of professional staff-months provided by associated consultants:
Name of associated consultants, if any:	Name of proposed senior professional staff of your firm involved and functions performed (indicate most significant profiles such as project director/coordinator, team leader):
Narrative description of project:	
Description of actual services provided by your staff within the assignment:	

Name of Firm: _____

Form TECH-5A. References of the Consultant

[Provide contact information for at least three (3) references that can provide substantial input about:

- (a) The type of work performed
- (b) Confirm the quality of the work experience listed in Form TECH-4.

The MCA Entity reserves the right, at its sole discretion, to contact other sources as well as to check references and past performance, including, without limitation, any source listed in TECH-4. For each reference, list a contact individual, their title, address, facsimile, phone and e-mail address.]

[Maximum 3 pages]

Form TECH-5B. References of MCC-Funded Contracts

Each Consultant or member of a JV/Association making up the Consultant must fill in this form and include information about any and all MCC-funded contracts (either with MCC directly or with any Millennium Challenge Account Entity, anywhere in the world) to which the Consultant or member of a JV/Association making up the Consultant is or has been a party whether as a lead Consultant, affiliate, associate, subsidiary, Sub-Consultant, or in any other role.

Contracts with MCC				
Contract Number	Name and	Role in Contract	Total Contract Amount	Employer Name and Address

Contracts with an MCA-Entity				
Contract Number	Name and	Role in Contract	Total Contract Amount	Employer Name and Address

Form TECH-6. Description of Approach, Methodology and Work Plan for Performing the Assignment

In this section, the Consultant should provide a comprehensive description of how it will provide the required Services in accordance with the Terms of Reference (TOR) included in this RFP. Information provided must be sufficient to convey to the TEP that the Consultant has an understanding of the challenges in performing the required Services and that it has an approach, methodology and work plan to overcome those challenges.

Your Technical Proposal should be divided into the following three (3) chapters:

- (a) Proposed Methodology ;
 - (b) Work Plan ;
 - (c) Organization and staffing.
- (a) Approach and methodology of risks management **Technical Approach and Methodology.** In this chapter, you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach. Also comment here on any specialized equipment and/or software of which may be necessary to perform the scope indicated in the Terms of Reference.
- (b) Work Plan. In this chapter, you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the MCA Entity), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work and Deliverables Schedule of Form TECH-10.
- (c) Organization and Staffing. In this chapter, you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

Note: Where the Terms of Reference includes tasks relevant to gender and social inclusion, the proposal should explicitly address how the Consultant will perform these tasks in the technical approach, and methodology, work plan, organization and staffing. We recognize that this type of expertise and experience may be outside of the normal work of some Consultants offering proposals, and thus call special attention to the importance of an adequately inter-disciplinary proposal and staffing plan.

Maximum 50 pages, including charts and diagrams]

Form TECH-7. Comments and Suggestions on the Terms of Reference & Assignment

[The MCA Entity welcomes comments and suggestions to improve the assignment to provide a better value for money. These comments and suggestions shall not be used for evaluation purposes, but may be discussed during negotiations. The MCA Entity is not bound to accept anything proposed. If the proposed modifications/suggestions would require changes in the offered price, it shall be noted as such, without giving the price of the change.

Maximum 5 pages]

A: On the Terms of Reference

[Present and justify here any modifications or improvements to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities).]

B: On the Facilities

[Comment here on facilities to be provided by the MCA Entity.]

Form TECH-8. Team Composition and Task Assignments

Key Professional Personnel				
Name of Staff	Organization	Area Expertise	of Position Assigned	Task Assigned

Form TECH-9. Staffing Schedule (Key Professional Personnel and Support Staff)

		Staff input (in the form of a bar chart) ¹														Total staff-month input		
			1 ²	2	3	4	5	6	7	8	9	10	11	N	Home	Field ³	Total	
Foreign																		
1		[Home]																
		[Field]																
2		[Home]																
		[Field]																
3		[Home]																
		[Field]																
n		[Home]																
		[Field]																
										Subtotal								
Local																		
1		[Home]																
		[Field]																
2																		
n																		
Support Staff										Subtotal								
										Total								

(a) For Key Professional Personnel, the input shall be indicated individually; for support staff it shall be indicated by category (e.g.: draftsmen, clerical staff, etc.).

(b) Months are counted from the start of the assignment. For each Personnel, indicate separately staff input for home and field work.

(c) Field work means work carried out at a place other than the Consultant's home office.

Full time input:

Part time input:

Form TECH-10. Work and Deliverables Schedule

	Task	Months											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Task 1 - Kick-off Meeting and Inception Report												
2	Task 2 - Site Reconnaissance, review of regulatory framework and Detailed Work Plan												
3	Task 3 - Equipment and Oil Sampling and Testing												
4	Task 4 - Sampling and Testing of Soils and Water												
5	Task 5 - Results and Analysis of the Chemical Testing												
6	Task 6 - Risk Assessment												
7	Task 7 - Formulate Short-Term Remediation Options												
8	Task 8 - Recommend Long-Term Management Options.												
9	Task 9 - Prepare specifications and TORs for short term remediation actions												
10	Task 10. Reporting												
11	Task 11 - Technology and Knowledge Transfer												

Section IV. A Technical Proposal Forms

	Deliverables												
1	Inception report (also including kick-off meeting)												
2	Initial assessment of sites, regulatory framework, updated Work Plan and Detailed Site Sampling Plan												
3	Progress report including : i) summary of activities since Inception report, ii) details of all testing/sampling sites, iii) details of samples sent to laboratory, iv) outline of main results from the field observations / tests, v) field constraints and limitations, vi) H&S reporting, vii) summary of technology & knowledge transfer to SBEE												
4	Interim report for soil and water (PCB, hydrocarbons, metals, etc.): i) detailed field observations and measurements, ii) maps showing contaminated areas and sample sites; iii) laboratory results, iv) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards												
5	Interim report for electrical												

Section IV. A Technical Proposal Forms

	equipment and oil (PCB and non PCB) : i) detailed field observations / measurements, ii) laboratory results , iii) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards												
6	Report of Risk Assessment (including maps showing the location, extent and level of risks)												
7	Short-term remediation plan ³ for soil and water (PCB, hydrocarbons, metals, etc.): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing												
8	Short-term remediation plan ³ for electrical equipment and oil (PCB and non PCB): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing												
9	Long term management plan ⁴ (SBEE operations after completion of compact): i)												

Section IV. A Technical Proposal Forms

	summary of main findings regarding sources / causes of contamination, ii) detailed long-term remediation measures/facilities; iii) costing; one separate report should be prepared for each power plant and one for all the substations.												
10	Specifications & TORs for short term remediation work												

[Indicate all main activities of the assignment, including deliverables and other milestones, such as the MCA Entity approvals. For phased assignments, indicate activities, deliverables and milestones separately for each phase. Duration of activities shall be indicated in the form of a bar chart. See TOR for the full list of deliverables. Above is a sample format (to be further completed by the Consultant based on the TOR requirements) that shall be used by the Consultant as an indicator of the proposed work load. The submission shall be evaluated as part of the Approach and Methodology.]

Form TECH-11. Curriculum Vitae (CV) for Proposed Key Professional Personnel

- 1.** Proposed Position [only one candidate shall be nominated for each position]
 Name of Firm [Insert name of firm proposing the staff]
 Name of [Insert full name]
 Personnel
 Date of Birth [Insert birth date]
 Nationality [Insert nationality]
 Education [Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]
 Membership in
 Professional
 Associations
 Other Training [Indicate appropriate postgraduate and other training]
 Countries of [List countries where staff has worked in the last ten years]
 Work Experience
 Languages [For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]
 Language Speaking Reading Writing
 Employment
 Record [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]
 From [year]: To [year]:
 Employer:
 Position(s) held:
 Detailed Tasks [List all tasks to be performed under this assignment]
 Assigned
 Work undertaken
 that best
 illustrates
 capability to
 handle the tasks
 assigned:
 Name of assignment or
 project:
 Year:
 Location:
 Client:

Main project features:

Position held:

Activities performed:

(a) References:

[List at least three individual references with substantial knowledge of the person's work. Include each reference's name, title, phone and e-mail contact information.] [The MCA Entity reserves the right to contact other sources as well as to check references, in particular for performance on any relevant MCC-funded projects.]

(b) Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

I, the undersigned, hereby declare that I agree to participate with the **[Consultant]** in the above-mentioned Request for Proposal. I further declare that I am able and willing to work:

1. for the period(s) foreseen in the specific Terms of Reference attached to the above referenced Request for Proposal for the position for which my CV has been included in the offer of the Consultant and
2. within the implementation period of the specific contract.

Signature of Key Professional Personnel

If this form has NOT been signed by the Key Professional Personnel, then in signing below the authorized representative of the Consultant is making the following declaration.

“In due consideration of my signing herewith below, if the Key Professional Personnel has NOT signed this CV then I declare that the facts contained therein are, to the best of my knowledge and belief, a true and fair statement AND THAT I confirm that I have approached the said Key Professional Personnel and obtained his assurance that he will maintain his availability for this assignment if the Contract is agreed within the Proposal validity period provided for in the RFP.”

Signature of Authorized Representative of the Consultant

Day / month/ year

2. Technical Proposal Forms in French

Section IV. A : Formulaire de Proposition Technique

Mentionner les prix proposés dans les formulaires de proposition technique constitue un motif pour déclarer la proposition non recevable : voir IAC Sous-Clause 12.4.

TECH-1	Formulaire de Soumission de la Proposition Technique
TECH-2A	Capacité Financière du Consultant
TECH-2B	Procédures Actuelles et Passées, Litiges, Arbitrage, Actions, Réclamations, Enquêtes et Litiges du Consultant
TECH-3	Structure du Consultant
TECH-4	Expérience du Consultant
TECH-5.A	Références du Consultant
TECH-5.B	Références du Consultant pour des Contrats Financés par le MCC
TECH-6	Description de la Démarche, de la Méthodologie et du plan de Travail pour l'Exécution de la Mission
TECH-7	Commentaires et Suggestions sur les Termes de Référence et la Mission
TECH-8	Composition de l'Equipe et Répartition des Tâches
TECH-9	Programme de Dotation en Personnel
TECH-10	Plan de Travail et des Livrables
TECH-11	Curriculum Vitae (CV) des Professionnels Clés Proposés

NB : Les commentaires entre parenthèses dans les pages suivantes sont fournis afin d'aider le Consultant dans sa préparation de la Proposition Technique. Ils ne devront pas figurer dans la Proposition Technique qui sera soumise.

Formulaire TECH-1. Formulaire de Soumission de la Proposition Technique

[Lieu, Date]

A l'attention de : Mr. Samuel O. BATCHO

National Coordinator

Millennium Challenge Account -Bénin II (MCA-BENIN II)

Adresse: Immeuble KOUGBLENOU, 3^{ème} étage
Domaine de l'OCBN, Quartier Zongo Nima
Derrière Compagnie Territoriale de la Gendarmerie du Littoral
01 BP 101 Cotonou, République du Bénin

Email: info@mcabenin2.bj

Madame, Monsieur

Re: Sélection d'un Consultant pour l'Evaluation des Matières Dangereuses

RFP Ref: PP1-CIF-ESP-01

Nous, soussignés, proposons de fournir les services de consultants pour la mission indiquée ci-dessus en Objet conformément à votre Demande de Propositions (DP) en date du [Insérer Date] et à notre Proposition.

Nous certifions par la présente que nous ne sommes pas engagés dans, ni ne facilitons ou autorisons, aucune des activités prohibées décrites au Chapitre 15 des Directives MCC en matière de passation de marché (Lutte contre la Traite des Personnes) et que nous n'allons pas nous engager, faciliter ou autoriser ces activités prohibées pendant la durée du Contrat. De plus, nous garantissons que les activités prohibées décrites au Chapitre 15 des Directives MCC en matière de passation de marché ne seront pas tolérées de la part de nos employés, de tout sous-traitant et de leurs employés respectifs. Enfin, nous reconnaissons que le fait de s'engager dans ce type d'activités est un motif de suspension ou de résiliation du Contrat.

Nous reconnaissons le document de politique du MCC en matière de prévention, de détection et de remédiation de fraude et de la corruption dans les opérations du MCC⁴. Nous avons pris des mesures pour faire en sorte que la personne qui agit pour nous ou en notre nom ne soit engagé dans des pratiques de corruption ou frauduleuses décrites dans la Clause 3 des IAC. Dans ce cadre, nous certifions que:

⁴Disponible sur le site web www.mcc.gov/resources/doc/corruption-policy-fraud-and-

Les prix de cette proposition ont été fixés de manière indépendante, sans, dans le but de restreindre la concurrence, aucune consultation, communication, ou accord avec un autre soumissionnaire ou concurrent en relation avec:

- (i) Ces prix;
 - (ii) L'intention de soumettre une offre; ou
 - (iii) Les méthodes ou les facteurs utilisés pour calculer les prix offerts.
-
- (a) Les prix de cette offre n'ont pas été et ne seront pas sciemment divulgués par nous, directement ou indirectement, à tout autre soumissionnaire ou concurrent avant l'ouverture des propositions ou d'attribution de contrat sauf exigence de la loi; et
 - (b) Aucune tentative n'a été faite ou ne sera faite par nous pour induire toute autre personne concernée à soumettre une proposition dans le but de restreindre la concurrence.

Nous soumettons par la présente notre Proposition, qui contient cette Proposition Technique, et une Proposition Financière, chacune placée dans une enveloppe/un paquet scellé, cacheté, clairement distincts et libellés.

Nous soumettons notre Proposition en association avec :

[Insérer la liste avec le nom en toutes lettres et l'adresse de chaque Consultant Associé]⁵

Nous déclarons par la présente que toutes les informations et déclarations faites dans cette Proposition sont vraies et acceptons que toute déclaration erronée puisse conduire à notre disqualification.

Nous y joignons des informations pour appuyer notre éligibilité conformément à la Section III de la DP.

Si des négociations se tiennent durant la période initiale de validité de la Proposition, nous nous engageons à négocier sur la base des Personnels Experts Clés désignés dans notre Proposition.

Notre Proposition engage notre responsabilité et, sous réserve des modifications résultant des négociations du Marché, nous nous engageons, si notre Proposition est retenue, à commencer la prestation des services de consultants relatifs à la mission au plus tard à la date indiquée dans cette DP.

⁵ [Supprimer dans le cas où aucune association n'est prévue]

Nous comprenons et acceptons sans condition, conformément à l'article 28.1 des IAC, que toute contestation ou protestation contre le processus ou les résultats de ce marché ne peut être menée que par le biais du Système de contestation des offres intérimaire de l'Entité MCA (BCS).

Nous comprenons que vous n'êtes pas tenu(e) d'accepter toutes les Propositions qui vous sont adressées.

Veuillez agréer, Madame, Monsieur, l'expression de notre considération distinguée.

Signataire Mandaté

Nom et titre du Signataire

Nom du Consultant

Adresse du Consultant

Annexes :

1. Acte notarié démontrant que la personne qui signe a été dûment mandatée pour signer la Proposition au nom du Consultant et de ses associés ;
2. Lettre(s) patente(s) (ou tous autres documents indiquant le statut juridique) ; et
3. Contrats de coentreprise ou d'association (le cas échéant, mais sans divulguer d'informations relatives à la Proposition Financière).
4. [autres documents demandés dans les Données Particulières de la Proposition]

Formulaire TECH-2A. Capacité Financière du Consultant

[La capacité financière du Consultant à mobiliser et à soutenir les Services est impérative. Le consultant est tenu de fournir des informations sur son statut financier. Cette exigence peut être satisfaite par la soumission de l'un des documents suivants: états financiers audités pour les trois (3) derniers exercices, appuyés par des lettres d'audit, ou les états financiers certifiés pour les trois (3) dernières années, soutenue par les déclarations de revenus.

Le défaut de ne pas présenter l'un des documents suscités en tant que preuve de la capacité financière entraînera le rejet de la proposition.

Si la Proposition est soumise par une coentreprise, il est demandé à toutes les parties de soumettre leurs états financiers. Les rapports seront soumis par ordre d'importance des associés dans l'association, du plus important au moins important.

L'Entité MCA se réserve le droit de demander des informations sur la capacité financière du Consultant. Un Consultant qui n'arrive pas à démontrer à travers ses documents financiers qu'il a la capacité financière pour exécuter les Services demandés, pourra se voir disqualifié.]

Formulaire TECH- 2B. Procédures actuelles et passées, Litiges, Arbitrage, actions, réclamations, enquêtes et litiges du Consultant

[Fournir des informations sur les procédures actuelles ou passées, litiges, arbitrage, réclamations, investigations ou différends au cours des cinq (5) années, comme indiqué dans le formulaire ci-dessous.]

Le Consultant, ou une société ou une entité ou filiale apparentée, a été impliqué dans une procédure, litige, arbitrage, action, réclamation, enquête ou différend au cours des cinq (5) dernières années, le processus ou les résultats de laquelle l' Entité MCA pourrait raisonnablement interpréter comme pouvant avoir un impact ou ont le potentiel d'avoir un impact sur la situation financière ou opérationnelle du consultant d'une manière qui peut nuire à la capacité du consultant pour satisfaire une de ses obligations en vertu du contrat : Non: ____ Oui : ____
(Voir ci-dessous)

Litiges, Arbitrages, Actions, Réclamations, Investigations, Différends au cours des Cinq (5) Dernières Années

Année	Domaine du Différend	Valeur de la décision/sentence contre Le Consultant en USD (équivalent)
-------	----------------------	---

Formulaire TECH-3. Structure du Consultant

Fournir une brève description du contexte et de la structure de votre entreprise/entité et de chaque associé pour cette mission. Inclure l'organigramme de votre entreprise/entité. La proposition doit démontrer que le Consultant a des capacités organisationnelles et expérience pour fournir le support administratif et technique nécessaire à l'équipe du Projet du Consultant sur place. La Proposition démontrera par ailleurs que le Consultant a la capacité de trouver et de fournir du Personnel de remplacement expérimenté dans un court délai.

Maximum 10 pages

Formulaire TECH-4. Expérience du Consultant

[Conformément au format ci-dessous, fournir les informations pour chaque mission pertinente pour laquelle votre société, et chaque associé de la présente mission, était juridiquement engagé contractuellement, soit individuellement en tant qu'entité commerciale soit en tant que l'une des principales sociétés d'un regroupement, pour l'exécution de services de consultants similaires à ceux requis dans les Termes de Référence de cette DP. **Cela inclut toutes les missions de même nature financées par MCC.** L'omission d'inclure les expériences dans un projet dans lequel les fonds de MCC ont été utilisés peut entraîner le rejet de la proposition. La Proposition doit démontrer que le Consultant dispose d'une d'expérience avérée dans l'exécution de projets similaires en termes de nature, de complexité, de valeur, de durée et d'étendue des services visés par le présent marché.

20 pages maximum.]

Nom de la Mission :	Valeur approximative du marché (en \$ US) :
Pays : Lieu dans le pays :	Durée de la mission (mois) :
Nom du Client :	Nombre total d'employés-mois ayant participé à la Mission :
Adresse :	Valeur approximative des services offerts par votre société au titre du marché ((en \$ US) :
Date de démarrage (mois/année) : Date d'achèvement (mois/année) :	Nombre de professionnels-mois fournis par les consultants associés :
Noms des consultants associés/associés, le cas échéant :	Nom des personnels professionnels senior de votre société impliqués et fonctions occupées (indiquer les principaux postes, par ex. Directeur/Coordonnateur, Chef d'équipe):

Description narrative du projet:

Description des services effectivement fournis par votre personnel dans le cadre de la mission :

Nom de la Société : _____

Formulaire TECH-5A. Références du Consultant

[Donner les coordonnées d'au moins trois (3) références qui pourront fournir des informations pertinentes sur :

- (a) Le type de travail réalisé
- (b) Confirmer la qualité de l'expérience de travail figurant dans le Formulaire TECH-4.

MCA se réserve le droit, à sa seule discrétion, de contacter d'autres sources, ainsi que de vérifier les références et les performances passées, y compris, sans limitation, toutes sources figurant dans le TECH-4. Pour chaque référence, indiquer la personne à contacter, ses adresse, numéros de fax et de téléphone et adresse courriel.

[Maximum 3 pages]

Formulaire TECH-5B. Références sur les contrats financés par MCC

Chaque consultant ou membre d'une co-entreprise/Association constituant le Consultant doit remplir ce formulaire et inclure les informations sur tous les contrats financés par MCC (soit avec le MCC directement ou avec une Entité MCA, partout dans le monde) à laquelle le Consultant ou un membre d'une co-entreprise/Association qui composent le Consultant est ou a été partie que ce soit en consultant principal, affilié, associé, filiale, Sous- Consultant, ou dans tout autre rôle.

Contrats avec MCC			
Nom du contrat et numéro	Rôle dans le contrat	Montant total du contrat	Nom et adresse de l'Employeur

Contrats avec les entités MCA			
Nom du contrat et numéro	Rôle dans le contrat	Montant total du contrat	Nom et adresse de l'Employeur

Formulaire TECH-6. Présentation de la Démarche, de la Méthodologie et du Plan de travail pour réaliser la Mission

[Dans cette section, le Consultant fournira la présentation complète du mode de prestation des Services recherchés conformément aux Termes de Référence de la présente DP. Les informations fournies doivent être suffisantes pour permettre au PET de savoir que le Consultant comprend les enjeux liés à l'exécution des Services demandés et qu'il adopte des démarche, méthodologie et plan de travail en adéquation avec ces enjeux.

Il est recommandé de diviser votre Proposition Technique en trois (3) chapitres. Ainsi :

- (a) Démarche Technique et Méthodologie,
- (b) Plan de Travail, et
- (c) Organisation et Dotation en Personnel
- (d) Démarche Technique et Méthodologie. Dans ce chapitre, vous présenterez votre compréhension des objectifs de la mission, votre démarche en termes de prestation des services, votre méthodologie pour exécuter les activités et atteindre les résultats attendus, et le détail de ces résultats. Vous devrez souligner les problèmes à résoudre et leur importance, et expliquer la démarche technique que vous adopterez pour les solutionner. Vous expliquerez en outre la méthodologie que vous entendez adopter et son articulation/ adéquation avec la démarche proposée. Commenter ici aussi tout équipement et/ou logiciel spécialisé qui peut être nécessaire pour effectuer les tâches indiquées dans les Termes de Référence.
- (e) Plan de Travail. Dans ce chapitre, vous proposerez les principales activités de la mission, leur nature et leur durée, leur phasage et leur articulation, les jalons d'avancement (y compris les approbations intermédiaires de l'Entité MCA) et les dates de remise des rapports. Le plan de travail proposé doit être conforme à la démarche technique et à la méthodologie, prouvant que les Termes de Référence ont été compris et traduits en un plan de travail réalisable. Une liste des documents finaux, rapports, dessins et tableaux à fournir à l'achèvement, doit être incluse dans ce chapitre. Le plan de travail doit être conforme au Programme de Travail et de Livrables du Formulaire TECH-10.
- (f) Organisation et dotation en Personnel. Dans ce chapitre, vous proposerez la structure et la composition de votre équipe. Vous donnerez la liste des principales disciplines représentées, le nom du professionnel/de l'expert référent, ainsi qu'une liste des personnels techniques et support/ administratifs proposés.

Note: Lorsque les termes de référence comprennent les tâches relatives au Genre et à l'inclusion sociale, la proposition devrait explicitement indiquer comment le Consultant exécutera ces tâches dans l'approche technique et méthodologique, le plan de travail, l'organisation et la dotation en personnel. Nous reconnaissons que ce type d'expertise et d'expérience peut être en dehors du travail normal de certains consultants offrant des propositions, et donc appelle une attention particulière à l'importance interdisciplinaire d'une proposition et le plan de dotation en personnel.

[50 pages maximum, tableaux et graphiques compris]

Formulaire TECH-7. Commentaires et Suggestions sur les Termes de référence et la mission

[L'Entité MCA se félicite des commentaires et des suggestions pour améliorer la mission et fournir un meilleur rapport qualité-prix. Ces commentaires et suggestion ne seront pas utilisés à des fins d'évaluation, mais pourront être discutés durant les négociations. L'Entité MCA n'est pas tenue d'accepter les modifications proposées. Si les modifications/suggestions nécessitaient des changements dans le prix proposé, il sera noté comme tel, sans donner les changements de prix.

Maximum 5 pages]

A : sur les Termes de Référence

[Présenter et justifier toute modification et/ou amélioration des Termes de Référence que vous proposez pour améliorer les résultats de la mission (par exemple, supprimer des activités que vous n'estimez pas nécessaires, en ajouter d'autres ou encore proposer un phasage différent des activités).]

B : sur le personnel et les installations de contrepartie

[Commentaires sur le personnel et les installations de contrepartie à fournir par l'Entité MCA.]

Formulaire TECH-8. Composition de l'équipe et Répartition des Tâches

Professionnels Clés				
Nom	Société	Domaine d'expertise	Poste attribué	Tâche attribuée

Formulaire TECH-9. Programme de dotation en personnel (Personnel clé et personnel d'appui)

		Déploiement des personnels ¹ . (sous forme de diagramme bâtons)													Total déploiement en personnels-mois ²		
			12	2	3	4	5	6	7	8	9	10	11	N	Siège	Terrain ³	Total
Etranger																	
1		[Siège]															
		[Terr]															
2		[Siège]															
		[Terr]															
3		[Siège]															
		[Terr]															
n		[Siège]															
		[Terr]															
											Sous-Total						
Local																	
		[Siège]															

		[Terr]															
											Sous-Total						
											Total						

- (a) Pour les Professionnels Clés, le déploiement sera indiqué par individu. Pour les personnels d'appui et administratifs, le déploiement sera indiqué par catégorie (par ex. dessinateurs, personnels de secrétariat, etc.).
- (b) Les mois sont comptés à compter de la date de commencement de la mission. Indiquer séparément pour chaque Personnel le déploiement au siège/ dans les bureaux du Consultant et sur le terrain.
- (c) Terrain fait référence au travail exécuté en dehors du siège/ des bureaux du Consultant dans son pays d'attache.

À plein temps

À temps partiel

Formulaire TECH-10. Programme des Travaux et Livrables

	Activité	Mois											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Tâche 1. Réunion et rapport de démarrage												
2	Tâche 2. Reconnaissance de site, examen du cadre réglementaire et élaboration du Plan de Travail Détaillé												
3	Tâche 3. Echantillonnage et analyses sur l'huile et les équipements												
4	Tâche 4. Echantillons et analyse de sols et eau.												
5	Tâche 5. Résultats et Interprétation des analyses chimiques												
6	Tâche 6. Evaluation des Risques												
7	Tâche 7. Formulation d'Options de Remédiation à												

	Court-Terme												
8	Tâche 8. Propositions d'Options de Gestion à Long-Terme												
9	Tâche 9. Préparer les spécifications et les TDR pour les actions de remédiation à court terme.												
10.	Tâche 10. Rapports.												
11.	Tâche 11. Transfert de connaissance/compétences et de technologie.												
	Livrables												
1	Rapport de démarrage (y compris la réunion de démarrage)												
2	Evaluation préliminaire des sites, cadre réglementaire, plan de travail mis à jour et plan d'échantillonnage détaillé												

3.	Rapport d'avancement comportant : i) résumé des activités menées depuis le rapport de démarrage, ii) liste détaillée de tous les points d'échantillonnages / analyses iii) liste détaillée des échantillons envoyés au laboratoire, iv) descriptif des principaux résultats obtenus des observations / tests de terrain, v) contraintes et limites de terrain, vi) rapport Santé et Sécurité, vii) point sur le transfert de connaissance et de technologie à la SBEE												
4.	Rapport intermédiaire pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) : i) rapport détaillé sur les observations et mesures de terrain ii) cartes montrant les zones contaminées et les points d'échantillonnage, iii) résultats de laboratoire, iv) analyse / interprétation de												

	l'étendue et du degré de contamination, par rapport à la réglementation béninoise et aux normes internationales												
5.	Rapport intermédiaire pour les huiles et les équipements électriques (PCB et non PCB) : i) rapport détaillé sur les observations / mesures de terrain, ii) résultats de laboratoire, iii) analyse / interprétation de l'étendue et du degré de contamination par rapport aux dispositions de la réglementation béninoise et aux normes internationales												
6.	Rapport d'Evaluation des Risques (y compris Carte des risques)												
7.	Plan de remédiation à Court-Terme ³ pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) : i) résumé des												

	principaux constats relatifs à la localisation, étendue et degré de contamination, ii) mesures détaillées de remédiation à court-terme, iii) estimation des coûts												
8.	Plan de remédiation à Court-Terme ³ pour les huiles et équipements électrique (PCB et non PCB) : i) résumé des principaux constats relatifs à la localisation, étendue et degré de contamination, ii) mesures détaillées de remédiation à court-terme, iii) estimation des coûts,												
9.	Plan de Gestion à Long-Terme ⁴ (opérations de la SBEE après l'achèvement du compact) : i) résumé des principaux constats relatifs aux sources / causes de contamination, ii) mesures / installations détaillées de remédiation à long terme ; iii) estimation des coûts ; un												

	rapport distinct doit être élaboré pour chaque centrale électrique et un pour l'ensemble des sous-stations.												
10.	TDR et spécifications pour les travaux de remédiation à court terme												

[Indiquer l'ensemble des activités principales de la mission, notamment les livrables et autres étapes-jalons, telles que les approbations de l'Entité MCA. Dans le cas de missions phasées, indiquer les activités, les livrables et les étapes-jalons de chaque phase respectivement. La durée des activités sera présentée sous forme de diagramme bâtons. Voir les Termes de Références pour la liste complète des livrables. Le tableau ci-dessus est un format type (à remplir par le Consultant conformément aux Termes de Référence) qui sera utilisé par le Consultant comme indicateur du volume de travaux envisagé. La Proposition sera évaluée comme partie intégrante des Démarche et Méthodologie.]

Formulaire TECH-11. Curriculum Vitae (CV) des Professionnels Clés proposés

1. **Poste proposé** [un seul candidat sera proposé pour chaque poste]
2. **Nom de l'entreprise** [insérer la dénomination de l'entreprise proposant les personnels]
3. **Nom du personnel** [insérer le nom en toutes lettres]
4. **Date de naissance** [insérer date de naissance]
5. **Nationalité** [Insérer nationalité]
6. **Niveau d'études** [indiquer les études universitaires et autres études spécialisées du personnel ainsi que le nom des établissements fréquentés, les diplômes obtenus et les dates d'obtention.]
7. **Affiliation à des Associations Professionnelles**
8. **Autres formations** Indiquer autres formations reçues/ diplôme(s) au-delà de la licence]
9. **Pays où le personnel a travaillé** [Donner la liste des pays où le personnel a travaillé au cours des 10 dernières années] :
10. **Langues** [Indiquer pour chaque langue le degré de connaissance : bon, moyen, médiocre pour ce qui est de la langue parlée, lue et écrite]

	Langue	Parlée	Lue	Écrite
11. **Expérience professionnelle** *[En commençant par son poste actuel, indiquer par ordre chronologique décroissant les emplois occupés par l'employé depuis la fin de ses études. Pour chaque emploi (voir le formulaire ci-dessous), donner les dates, le nom de l'employeur et le poste occupé.]*

De [année] : À [année] :

Employeur :

Poste(s) occupé(s) :
12. **Détail des tâches attribuées** [Indiquer toutes les tâches à exécuter pour cette mission]

- 13. Expérience de l'employé qui illustre le mieux sa capacité à assumer les tâches attribuées** [Parmi les missions auxquelles le personnel a pris part, donner les informations suivantes pour les missions qui illustrent au mieux la compétence professionnelle du personnel pour les tâches mentionnées au point 11.]

Nom du projet ou de la mission :

Année :

Lieu :

Client

Projet principal :

Poste occupé :

Tâches et activités exécutées :

14. Références :

[Indiquer au moins trois références différentes ayant une bonne connaissance du travail du personnel. Inclure le nom de chaque référence, son titre, son numéro de téléphone et son adresse courriel.]
[L'Entité MCA se réserve le droit de contacter d'autres sources et de vérifier les références apportées, en particulier pour les interventions dans les projets financés par MCC.]

15. Déclaration sur l'honneur :

Je soussigné(e), certifie en mon âme et conscience que ce CV me décrit correctement, ainsi que mes qualifications et mon expérience. Je comprends que toute fausse déclaration faite intentionnellement constituera un motif de disqualification, ou de renvoi, dans le cas où je serais engagé(e).

Je soussigné(e), affirme par la présente que j'accepte de répondre avec [Consultant] à la Demande de Propositions ci-dessus. Je déclare en outre que je suis capable et disposé à travailler :

- 16.** pour la/les période(s) prévue (s) dans les Termes de Référence spécifiques inclus dans le Dossier de Demande de Propositions pour le poste pour lequel mon CV a été inclus à la Proposition du Consultant ; et
- 17.** pour la durée de la mise en œuvre du marché spécifique.

Signature du Professionnel Clé

Si ce formulaire N'a PAS été signé par le Professionnel Clé, en le signant ci-dessous, le représentant mandaté du Consultant déclare ce qui suit :

« En signant ci-dessous, si le Professionnel Clé N'a PAS signé ce CV, je déclare que les faits qui y sont énoncés sont, autant que je puisse en juger, authentiques et corrects ET je confirme que j'ai approché ce Professionnel Clé et obtenu de lui/d'elle l'assurance de sa disponibilité pour cette mission si le Marché est conclu au cours de la période de validité de la DP. »

Signature du Représentant Mandaté du
Consultant

Jour/mois/année

Section IV. B. Financial Proposal Forms

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under Sub-Clause 12.5 of Section I, Instructions to Consultants.

1. Financial Proposal Forms in English

FIN-1 Financial Proposal Submission Form

FIN-2 Price Summary

FIN-3 Breakdown of Price by Activity

FIN-4 Breakdown of Price by Remuneration

Note: Comments in brackets on the following pages serve to provide guidance for the preparation of the Financial Proposal and therefore should not appear on the Financial Proposals to be submitted.

Form FIN-1. Financial Proposal Submission Form

[Location, Date]

To: Mr. **Samuel O. BATCHO**, National Coordinator of Millennium Challenge Account -BENIN II (MCA-BENIN II)

Address: Immeuble KOUGBLENOU, 3^{ème} étage
 Domaine de l'OCBN, Quartier Zongo Nima
 Derrière Compagnie Territoriale de la Gendarmerie du Littoral
 01 BP 101 Cotonou, Republic du Benin

Email: info@mcabenin2.bj

Ladies and Gentlemen:

Re: Selection of Consultant for Hazardous Materials Assessment

RFP Ref: PP1-CIF-ESP-01

We, the undersigned, offer to provide the consulting services for the above mentioned assignment in accordance with your Request for Proposal (RFP) dated **[Insert Date]** and our Technical Proposal.

Our attached Financial Proposal is for the fixed price of **[Insert amount(s)]⁶ in words and figures**.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, as indicated in Paragraph ITC 16.1 of the PDS.

Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below:⁷

Name and Address of Agents	Amount and Currency	Purpose of Commission or Gratuity

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

⁶ Amount must coincide with the ones indicated under total price of Form FIN-2.

⁷ If applicable, replace this paragraph with "No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Contract execution".

Authorized Signatory

Name and title of Signatory

Name of Consultant

Form FIN-2. Price Summary

Re: Selection of Consultant for Hazardous Materials Assessment

RFP Ref: PP1-CIF-ESP-01

	Price ¹	
	US\$	[Local Currency]
Total Price of Financial Proposal		

1. Indicate the total price to be paid by the MCA Entity in each currency. Such total price must coincide with the sum of the relevant sub-totals indicated in Form FIN-3. (Tax provisions relevant to this RFP are set out in Section VI, General Conditions of Contract.)
2. If the RFP contains options, the options will be fully priced and evaluated at 100%.
3. Provide **fully loaded prices** (including any international travel, communication, local transportation, office expenses, and shipment of personal effects, direct and indirect rates and profits).
4. See PDS ITC 12.5 regarding travel-related expenses.

Form FIN-3. Breakdown of Price by Activity
Re: Selection of Consultant for Hazardous Materials Assessment
RFP Ref: PP1-CIF-ESP-01

[Information to be provided in this Form shall only be used to establish payments to the Consultant for possible additional services requested by the MCA Entity and/or for the purpose of verification of the market reasonableness of the prices offered. Please complete for each phase.]

Group of Activities by Phase	Description ²	
	Price ³	
	US\$	Local Currency
Task 1 - Kick-off Meeting and Inception Report		
Task 2 - Site Reconnaissance, review of regulatory framework and Detailed Work Plan		
Task 3 - Equipment and Oil Sampling and Testing		
Task 4 - Sampling and Testing of Soils and Water		
Task 5 - Results and Analysis of the Chemical Testing		
Task 6 - Risk Assessment		
Task 7 - Formulate Short-Term Remediation Options		
Task 8 - Recommend Long-Term Management Options.		
Task 9 - Prepare specifications and TORs for short term remediation actions		
Task 10. Reporting		
Task 11 - Technology and Knowledge Transfer		

- 1.** Form FIN-3 shall be completed for the whole assignment. In case some of the activities require different modes of billing and payment (e.g.: the assignment is phased, and each

-
- phase has a different payment schedule), the Consultant shall fill a separate Form FIN-3 for each group of activities. Include base and option years.
2. A short description of the activities whose price breakdown is provided in this Form.
 3. Provide **fully loaded prices** (including international travel, communications, local transportation, office expenses, and shipment of personal effects, direct and indirect rates and profit).
 4. See PDS ITC 12.5 regarding travel-related expenses.

Form FIN-4. Breakdown of Remuneration
Re: Sélection of Consultant for Hazardous Materials Assessment
RFP Ref: PP1-CIF-ESP-01

[Information to be provided in this form shall only be used to establish price reasonableness and to establish payments to the Consultant for possible additional services requested by the MCA Entity.]

Name ²	Position ³	Person-Month Fully Loaded Rate ⁴		
Foreign Staff		Home	US\$	[Local Currency]
		Field		
		Home		
		Field		
		Home		
		Field		
Local Staff		Home		
		Field		
		Home		
		Field		
		Home		
		Field		

1. Form FIN-4 shall be filled in for the same Key Professional Personnel and other Personnel listed in Forms TECH-8 and 9.
2. Professional Personnel shall be indicated individually; support staff shall be indicated by category (e.g., draftsmen, clerical staff).
3. Positions of the Key Professional Personnel shall coincide with the ones indicated in Forms TECH-8 and 9.
4. Indicate separately person-month rates for home and field work. Provide fully loaded prices (including international travel, communication, local transportation, office expenses, and shipment of personal effects, direct and indirect rates and profit).
5. See PDS ITC 12.5 regarding travel-related expenses.

2. Financial Proposal Forms in French

Section 4 B. Formulaires de Proposition Financière

[Les Formulaires Type de Proposition Financière doivent être utilisés pour la préparation de la Proposition Financière conformément aux instructions figurant au paragraphe 12.5 de la Section 1 - Instructions aux Consultants.]

FIN-1 Formulaire de Soumission de la Proposition Financière

FIN-2 Récapitulatif des Prix

FIN-3 Ventilation des Prix par Activité

FIN-4 Ventilation des Prix par Rémunération

NB. : Les commentaires entre parenthèses dans les pages suivantes ne fournissent qu'une indication pour la préparation de la Proposition Financière ; à ce titre, ils ne figureront pas dans les Propositions Financières à soumettre.

Formulaire FIN-1. Formulaire de Soumission de la Proposition Financière

[Lieu, Date]

A l'attention de : Mr. Samuel O. BATCHO

National Coordinator

Millennium Challenge Account -Bénin II (MCA-Bénin II)

Adresse: Immeuble KOUGBLENOU, 3^{ème} étage
 Domaine de l'OCBN, Quartier Zongo Nima
 Derrière Compagnie Territoriale de la Gendarmerie du Littoral
 01 BP 101 Cotonou, République du Benin

Email: info@mcabenin2.bj

Madame, Monsieur

Re: Sélection d'un Consultant pour l'Evaluation des Matières Dangereuses

RFP Ref: PP1-CIF-ESP-01

Nous, soussignés, avons l'honneur de vous proposer nos services de consultants, pour la mission indiquée ci-dessus en Objet conformément à votre Demande de Propositions en date du [date] et à notre Proposition Technique.

Notre Proposition Financière ci-jointe porte sur le montant forfaitaire de [insérer le(s) montant(s)]⁸ en toutes lettres et en chiffres].

Notre Proposition Financière engage notre responsabilité sous réserve des modifications résultant des négociations contractuelles relatives au Marché, jusqu'à expiration de la période de validité de la Proposition visée au Paragraphe 16.1 des **DPDP**.

Les commissions et gratifications versées ou à verser par nous à des agents dans le cadre de la présente Proposition et de l'exécution du Marché, si nous en sommes les adjudicataires, sont indiquées ci-dessous⁹ :

Nom et adresse des agents	Montant et Monnaie	Objet de la Commission ou de la gratification

⁸Ce(s) montant(s) doi(ven)t coïncider avec celui(ceux) porté(s) au Formulaire Fin-2, Prix Total.

⁹ Le cas échéant, remplacer ce paragraphe par : « Aucune commission ni gratification n'a été, ni ne sera, versée par nous à des agents dans le cadre de la présente Proposition et de l'exécution du Marché. »

Nous comprenons que vous n'êtes pas tenu d'accepter toutes les Propositions qui vous sont adressées.

Veuillez agréer, Madame, Monsieur, l'expression de notre considération distinguée.
Signataire Mandaté

Nom et titre du Signataire

Nom du Consultant

Formulaire FIN-2. Récapitulatif des Prix

Re: Sélection d'un Consultant pour l'Evaluation des Matières Dangereuses

RFP Ref: PP1-CIF-ESP-01

	Prix ¹	
	USD	[Monnaie locale]
Prix Total de la Proposition Financière		

1. Indiquer le prix total à payer par l'Entité MCA dans chaque monnaie. Ce prix total doit correspondre à la somme des sous-totaux indiqués dans le Formulaire FIN-3. (Les dispositions fiscales relatives à la présente DP sont énoncées en Section 5 – Formulaires du Marché)
2. Si la DP contient des options, le prix complet de ces options sera fixé et évalué à 100%.
3. Veuillez indiquer des **prix complets** (qui tiennent compte notamment des déplacements internationaux, communications, transports sur place, charges administratives, expédition d'effets personnels, charges et bénéfices directs et indirects.).
4. Cf. DPDP 12.5 pour les dépenses liées aux déplacements.

Formulaire FIN-3. Ventilation des Prix par Activité¹

Re: Sélection d'un Consultant pour l'Evaluation des Matières Dangereuses

RFP Ref: PP1-CIF-ESP-01

[Les informations présentées dans ce Formulaire seront utilisées uniquement pour définir les paiements au Consultant au titre des services supplémentaires demandés par l'Entité MCA et /ou dans le but de vérifier que les prix proposés sont raisonnables. Veuillez remplir pour chaque phase.]

Groupe d'Activités par Phase ²	Description ³	
	Prix ⁴	
	USD	Monnaie locale
Tâche 1. Réunion et rapport de démarrage.		
Tâche 2. Reconnaissance de site, examen du cadre réglementaire et élaboration du Plan de Travail Détaillé		
Tâche 3. Echantillonnage et analyses sur l'huile et les équipements		
Tâche 4. Echantillons et analyse de sols et eau		
Tâche 5. Résultats et Interprétation des analyses chimiques		
Tâche 6. Evaluation des Risques		
Tâche 7. Formulation d'Options de Remédiation à Court-Terme		
Tâche 8. Propositions d'Options de Gestion à Long-Terme		
Tâche 9. Préparer les spécifications et les TDR pour les actions de remédiation à court terme.		
Tâche 10. Rapports.		
Tâche 11. Transfert de connaissance/compétences et de technologie.		

Total		
-------	--	--

1. Le Formulaire FIN-3 doit être rempli pour la totalité de la mission. Au cas où certaines des activités exigeraient des modes de facturation et de paiement différents (par exemple lorsque le marché est phasé et que chaque phase fait l'objet d'un échéancier différent), le Consultant remplira un Formulaire FIN-3 différent pour chaque groupe d'activités. Inclure les années de base et les années d'option(s).
2. Une brève description des activités dont le prix ventilé apparaît dans le présent Formulaire.
3. Fournir des **prix complets** (qui tiennent compte notamment des déplacements internationaux, communications, transports sur place, charges administratives, expédition d'effets personnels, charges et bénéfices directs et indirects coûts et bénéfices directs et indirects).
4. Cf. DPDP 12.5 pour les dépenses liées aux déplacements.

Formulaire FIN-4. Ventilation de la Rémunération**Re: Sélection d'un Consultant pour l'Evaluation des Matières Dangereuses****RFP Ref: PP1-CIF-ESP-01**

[[Les informations présentées dans ce Formulaire seront utilisées uniquement pour définir les paiements au Consultant au titre des services supplémentaires demandés par l'Entité MCA.]

Nom² Poste³ Taux plein personnel-mois⁴

Personnels étrangers			USD	[Monnaie Locale]
		Siège		
		Terrain		
		Siège		
		Terrain		
		Siège		
		Terrain		
Personnels locaux				
		Siège		
		Terrain		
		Siège		
		Terrain		
		Siège		
		Terrain		

1. Le Formulaire FIN-4 doit être rempli pour les mêmes Professionnels et autres Personnels supports et administratifs que ceux qui figurent dans les Formulaires TECH-8/9.
2. Les Professionnels doivent être présentés individuellement ; les Personnels supports et administratifs par catégorie (par ex., dessinateur, personnel administratif, etc.).
3. Les postes des Professionnels doivent correspondre à ceux indiqués dans les Formulaires TECH-8 et 9.
4. Indiquer séparément les taux personnels-mois pour le travail au siège/dans les bureaux du Consultant et le travail sur le terrain (y inclure les déplacements internationaux, communications, transports sur place, charges administratives, expédition d'effets personnels, charges et bénéfices directs et indirects, charges et bénéfices directs et indirects).
5. Cf. DPDP 12.5 pour les dépenses liées aux déplacements.

Section V. Terms of Reference

The RFP is issued in English but the proposals are to be submitted in French. This is the reason as to why the English and French versions of the TOR are being provided. However, please note in case of discrepancy, the English version of the TOR shall prevail.

English version

TERMS OF REFERENCE BENIN POWER COMPACT HAZARDOUS MATERIALS ASSESSMENT

1.0 INTRODUCTION

1.1 MCC and Government of Benin

The Millennium Challenge Corporation (“MCC”) is a United States government-owned corporation created under Title VI of the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 2004 and is responsible for the stewardship of the Millennium Challenge Account. MCC works with developing countries to promote sustainable economic growth to reduce poverty. Eligible countries develop specific investment programs to be funded by MCC through a grant agreement or compact over a five year period and implemented by the country partner.

On September 9, 2015, acting on behalf of the United States Government (“USG”), MCC signed a second Compact with the Government of Benin (the “Government” or “GoB”) focused on the electric power sector. The Compact, comprised of a US\$375 million grant from the USG and a \$28 million matching contribution from the GoB, aims to strengthen Benin’s national utility, attract private sector investment, and fund infrastructure investments in electric generation and distribution as well as off-grid electrification for poor and unserved households.

The Benin Compact will be implemented for a five-year period and is expected to enter into force¹⁰ in March 2017. A Millennium Challenge Account entity, Millennium Challenge Account-Benin (“MCA-Benin II” or “MCA”) has been established to implement the Compact

¹⁰ Entry into force (“EIF”) is MCC’s Compact effectiveness period.

program. MCA-Benin II has been established as a legal entity in Benin and will be governed by a public-private Board of Directors accountable to the President of the Republic of Benin.

1.2 Overview of Scope of Services

MCA-Benin II, serving as the Client, will hire a consulting firm (the “Consultant”) to identify on the project sites all environmental conditions that require analysis and propose efficient solutions for remediation.

While MCA-Benin II is the Client under this contract, the Consultant shall also work in close consultation with other GoB ministries and agencies that will partner with MCA in furtherance of the Compact program, termed Implementing Entities (“IE”), each of which will sign an Implementing Entity Agreement (“IEA”) with MCA-Benin II. Specifically, the Consultant shall work most closely with Benin national electric utility (Société Béninoise d’Énergie Électrique, “SBEE”), in the execution of this terms of reference.

1.3 Institutional Arrangements

- **MCA-Benin II:** MCA-Benin II is the Government’s Accountable Entity (“AE”) responsible to MCC for the implementation of the Compact. MCA will procure all goods and services under the Compact, and will enter into contracts and administer all such contracts with the service providers. MCA is also responsible for managing political processes, reporting quarterly and annual performance data, implementing the Monitoring and Evaluation (“M&E”) Plan, and public relations.
- **Fiscal Agent (“FA”):** The Fiscal Agent is a contractor hired by MCA responsible for handling all the funds provided by MCC. The FA will provide data and information on targets for key process milestones, mainly the commitments and disbursements on key contracts.
- **Procurement Agent (“PA”):** The Procurement Agent is a contractor hired by MCA responsible for managing all the procurement activities associated with the Compact.
- **Program Environmental, Social, and Management Consultant (“PESMC”):** MCA-Benin II will retain the services of a firm to assist it in the performance of its role as the AE as it relates to the infrastructure projects included in the Compact program. Such firm will provide a range of program management and support functions on behalf of MCA-Benin II, including preparation and implementation of Resettlement Action Plans (“RAPs”) for all Compact projects.
- **Ministère de l’Energie, de l’Eau et des Mines (“MEEM”) :** MEEM provides policy oversight over the electric power sector in Benin and will be an IE under the Compact and will be responsible for supporting the implementation of aspects of Compact projects on behalf of MCA.

- **Autorité de Régulation de l'Electricité au Bénin (“ARE”):** ARE regulates the electric power sector in Benin and will be an IE under the Compact and will be responsible for supporting the implementation of specified activities under the Policy Reform and Institutional Strengthening Project on behalf of MCA, per an IEA between MCA and ARE.
- **Agence Béninoise pour l'Environnement (“ABE”):** ABE is responsible for oversight of the environmental assessment process in Benin and for monitoring and enforcing compliance with environmental legislation and regulations.
- **Société Béninoise d'Énergie Électrique (“SBEE”):** SBEE is the national electricity distribution company and will be an IE under the Compact and will be responsible for supporting the implementation of Compact projects, most notably the Electricity Distribution and Electricity Generation Projects and aspects of the Policy Reform and Institutional Strengthening Project on behalf of MCA.
- **Communauté Electrique du Bénin (“CEB”):** CEB is a bi-national organization, owned jointly by the Governments of Benin and Togo, established in 1968 that provides generation, import, and transmission to the two countries. CEB will be an IE under the Compact and will be responsible for supporting the implementation of specified activities under the Electricity Distribution Project on behalf of MCA.

2.0 BACKGROUND

2.1 Country Background

Benin has a population of 10.3 million, with 36% living below the national poverty line and with a poverty incidence of 35% in rural areas and 27% in urban areas. The economic boom related to increased trans-shipment and high cotton prices have resulted in an average growth rate of 4% over the last decade. However, the continued population growth (3.5% per year over the past decade) has resulted in a net poverty increase. Extreme poverty is concentrated in the north of the country, where food insecurity is widespread. Benin's agricultural sector, dominated by cotton, accounts for 36% of GDP, employs 48% of the working population, and accounts for 80% of export earnings. The Benin economy is vulnerable to external shocks resulting from swings in commodity prices or policy changes in Nigeria, Benin's major trading partner.

2.2 Benin Power Compact

The second compact between the GoB and MCC targets lack of electricity infrastructure, a binding constraint to economic growth in Benin, where an insufficient quantity and quality of electricity results in reduced productivity, output, and investment for businesses, less effective delivery of public and social services, and diminished well-being and economic opportunity for

households.¹¹ The root causes of these problems lay not only in the poverty of the country but in the policies, institutions, and actors comprising the sector.

The Benin Power Compact aims at addressing these core problems through policy reforms and institutional strengthening, large-scale investments in energy generation and distribution infrastructure, as well as off-grid electrification and is comprised of the following four projects:

- **Policy Reform and Institutional Strengthening Project:** This project will advance far-reaching policy reforms and strengthen institutions through improved regulation, tariff reform, utility operations and management, energy efficiency, and private investment in power generation. The project advances the compact's policy reform agenda, including planned conditions precedent.
- **Electricity Generation Project:** This project will increase the amount of effective installed generating capacity in Benin by 78 megawatts ("MW") – equivalent in capacity to one-third of the country's current peak demand – while helping the country decrease its reliance on unreliable energy imports. This will be achieved through the installation of 45 MW of solar photovoltaic generation and the rehabilitation of 33 MW of thermal and hydroelectric generation infrastructure.
- **Electricity Distribution Project:** This project will modernize Benin's electricity distribution infrastructure to expand grid capacity to accommodate future growth, improve reliability, and reduce losses and outages. The project will improve the grid serving Cotonou, the commercial capital, selected regional networks as a complement to proposed solar generation investments, as well as on a national level by building a modern distribution dispatch and control center to more effectively manage the network, including intermittent power from renewable sources.
- **Off-grid Electricity Access Project:** This project will expand access to electricity in a country where only one-third of the population has electricity through funding of an off-grid energy grant facility along with policy and institutional strengthening to support the entire off-grid power sector in Benin.

¹¹ Benin completed its first compact in October 2011. The \$307 million program included the following projects: (i) modernizing and expanding the Port of Cotonou; (ii) promoting land security; (iii) improving access to capital for micro- and medium-sized enterprises; and (iv) creating a more efficient judicial system.

3.0 SCOPE OF SERVICES

3.1 Consultancy Objectives

The primary objective of this consultancy is the assessment of Hazardous Materials at certain of the project sites and the development of proposed remediation solutions. The assignment consists of eleven tasks that are described in detail below:

1. Kick-off Meeting and Inception Report
2. Initial Reconnaissance and Detailed Work Plan
3. Equipment and Oil Sampling and Testing
4. Sampling and Testing of Soils and Water
5. Results and Analysis of the Chemical Testing
6. Risk Assessment
7. Formulate Short-term Remediation Options
8. Recommend Long-term Management Options
9. Prepare specifications and TORs for short term remediation actions
10. Reporting
11. Technology and Knowledge Transfer

3.2 Purpose and Approach

MCA–Benin II, with funding from MCC, will be financing:

- generating equipment rehabilitation works at three thermal power plants and one hydroelectric power plant owned and operated by SBEE
- replacement of three SBEE substations
- transformer replacement
- other upgrade and expansion activities at other substations owned variously by SBEE
- and installation of new photovoltaic arrays at four sites.

There are recognized environmental conditions (“REC”) at many of these sites, including leaks and spills of transformer oil, lubricating oil, and diesel fuel. PCBs are likely to be present in leaking and non-leaking equipment (both operating and abandoned), stored transformer oil, and contaminated soil and water¹². Soil contamination by hydrocarbons is an obvious REC at all of thermal power plants, and PCB contamination is likely. Uncontrolled municipal waste disposal has been allowed to occur at one of the sites proposed for solar generation. Contamination of groundwater and runoff are possibilities at any of these locations.

¹² SBEE has tested 192 of its more than 2200 transformers for PCBs and found that 50 of them, or 26 percent, had PCB concentrations indicating contamination. The concentrations in 32 of them were in what US EPA considers the lowest range of contamination, 50 to 500 parts per million. The other 17 were more heavily contaminated. The list of transformers tested is not available. The report will be provided to the Consultant after contract award.

The Consultant may identify other environmental conditions during the course of the assignment that require analysis.

The purposes of the consulting assignment are:

- to determine the nature and extent of existing hazardous material contamination;
- to characterize the PCB and other contamination situation at each location;
- to assess risks of this contamination to the health and safety of contractors' workers, SBEE [and CEB] staff, residents of adjacent communities, and the environment in general;
- to map all contaminated equipment and areas, as well as any sensitive environmental and social components at risk (such as housing, wells, agriculture, marshes, etc.);
- to formulate site-specific, short-term remedial action plans to manage those risks; and
- to make recommendations for final solutions including but not limited to equipment decontamination and PCB disposal, PCB management, as well as decontamination and / or disposal of contaminated soil (PCB, hydrocarbons or other);
- to prepare specifications and TORs for remediation activities to be undertaken prior to construction.

MCA will follow a risk-based approach, as outlined in MCC's guidance document¹³, in which it will be "expected to develop response actions that are consistent with the severity of the risk, taking into account the most cost-effective solution to mitigate or abate the risk." The guidance emphasizes careful definition of boundaries for the risk management activities:

Boundaries of MCC and MCA's obligation to address hazardous materials and wastes should be established based upon the scope of the project and the specific characteristics of the project site. In general these obligations would be restricted to materials within contractors' work areas, inclusive of all areas that are directly or indirectly utilized or impacted by the contractor in the execution of their works. Contractors are responsible for the proper handling, management and disposal of all hazardous materials and waste encountered or generated by their actions, even if they occur outside of their defined works area.

In some cases, MCC and MCA may consider including additional measures that go beyond the contractors' works area in order to mitigate broader risks and/or to ensure that a completed project provides an operational environment that is protective of human health and the environment. The nature and extent of the on-site risks should help determine the appropriate response action.

Based on this guidance and the RECs already identified and the results of the assessment, MCA intends to abate immediate contamination sources; remove, treat or securely store contaminated soil, materials, and equipment found in the work areas or likely to be disturbed by the planned works; and ensure that Compact-supported investments in any facility (such as a substation) will not put contaminated equipment or contaminated areas back into operation. This last is consistent with MCC policies on Hazardous Material in which the project undertaken must

¹³ "Clarifying Guidance on Implementation of IFC Performance Standards to Address Hazardous Material and Waste Management." MCC, May 2014 (draft).

provide an operational environment that is protective of human health and the environment.

The assessment will be closely followed by remediation, which will be undertaken by separate procurement following plans that the Consultant will develop as part of this assignment. The Assessment will produce remediation recommendations for both PCBs and hydrocarbon contamination at the Generation and Distribution project sites. Remediation of PCBs at both types of sites will be contracted with a specialized contractor, while the remediation of hydrocarbons and other environmental and workplace hazards can likely be undertaken by the contractors to be procured to carry out the planned rehabilitation or expansion works. In the case of hydrocarbon contamination, this material may be disposed locally, either through incineration at a properly operated incinerator with adequate temperature and emission control – the kiln at the LaFarge cement factory in Onigbolo is a possibility, and the Consultant may identify others – or by burial in a properly constructed and secure site, perhaps, in co-location with existing local waste disposal operations – or by other remediation techniques that the Consultant may recommend. PCBs, however, will require specialist handling and probably transporting out of the country.

The Assessment will be conducted in a manner consistent with the ASTM Standard for Phase II Environmental Site Assessment.¹⁴ PCB identification will be done in accordance with UNEP guidelines.¹⁵ Any other pertinent norm or legislation will also apply to this assessment.

3.3 Facilities to be assessed¹⁶

Generation Project Facilities – see Annex 1 for details

- Natitingou Thermal Power Plant (existing facilities)
- Parakou Thermal Power Plant (existing facilities)
- Porto Novo Thermal Power Plant (existing facilities)
- Parakou Solar Generation Site (no facilities; site used as an open urban waste dump)

Distribution Project Facilities – six existing substations --see Annex 1 for details

- Cadjehoun
- Ancien Pont
- D1 CimBénin
- D2 Croix rouge
- Saint-Michel
- OCBN

New Distribution Facility Sites (Considered as additional services which could be requested by MCA-Benin II): These sites are under consideration for development of new facilities as noted in the descriptions. If MCA-Benin II determined any should be assessed once they are confirmed

¹⁴ ASTM Standard 1903-11, “Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.” ASTM International, 2011.

¹⁵ “Guidelines for the Identification of PCBs and Materials Containing PCBs.” UNEP Chemicals, 1999.

¹⁶ The complete list of facilities and an estimate of the numbers of equipment and sites of obvious contamination are provided in Annexes 1 and 2.

as part of the Distribution Project, an amendment will be made to the contract based on the breakdown of remuneration of Form FIN 4.

New substation at Gbedjromede (informal mechanical workshop) and Fidjerosse

- New substation at Ancien Pont (bus station)
- New substation at OCBN (parking)
- New sites for national dispatch center and backup facility
- Other substations as applicable (see Annex 2) depending on the magnitude of proposed project at these sites

3.4 Tasks

The assignment consists of 11 (eleven) tasks that are described in detail below:

Task 1. Kick-off Meeting and Inception Report. Within 2 weeks of receiving Notice to Proceed, the Consultant will arrange a kick-off meeting at MCA's offices in Cotonou, Benin, at which time they will present an Inception Report that includes the following:

- Summary of existing information
- Initial Work Plan
- Health and Safety Plan related to the assignment
- Environmental management plan related to the assignment
- Schedule for Site Reconnaissance
- SBEE Engagement Plan

Task 2. Site Reconnaissance, review of regulatory framework and Detailed Work Plan.

Immediately after the kick-off meeting, the Consultant will conduct visual site reconnaissance of and discussions at the facilities listed above to obtain data on present and historical contamination, as well as any other information which may be necessary to develop a pertinent, accurate and safe sampling plan (e.g. the location of underground cables or pipes). The Consultant will identify, review and compile national and international regulations and standards pertinent to the present assessment, including identification/inventorisation, analysis and management (use, handling, transport, disposal) of PCB, oil and petroleum product and any other potential dangerous materials or wastes found at the sites. The Consultant will highlight to MCA and the compact beneficiary(ies) their obligations, taking into account Beninese environmental legislation (Loi-cadre No 98 – 030 sur l'environnement, Décret N° 2003-330, portant gestion des huiles usagées ; Décret No 87-15 portant code de l'hygiène public, Décret n°2001-109, fixant les normes de qualité des eaux résiduaires, etc.), international standards (MCC, IFC, WHO, UNEP, etc.); and international conventions (Basel, Stockholm, Rotterdam, etc.). It is the responsibility of the Consultant to identify all pertinent regulations/standards.

The Consultant will prepare and submit updated work plan and a detailed sampling plan, in conformity with national legislation and international standards. The detailed sampling plan will include a hazardous materials sampling and testing plan for each site, and for soils, surface water and groundwater on neighboring lands if the nature of the contamination suggests that contamination may have migrated off-site. Single or two-step sampling/testing methodologies may be defined, for PCBs and other hazardous materials. The plan will include exact numbers and locations of soil samples, groundwater samples (requiring drilling for the purpose of this assignment) and oil sampling, and field and lab tests for each facility, sample identification

system, sampling procedures, description of soil type and granulometry, testing methods/chemical analysis, standards for each parameter, methods used to estimate quantities of contaminated soils and water as well as an appropriate quality assurance and quality control (QA/QC) system (including ensuring that sampling locations are representative, testing duplicate samples and blank samples, conservation and chain of custody of samples from field to lab, and laboratory certification).

For the purposes of the financial proposal, prospective consultants should assume:

- 5 on-site soil borings, 2 off-site soil borings, 2 on-site groundwater drills, and 2 off-site groundwater drills (upstream and downstream) at each of the thermal power plants; where applicable, 2 nearby existing wells should also be tested;
- 2 soil borings, 1 on-site groundwater drill, and 1 off-site groundwater drill (upstream) at each substation.

Soil samples should be taken at least at 5 representative depths along the soil profile. Borings for soil sampling should stop when the groundwater is reached or have a maximum depth of 3 m. Groundwater drills should stop when the groundwater is reached or have a maximum depth of 15 m (see approximate groundwater depth in Annex 1). However, this is indicative and the Consultant should confirm the number of sampling sites and samples, and depth, upon best practices and standards.

The Consultant will have to take all necessary measures to prevent polluting groundwater, during drilling/sampling and in the long term after sampling.

With respect to PCBs, at a minimum, the below-listed items will be sampled for PCBs and tested. Based on the initial reconnaissance or findings during sampling, the Consultant may identify other needs for sampling and testing.

- a) Transformer oil in equipment that will be replaced under the Compact¹⁷ (see Annex for details)
- b) Transformer oil leaking from abandoned or operating equipment or containers
- c) Structures, soil, or water showing evidence of contamination by transformer oil (including wells or water bodies near the facility if the nature of the contamination suggests that contamination may have migrated off-site)
- d) Transformer oil in non-leaking, abandoned equipment
- e) Transformer oil in non-leaking containers
- f) Transformer oil in non-leaking, new equipment that has not been installed
- g) Transformer oil in certain non-leaking, operating equipment to be identified (this is most likely to be equipment that the investment is not actually touching and, therefore, will remain in service but needs to be labeled and managed)

Items a, b, c, and d are included because these groups encompass items that will be taken out of service under MCC-funded activities, or that constitute immediate hazards to workers, communities, and the environment, or both at/near project sites, as defined. They are directly related to the Compact and require urgent attention. Items e, f, and g are included because of the risk that MCC's investment in a facility that is dependent on non-leaking, contaminated

¹⁷ Annex 2 : list of transformers in the intervention zone

equipment to operate may not be sustainable in the long term.

Task 3. Equipment and Oil Sampling and Testing. MCC's review of SBEE capacity and capacity for local laboratory testing, as well as regulations governing the transporting of this material, suggests that field testing is the best option for screening of transformer oil for PCBs. Samples tested positive in the field and samples for which field tests are not available will be sent to the Consultant's laboratory (either existing or to be established as a temporary facility for the engagement) for a determination of the level of contamination. Equipment and drums with oil that tests positive will be immediately and prominently labelled as PCB contaminated. After laboratory tests are completed, information on the level of contamination will be added to the label. The Consultant will test transformer oil for other hazardous contaminants if it considers relevant to the engagement.

Task 4. Sampling and Testing of Soils and Water. MCC/MCA site visits indicate that soil, surface water and groundwater will need to be tested, at least for PCBs, total petroleum hydrocarbons, and heavy metals, at the generation locations and substations. The Consultant will need to have equipment available for this (in situ measurement or sampling for laboratory analysis) and other tests that the Consultant considers necessary based on the initial reconnaissance. The Consultant will determine what testing is needed at the Parakou waste dump, if any, after ascertaining the types of waste that have been placed there. Task 4 should be conducted in parallel with Task 3. The Consultant will maintain detailed records of the testing, including field and lab results, location, description of sample site, and photographs.

If, during the course of the assessment, the Consultant discovers that groundwater or surface runoff is contaminated, the details will immediately be communicated to MCA so that appropriate authorities can be informed and public access to the water source can be restricted.

Task 5. Results and Analysis of the Chemical Testing. Results of the chemical analysis and field tests will be compiled and compared to standards and guidelines. Contaminated areas/water bodies will be shown on site maps. Estimated volumes of contaminated soils will be calculated and also shown on the maps, including areas and depths. Needs for further sampling/testing will be explained in this task.

Task 6. Risk Assessment. The Consultant will conduct a qualitative assessment of the risks associated with PCBs, non-PCB oils, and other hazardous materials found at the sites, based on the locations, the environmental media or pieces of equipment in which they are found, the quantities of materials present, the level of contamination, the likely uses of contaminated equipment or materials in the absence of any controls, on-site staff and off-site populations or environmental features that are being or could be affected, and the likelihood and severity of effects. Corrective measures are presented in the following task. The risk assessment should be conducted and the results presented following the methodology in the MCC guidance document previously cited.

Task 7. Formulate Short-Term Remediation Options. Using the results of the risk assessment as a means of assigning priority, the Consultant will recommend a management procedure (or options if there are logical alternatives) for immediate abatement of hazards. This

needs to be developed in collaboration with SBEE. Cost and duration estimates should be provided for the recommended options. These options should adhere to applicable Benin's legislation, international conventions signed/ratified by Benin and international best practices / standards.

These could include but would not be limited to the following.

- a) equipment that will be replaced under the Compact, if not leaking: label and place in secure storage to be established by MCA and SBEE – *i.e., not accessible to the public or close to communities, with low risk of groundwater or surface water pollution, provided with fire protection and with containment in case of leakage, monitored by security force* – pending final disposal.¹⁸
- b) abandoned or operating equipment or containers that are leaking: qualified contractor to control or contain leakage from operating equipment, and to label abandoned equipment or containers, remove and properly package oil, and move all to secure storage pending disposal.
- c) Structures, soil, or water contaminated by PCB oil: qualified contractor to conduct remediation, move contaminated material to secure storage and subsequently to treatment / disposal.
- d) non-leaking, abandoned equipment contaminated by PCB oil: label and move to secure storage pending treatment / disposal.
- e) PCB transformer oil in non-leaking containers: label and move to secure storage to prevent usage in maintenance and thus new contamination, pending treatment / disposal.
- f) PCB transformer oil in non-leaking, new equipment that has not been installed: label and return to supplier if feasible, or label and move to secure storage pending cleaning and potential reuse and oil disposal.
- g) PCB transformer oil in non-leaking, operating equipment not being replaced: label and leave in place until service life has ended (if this equipment does not come into play with MCC funded investments).
- h) Non-PCB hazards such as hydrocarbon contamination of soil and water: provide recommended management method to be incorporated in contracts for general site remediation or civil works. In addition to abatement of existing contamination, the management method will include corrective measures to prevent recurrence, such as eliminating leaks in secondary containments around oil storage tanks, repairing oil-water separators, and preventing public access to used oil storage facilities.
- i) Hazardous waste found at the Parakou dump site, and related contamination of soil or groundwater.

As part of short-term management, the Consultant should provide a preliminary design and construction and operating cost estimates for a Secure Storage Yard for hazardous equipment and materials; included in the preliminary design, the Consultant should identify and assess at

¹⁸ The existing site SBEE has designated for storage does not meet any of those criteria.

least 3 candidate viable sites for this storage. If the Consultant determines that intermediate storage sites are needed to temporarily house contaminated equipment or oil found in remote areas until it can be transferred to the main site, preliminary site identification, design and cost estimates should be provided for them as well.

Task 8. Recommend Long-Term Management Options. The Consultant will recommend options for “permanent” abatement of the hazards, again using the results of the qualitative risk assessment as a guide to establish the priority of various actions and to identify those that should be carried out under the Compact, versus those that could be deferred until, for example, regional capacity (in West Africa) for hazardous material disposal has developed. This needs to be developed in collaboration with SBEE. Cost estimates should be provided for the recommended options. These options should adhere to applicable Benin’s legislation, international conventions signed/ratified by Benin and international best practices / standards.

Options for PCBs. In completing this task, the Consultant should be aware that the Bamako site that was agreed on as part of a regional PCB management program does not yet exist. The regional program is moribund; Bamako is therefore not a realistic option. Other possibilities include but should not be limited to the following. Cost estimates should be provided for the recommended options.

- a) Set up a processing operation in Benin, to drain and package oil, decontaminate equipment that can be easily decontaminated, and ship oil and the equipment that remains contaminated to Europe or South Africa for treatment and disposal.
- b) Item a) but with local treatment. A PCB inventory project in Nigeria has identified a “portable” (i.e., trailer-mounted) chemical disposal system that deactivates PCBs by removing the chlorine atoms from the molecules and allows the resulting PCB-free oil to be reused. This would need to be thoroughly investigated. Another option to be assessed for feasibility, environmental impact, and health and safety is destruction of PCBs in the LaFarge cement kiln at Onigbolo or in other cement kilns the Consultant may identify in Benin, Togo, and Nigeria.
- c) Establish a transformer repair shop (in compliance with technical, environmental and social standards), including but not limited to:
 - an industrial building equipped with a 20-25 ton palan ;
 - a testbed with HT injection room;
 - testing equipment (3 phase radiometer; megohmmeter 20 KV, micrometer, multimeter, frequency response analyzer, etc.);
 - tool kit (facom wrenches kit, palet truck, ladder, etc.).
 This shop can be operated by an individual or by SBEE staff. The Consultant should prepare conceptual design and cost estimates if this is a useful option, and recommend a transformer repair training program.
- d) Provide an outline for a program to prevent new influx of PCBs that would include such activities as (i) identifying reliable PCB free oil suppliers, (ii) Identifying reliable PCB

- free transformers suppliers, and (iii) recommending a system to insure that all equipment and oil that is procured is tested for PCBs prior to acceptance.
- e) Propose monitoring indicators and responsibilities lines within SBEE and/or DGE for this monitoring.

Options for other contamination control. Cost estimates should be provided for the recommended options.

- a) Recommendations on diesel and used oil containment with technical requirements (minimal design specifications) and cost estimates, for the thermal plants and any additional project sites where these hazardous materials occur (as identified during previous tasks). Second containments, drainages and oil separators must be designed in such a way as to avoid overspill of contaminated water during rainfall.
- b) Recommendations on used oil recycling or disposal in local context, and cost estimate and risk assessment. This may include strictly prohibiting selling to individuals because of potential impacts to human health and the environment. A local option to be assessed for feasibility, environmental impact, and health and safety is the destruction of oil in the LaFarge cement kiln at Onigbolo or other cement kilns that the Consultant may identify.
- c) Recommendations for oil recycling contractor licensing.
- d) Recommendations to abate sources of other contamination, such as heavy metals
- e) Recommendations to remove and properly treat or dispose of waste at the Parakou solar site.
- f) Propose monitoring indicators and responsibilities lines within SBEE and/or DGE for this monitoring.

Task 9. Prepare specifications and TORs for short term remediation actions. The consultant shall prepare specifications and TORs for the remediation of sites to be undertaken within the compact by MCA's contractors. These will focus on both PCB / non-PCB equipment, PCB / non-PCB oil, and contaminated soil and water, including all applicable remediation measures as recommended in Task 7 and agreed with MCC/MCA and SBEE. Specifications and TORs will be structured taking into account the following :

- remediation measures relating to PCB contamination will be undertaken by one or more PCB qualified contractors ;
- non-PCB contamination may be managed by construction contractors if qualified; construction works may be split into different packages, yet to be determined.

Task 10. Reporting. The Consultant will produce draft and final reports, as listed in Section 4 (Deliverables), within the contractual deadlines. These reports have to be illustrated with maps showing the location and layout of sites, sampling points, contaminated equipment, contaminated areas, sensitive environmental and social components at risk (such as housing, wells, agriculture, marshes, etc.), as well as conceptual plans of facilities as recommended from Tasks 7 and 8.

Task 11. Technology and Knowledge Transfer. SBEE will identify staff that can accompany and assist the Consultant, thereby receiving on-the-job training in hazardous

materials assessment and management (including methods and tools to analyze data). In addition, the Direction Générale de l’Energie (DGE, a governmental entity) will also be involved and will identify one staff to accompany and assist the Consultant.

3.5 Facilities, Equipment, and Start Up

The Consultant during the assignment Period shall be a combination of home office work and laboratory work and temporary duty in Benin. Any site offices that are required during the contract period are the Consultant’s responsibility. The Consultant shall be responsible for office furniture, IT, and telephone. Office space that is required in Benin is the Consultant’s own responsibility.

The Consultant is responsible for bringing adequate office equipment to support a professional procurement support operation. This includes responsibility for ensuring continuing, well-functioning internet service, which can be a challenge in Benin. The Consultant shall also be responsible for bringing its own transportation that meets the requirements of the assignment, including field visits, surveys, sampling and testing and regular or ad-hoc trips as needed. The Consultant is responsible for obtaining comprehensive insurance to cover its vehicle fleet and personnel.

Equipment bought and used by the Consultant during the course of this assignment (i.e., office equipment, programs/software, surveying equipment, etc.) should eventually be transferred to the Client (or to a designated Implementing Entity), with full training offered, to ensure program sustainability.

By the kick off meeting, the Consultant shall have in place adequate staff to meet the requirements of this contract. Throughout the assignment, the hazardous material management specialist, the soil & water contamination and remediation experts, engineers, supporting staff, systems, subject matter experts, and overall capability shall be maintained at a level to ensure the project success.

The Consultant shall note that the proposed project sites are located across Benin. Consequently, several site visits and extended trips to these locations should be planned early on.

4.0 DELIVERABLES

4.1 Overview of Deliverables

Following the signing of the Contract and issuance of the Notice to Proceed (“NTP”), the consultancy will be launched with a formal kick-off meeting in Cotonou (Benin). The Consultant shall be represented by the Head of the mission (Specialist in hazardous material management in the power sector) and Key Personnel. The purpose of the kick-off meeting will be to address any questions about the Contract or scope of work and to clarify expectations regarding the services.

The following table summarizes the Deliverables and their Due Dates:

REPORTING REQUIREMENTS		
<u>Deliverable</u>	<u>Due Date of Draft Report</u>	<u>Due Date of Final Report</u>
1. Inception report (also including kick-off meeting)	Within 2 weeks of NTP	Within 2 weeks of receiving comments on draft Inception Report

2. Initial assessment of sites, regulatory framework, updated Work Plan and Detailed Site Sampling Plan	Within 6 weeks of NTP	Within 2 weeks of receipt of comments
3. Progress report including : i) summary of activities since Inception report, ii) details of all testing/sampling sites, iii) details of samples sent to laboratory, iv) outline of main results from the field observations / tests, v) field constraints and limitations, vi) H&S reporting, vii) summary of technology & knowledge transfer to SBEE	Within 15 weeks after NTP ¹	Within 2 weeks of receiving comments on progress report
4. Interim report for soil and water (PCB, hydrocarbons, metals, etc.): i) detailed field observations and measurements, ii) maps showing contaminated areas and sample sites; iii) laboratory results, iv) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards	Within 22 weeks after NTP	Within 2 weeks of receiving comments on Interim report for soil and water (PCB, hydrocarbons, metals, etc.)
5. Interim report for electrical equipment and oil (PCB and non PCB) : i) detailed field observations / measurements, ii) laboratory results , iii) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards	Within 22 weeks after NTP	Within 2 weeks of receiving comments on Interim report for electrical equipment and oil (PCB and non PCB)
6. Report of Risk Assessment (including maps showing the location, extent and level of risks)	Within 22 weeks after NTP	Within 2 weeks of receiving comments on Risk Assessment report
7. Short-term remediation plan ³ for soil and water (PCB, hydrocarbons, metals, etc.): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on short term remediation plan for soil and water
8. Short-term remediation plan ³ for electrical equipment and oil (PCB and non PCB): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on short term remediation plan for electrical equipment and oil
9. Long term management plan ⁴ (SBEE operations after completion of compact): i) summary of main findings regarding	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on Long term management

sources / causes of contamination, ii) detailed long-term remediation measures/facilities; iii) costing; one separate report should be prepared for each power plant and one for all the substations.		plan
10. Specifications & TORs for short term remediation work	Within 36 weeks after NTP	Within 2 weeks of receiving comments on specifications and TORs

¹ Deliverable #2 needs to be approved before the start of sampling activities

² Deliverables #4, 5, 6 need to be approved before starting the preparation of short and long term plans

³ Remediation / cleaning to be performed prior to construction (compact implementation)

⁴ Including any long term facilities (to be added into detailed design) and good practices for long term operation of sites

The timeline presented in the above table is indicative. Consultants are strongly encouraged to propose a workplan and organization which may reduce the entire duration of the study.

It is the intention of MCA-Benin II to provide comments on all draft reports within two weeks of receipt of the drafts; the Consultant will then be required to issue the finalized report within two weeks thereafter, taking into consideration the comments provided.

4.2 Presentation of Deliverables

Consultant shall present deliverables according to the schedule presented above. All draft deliverables shall be submitted electronically in French and all final deliverables shall be submitted electronically and in 15 hard copies to be delivered to MCA-Benin II in Cotonou. All final reports shall be submitted simultaneously in both English and French.

Packaging and packing for all items delivered hereunder shall be in accordance with commercial practice and adequate to ensure acceptance by common carrier and safe arrival at destination. The contract number shall be placed on each package, report, or other deliverable.

In general, all electronic documentation will be accessible via: (1) MS Windows based MS Office 2003 (or later) products, including Word for text, Excel for spreadsheets and data tables, PowerPoint for presentations and Project for schedules; (2) AutoCAD 2002 (or later) and in PDF format for original drawing files; (3) JPG format for digital photos; and (4) Manifold (used by SBEE) and ArcGIS for GIS database. Any raw data not submitted through spreadsheets should be submitted in either Microsoft Access (*.accdb file), STATA (*.data file), or SPSS (*.sav file). Any other format(s) must be agreed upon by MCA-Benin II.

5. PERIOD OF PERFORMANCE AND PAYMENT SCHEDULES

5.1 Period of Performance

The services under this contract are anticipated to be conducted during a period of forty weeks (40) or approximately nine and half (9.5) calendar months. The Consultant may propose adjustments to the timing and schedule of deliverables outlined above, provided that any alternative schedule will meet MCA's requirements.

CONTRACT DURATION	
<u>Tasks and Process</u>	<u>Estimated Duration*</u>
Inception report and kick off meeting (Deliverable 1)	2 weeks (draft)
Initial assessment of sites, regulatory framework, updated workplan and detailed sampling plan (work, sampling and testing, environmental management plan, Health and Safety, etc.) (Deliverable 2)	8 weeks
Sampling, field observations and measurements, Laboratory analysis, interpretation of results and level of contamination, and risk assessment (Deliverable 3 to 6)	16 weeks
Short and long term remediation plans (Deliverable 7 to 9)	7 weeks
Specifications & TORs for short term remediation work (Deliverable 10)	7 weeks
Total	40 weeks or 9.5 months

*Including duration for comments and submission of final report, except if otherwise specified

The Consultant shall be expected to be available during the period of performance and shall be responsible for management of the services. This includes supervision and management of the consultancy, liaison with MCA-Benin II and other parties (most notably SBEE and CEB, IEs for this engagement), office management, and ensuring quality control of services. As part of head of mission, a number of meetings between MCA-Benin II and the Consultant may be scheduled at any point in time. The Consultant shall produce minutes of all such meetings.

5.2 Payment Schedule

The Consultant shall produce the reports described in Section 4 above and listed in the table below to the highest international technical standards. The following is the list of deliverables that are expected from the Consultant, their submission dates, and the associated payments. The Consultant will propose a schedule for precise times of submission in the Inception Report.

LIST OF DELIVERABLES AND ASSOCIATED PAYMENTS					
<u>ID</u>	<u>Report Title</u>	<u>Draft or Final</u>	<u>Expected Date (Weeks from NTP)</u>	<u>Payment (% of contract price)</u>	<u>Cumulative Payment (% of contract price)</u>
Period of performance					
1	Inception report (also including kick-off meeting)	Final	6	15%	15%
3	Progress report	Final	19	10%	25%

4, 5, 6	Interim report for soil and water (PCB, hydrocarbons, metals, etc.) Interim report for electrical equipment and oil (PCB and non PCB) Report of risk assessment	Final	26	25%	50%	
7, 8, 9	Short-term remediation plan for soil and water (PCB, hydrocarbons, metals, etc.) Short-term remediation plan ¹ for electrical equipment and oil (PCB and non PCB) Long term management plan (SBEE operations after completion of compact)	Final	33	40%	90%	
10	Specifications and TORs for short term remediation work	Final	40	10%	100%	

6.0 STAFFING AND KEY PERSONNEL

6.1 Consulting Staff

Consultant shall assemble a team of both key and other personnel with in-depth knowledge of international best practices in Hazardous Materials Assessment and remediation as well as local and regional knowledge, fluency in French, and sufficient technical and administrative support throughout the term of the contract.

Additional staff and staffing requirements should be proposed by the Consultant as necessary and based on the Consultant's proposed methodology and approach that will achieve the objectives of the assignment. Consultant must provide and maintain all Key Personnel. Any changes are subject to prior approvals by MCA-Benin II in accordance with the terms of the contract.

6.2 Qualifications of Consultant's Key Personnel

The Consultant will propose a team of experts to meet the Consultant's qualification requirements.

The proposal must include:

- Each individual's position and responsibilities within the team and within each task;
- Number of working days of each individual to this Project and for each task;
- Brief summary of the proposed team indicating their relevant experience to this assignment;
- Confirmation that the nominated personnel will be available to complete the assignment;
- Resumes of proposed personnel with relevant capability and expertise;

The expected team will include, at least:

Key staff

1. Head of mission and specialist in hazardous material management in the power sector
2. Specialist in soil & water contamination and remediation
3. Geohydrologist
4. Specialist for oil management / elimination
5. Civil engineer
6. Cartographer
7. Logistics / transport expert (transport of hazardous wastes)

STAFFING	
Key Personnel	
Role	Qualifications
Head of mission & Specialist in hazardous material management in the power sector	<i>Education:</i> Master's degree in environmental sciences with a speciality in hazardous material management and contamination control; or Engineering degree in electricity, with a speciality in environment, hazardous material management and health & safety. <i>Key experience:</i> • At least 15 years of experience in the field of hazardous material assessment and management / elimination • At least 5 years as a head of mission (or project manager) for similar assignments • Extensive experience associated with the power sector (including thermal generation and transport / distribution of electricity) • Specific experience with testing, sampling and assessing PCB in transformers, circuit breakers and any other pieces of

	equipment which could be contaminated with PCB • Specific experience with the management / elimination of PCB contaminated equipment and oil • Experience with writing TORs and technical specifications for Requests for Proposals • Experience with and knowledge of international standards regarding hazardous material / wastes management, contamination and remediation, including IFC performance standards, Stockholm convention, Basel Convention, WHO, UNEP (chemicals), ISO, etc.
Specialist in soil & water contamination and remediation	<i>Education:</i> Master's degree in environmental sciences, with a speciality in soil and water contamination and remediation / treatment <i>Key experience:</i> • At least 10 years of experience in the assessment and remediation of soil and water contamination, specifically contamination from fuels (diesel / heavy), lubricants and PCBs • Extensive experience in sampling and analysis of contaminants (including PCBs, petroleum compounds, metals and other hazardous substances) in water and soil • Extensive experience in the remediation of contaminated soil • Experience with and knowledge of international standards regarding soil and water contamination and pollution abatement, including IFC performance standards, WHO, Stockholm Convention, UNEP (chemicals), ISO, etc.
Geohydrologist	<i>Education:</i> Master's degree in geohydrology or related field <i>Key experience:</i> • At least 5 years of experience in the assessment of groundwater contamination, specifically contamination from fuels (diesel / heavy), lubricants and PCBs • Extensive experience in sampling and analysis of contaminants (including PCBs, petroleum compounds, metals and other hazardous substances) in groundwater – also including drilling • Knowledge of health issues associated with the quality of drinking water and contaminants • Experience with and knowledge of international standards regarding groundwater contamination, including IFC performance standards, WHO, Stockholm Convention, UNEP (chemicals), etc.

Specialist for oil management / elimination	<i>Education:</i> Master's degree in environmental sciences with a speciality in hazardous material management and contamination control <i>Key experience:</i> • At least five years in the management and elimination of oil (including diesel, lubricants and di-electrical oil) and oil contaminated materials (such as filters, clothes, absorbing materials, etc.) • Experience in environmental management (hazardous material management; contamination; health and safety) of cement factories or other types of facilities using high temperature incineration • Experience with and knowledge of international standards, including IFC performance standards, WHO, Stockholm Convention, Basel Convention, UNEP (chemicals), ISO, etc. • Experience with PCB contaminated oil
Civil engineer	<i>Education:</i> Civil engineer degree, with a speciality in environmental design <i>Key experience:</i> • At least 5 years of experience in the design of environmental infrastructure including especially oil separators, secondary containment, fuelling areas, storage for hazardous materials, but also treatment and pollution control facilities, drainage, etc. • Experience with writing TORs and technical specifications for Requests for Proposals • Experience with and knowledge of international standards regarding hazardous material / wastes management, including IFC performance standards, Stockholm Convention, UNEP (chemicals), ISO, etc.
Cartographer	<i>Education:</i> Master's degree in Geographical Information Systems, mapping and land survey <i>Key experience:</i> • At least five years of experience in the domain of mapping and GIS • Practical experience in using GPS and at least four mapping software • Experience in applying GIS and mapping expertise to Environmental and Social Impact Assessment, pollution assessment or risk assessment.

Logistics / transport expert (transport of hazardous wastes)	<i>Education:</i> high school degree in logistics / forwarding freight / transport or similar field, preferably with a speciality in hazardous goods / wastes transport <i>Key experience:</i> • At least five years of experience in the transport / freight of hazardous goods / wastes • Experience in trans-boundary transport of hazardous wastes under the Basel Convention would be a plus • Experience with and knowledge of international regulations and standards regarding hazardous goods / wastes, including IFC performance standards, Stockholm Convention, Basel Convention
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6.3 Logistical support (samples management)

The Consultant has to demonstrate that they will provide adequate support for import / export of testing / sampling equipment, hazardous goods (as necessary: reagents, preservatives, oil, etc.) and samples, with the following experience:

- Cold chain
- Packaging (including dangerous good for airplane)
- Import / export regulation and permitting
- Chain of custody documents

6.4 Laboratory

The Consultant will provide details for one (or more if necessary) accredited laboratory that they will use for the analysis of samples, including:

- Name
- Address
- Email & phone contact
- Website (if any)
- Main references
- Accreditation (exceptionally for a laboratory in Benin which may not be accredited, provide the CV of the chief chemist who will certify the results of analysis)
- Outline of QA/QC protocol
- Brief description of experiences over the 10 past years, related to the analysis of hydrocarbons, heavy metals and PCB in water and soil samples, and related to the analysis of PCB in dielectrical oil (provide the type of analysis, number of samples which were analysed, clients and projects or context).

- Analytical method and determination level for each parameter to be analysed.

6.5 Additional qualifications

All the above listed Consultant team members should have the following additional qualifications:

1. Fluency in written and spoken English and French (all written reports must be delivered in both English and French).
2. Computer literate.
3. Experience working in Benin or other sub-Saharan African countries is highly desirable.

The Consultant may provide additional technical support staff as may be required. The team is expected to use a combination of both local as well as foreign consultants in order to have optimum access to local stakeholders and also to facilitate the development of local expertise.

7. INPUTS, SUPPORT AND DOCUMENTS TO BE PROVIDED

7.1 Inputs Provided by Consultant

The primary duty location of the Consultant's team shall be in the Consultant's home office and in Cotonou.

The Consultant shall be responsible for all the requisite staff resources; office space; transportation (local and overseas); accommodation; stationery; communications; computers and accessories; translations/interpretation (if needed); insurance (as applicable); staff training; and other costs related to the undertaking of its responsibilities. All equipment and/or tools needed to undertake the studies, assessments, and analyses described herein shall be provided by the Consultant at no additional cost.

7.2 Contract Performance Monitoring

Consultant shall have in place and maintain a Quality Control Plan ("QCP") that covers, as a minimum, how Consultant intends to meet the requirements of all performance objectives, monitor and proactively manage work requirements. It shall also include the mechanism by which MCA-Benin II will be notified of performance related incidents likely to affect quality of services or impact mission accomplishment. Consultant shall provide a copy of its QCP along with the Inception Report. Any proposed changes to the QCP shall be provided to MCA for review and comment no later than 10 working days prior to the effective date of the proposed changes.

7.3 Support Provided by MCA-Benin II

Consultant's primary point of contact for this assignment will be the MCA-Benin II Environmental and Social Performance Chief. Other points of contact, for example for detailed technical issues, shall be identified and agreed upon at the Kickoff Meeting and documented in the Final Inception Report.

MCA-Benin II will provide the Consultant the following information and support :

- (a) Access to all reports, data and other necessary documents related to the assignment that may already be available.
- (b) Letters of introduction to facilitate access to various stakeholders, ministries, governmental authorities and agencies whose activities and roles are essential to the mission of the Consultant.
- (c) Invitation letters as may be needed to support visa applications for entry and exit for the Consultant's expatriate staff.
- (d) Facilitation of issuance of any permit required for personnel of the Consultant to perform its tasks in Benin.
- (e) Facilitation of the import and export of equipment or sampling that may be required for the Consultant's performance of consulting services, and property belonging to the Consultant's expatriate staff.
- (f) Support with setting up meetings with the Ministry of Living Environment and sustainable development and/or the Agence Béninoise pour l'Environnement (ABE).

7.4 Documents to be provided by MCA

The Consultant will be provided all necessary documentation of the Compact. These documents shall include, but not be limited to, the following:

- a. Compact Agreement signed on September 9, 2015; the Compact is also available on the website www.mcc.gov).
- b. Technical aspects or scope of work of the IEAs as and when they become available.
- c. Relevant MCC Policies: MCC Environmental Guidelines, MCC Policy for Monitoring and Evaluation of Compact and Threshold Programs, MCC Guidance for Common Indicators, MCC Gender Policy and Gender Integration Guidelines, MCC Program Procurement Guidelines (available on the website www.mcc.gov).
- d. Relevant Beninese laws, regulations, and official procedures, especially as it relates to the environmental permitting process and requirements.
- e. Related reports used during the development of the Compact activities:
 - (i) Inventories of SBEE's transformers
 - (ii) SBEE PCB report
 - (iii) Other relevant studies.
- f. Reports referred to herein prepared by other consultants.

7.5 Support to be provided by SBEE and DGE

SBEE is a key stakeholder to be actively involved in this hazardous material assessment, for both concertation and technology transfer.

SBEE will provide access to the sites and equipment, including in operation transformers. SBEE will take appropriate measures to insure health and safety for the team, notably approaching on-use transformers, as advised by the Consultant. However, the Consultant will be responsible to provide any Personal Protective Equipment (PPE) or other health & safety specific device for this assessment, including IPE for the SBEE and DGE officers who are accompanying the Consultant.

SBEE will provide available technical information regarding their sites and their hazardous material management. It will be crucial to obtain from SBEE accurate information on present and historical contaminations at all sites, as well as any other information which may be necessary to develop the sampling plan (e.g. location of any underground cables or pipes).

The DGE is also a key stakeholder to be actively involved in this hazardous material assessment, for both consultation and technology transfer.

The DGE will facilitate the identification and monitoring of indicators related to legislation and will provide information related to the legal framework.

LIST OF ACRONYMS/ABBREVIATIONS

ABE	Agence Béninoise pour l'Environnement
ABERME	Agence Béninoise d'Electrification Rurale et de Maîtrise de l'Energie
AE	Accountable Entity
ANADER	l'Agence Nationale pour le Développement des Energies Renouvelables
ARE	l'Autorité de Régulation de l'Electricité
BoQ	Bills of Quantities
CB	Circuit Breaker
CEB	Communauté Electrique du Bénin
CSS	Compact Sub-Station
DGE	Direction Générale de l'Energie
EIF	Entry into Force
EMS	Environmental Management System
ESP	Environmental and Social Performance
FA	Fiscal Agent
FCFA	Franc of the Communauté Financière Africaine (African Financial Community)
GIS	Geographic Information System
GoB	Government of the Republic of Benin
GPS	Geospatial Positioning System
IE	Implementing Entity
IEA	Implementing Entity Agreement
IFC	International Finance Corporation
IFC PS	IFC Environmental and Social Performance Standards
IT	Information Technology
MCA	Millennium Challenge Account-Benin II
MCC	Millennium Challenge Corporation
M&E	Monitoring and Evaluation
MEF	Ministere de l'Economie et des Finances
MEEM	Ministre de l'Energie, de l'Eau et des Mines
NTP	Notice to Proceed
O&M	Operation and Maintenance
PA	Procurement Agent
PCB	Polychlorinated biphenyl
PESMC	Program Environmental, Social, and Management Consultant
PPE	Personal Protective Equipment
PV	Photovoltaic
QA/QC	quality assurance/quality control
QCP	Quality Control Plan

REC	Recognized Environmental Condition
SBEE	Société Béninoise d’Energie Electrique
SCADA	System Control and Data Acquisition
TOR	Terms of Reference
UNEP	United Nation Environmental Programme
USG	US Government
WHO	World Health Organisation

ANNEX 1. DESCRIPTION OF SITES AND EQUIPMENT TO BE SAMPLED AND TESTED

GENERATION PROJECT

Porto Novo thermal plant

Note: figures given below are orders of magnitude and will need to be confirmed / refined as part of this assignment.

The site is approximately 2 ha in size and 30 years old (See Figure 1-1), although it was expanded in 2005 to its current shape when the thermal plant was built. It was built on land which had gardens and houses. It is located within the urban area of Porto Novo.

Coordinates: 6.498075033N / 2.618814221E

Groundwater was found to be at about 14 m below ground surface in July 2015, in two nearby wells (6.49766N / 2.61915E; 6.49861N / 2.61876E), but it may be much deeper at the end of the dry season.

The site is subdivided into:

- Power plant building with 6 engines (Wärtsilä 2 MW each) running on diesel, located in the southern triangle area; the building is surrounded by a backyard hosting the following equipment (the ground is unpaved but partially covered with cement small blocks) :
 - 5 000L feeding tanks for diesel and oil
 - A 5 000L tank for used lubricating oil (from generators) within a secondary containment (oil is directly pumped from the generators to the tank); rainwater accumulating in the second containment is emptied out onto the surrounding ground
 - Cooling system (the cooling system is about 2 or 3 m high and below this cooling system, there is a concrete slab where some equipment may be stored)
 - Oil separator : not working and spilling over whenever it rains, creating a large stain on the surrounding ground
 - Drainages around the building directing (probably) oil spills and runoff toward the oil separator, but not cleaned and spilling over whenever it rains
- Substation, located in the center of the site, between the power plant and the diesel tanks area; it includes 5 transformers and a building hosting the control units for the substation
- A backyard located in the northern portion of the site including:
 - The main diesel tanks (placed into a second containment) plus fueling area (unpaved and no system to prevent / collect spills)
 - Unpaved open area serving as a storage space for various pieces of equipment (old and new; still operational or abandoned) as indicated in Tables 1-1 and 1-2, and including transformers.

Contaminated areas were very roughly estimated based by observation of visible stains (from diesel, lubricating oil, transformer oil), on the ground and current layout of facilities and equipment. The total is 1300 m², including 300 m² with higher risk of contamination from diesel / lubricating oil, and 300 m² with higher risk of PCB contamination (where the transformers are stored). This does not include areas below existing buildings and large secondary containments. It has to be noted that pieces of equipment may have been scattered and moved around over the years. Also, generally speaking, runoff likely to be contaminated drains from the site toward the urban drainage along the streets outside SBEE property.

Table 1-1. Transformers in use at the Porto Novo substation

Brand	Transformer serial number	Year	Power (kVA)	Total weight (kg)	Oil Weight (kg)	Leaking
ABB	LIT00701A	2004	12500 16000	36000	8500	Not to our knowledge
Société Normande de transformation	93906	2006	36000	31000	5800	Not to our knowledge
CHINT	200901002	2009	31500	64000	15000	Not to our knowledge
Tansfix	01320GBRC	2007	160	610	120	Not to our knowledge
N/A	83639	2002	160	850	210	Not to our knowledge

Table 1-2. List of transformers stored / abandoned at Porto Novo site

Brand	Transformer serial number	Year	Power (kVA)	Total weight (kg)	Oil Weight (kg)	Leaking
Kotsons (India)	E17576	?	400	1500	400	Not to our knowledge
France Transfo	173276-04	1990	15	135	40	Not to our knowledge
Energy transfor (Morocco)	T160230	2013	160	830	190	Not to our knowledge
France Transfo	I73276-01	1990	15	135	40	Yes
Timsan tranformator (Turkey)	6318	?	100	779	148	Yes & burnt

Figure 1-1. Porto Novo thermal site and soil contamination area

Parakou thermal plant

The site is approximately 2 ha in size within a large area owned by SBEE of about 20 ha and is 40 years old (See Figure 1-2). It was built on a green field.

It is located within the urban area of Parakou, with a mix of administrative buildings (including the university), residences and an open depression (marsh area) used for cultivation and partially owned by SBEE, as mentioned above.

Coordinates: 9.3356728N / 2.641450596E

Groundwater was found to be at about 1 or 2 m below ground surface in July 2015, in two nearby wells (9.33518 / 2.64410; 9.33326/2.64055); within the adjacent marshy area, groundwater was found just below ground level; however it may be much deeper at the end of the dry season.

The site is subdivided into:

- Power plant building with 7 engines (Wärtsilä 2 MW each) running on diesel, located on the western portion of the site, near the SONEB facility (treatment plant for drinking water); the building is surrounded by a backyard hosting the following equipment (the ground is unpaved and has been partially landfilled to increase its level above natural ground):
 - 5 000 L feeding tanks for diesel and oil
 - A 20 000 L tank for used lubricating oil tank (from generators) within a secondary containment (oil is directly pumped from the generators to the tank); a hole was made in the second containment to drain rainwater and oil spills
 - Cooling system above a concrete pad which may be used to store equipment
 - Oil separator: not working and spilling over whenever it rains, creating a large stain on the surrounding ground, and ultimately draining toward the marshy area
 - Drainages around the building (probably) directing oil spills and runoff toward the oil separator;
 - a 500 000 L diesel storage tank (placed into a secondary containment) plus fueling area (unpaved and with no system to prevent / collect spills)
 - A transformer fabricated in 2004
- Old power plant located in the central portion of the site; the old generators were dismantled in 1986 and there may have been asbestos at the time (unconfirmed); the building now hosts a 5 MW caterpillar generator in disrepair; it is linked to the following fuel tanks:
 - a 500,000 L heavy fuel oil tank, a 10,000 L diesel fuel tank, and heavy fuel oil centrifuge and a 10,000 L filtered heavy fuel oil tank plant (all placed into second containment); second containments could also be source of contamination because of the way they are drained ; the building is equipped with a drainage system which seems to go toward the marshy area;
 - Three 50 000 L tanks, a 12 000 L and a 1 000 L tank for old generators (all placed into a secondary containment): out of service and seemingly in poor condition along with the secondary containment; these could also be source of contamination
- Workshops and storage buildings located along the southern boundary of the site; the workshop buildings are equipped with a draining system which seems to drain toward the marshy area;
- A backyard located on the north-eastern portion of the site and used as an open storage for various pieces of equipment (old and new; still operational or out of use / broken) as indicated in the Tables 1-3 and 1-4 and including transformers. This equipment lies on unpaved ground, without any facility to protect it from degradation and prevent contamination.

- An oil sludge incinerator

Contaminated areas were very roughly estimated based upon observation of visible stains (from diesel, lubricating oil, transformer oil) on the ground and current layout of facilities / equipment. They total about 7 500 m², including 200 m² with higher risk of contamination from diesel / lubricating oil, and 3 500 m² with higher risk of PCB contamination (where the transformers are stored). This does not include areas below existing buildings and large second containments. Pieces of equipment may have been scattered and moved around over the years. In addition, the marshy area immediately downstream from the site may also be contaminated as it receives runoff (and likely groundwater) from the site.

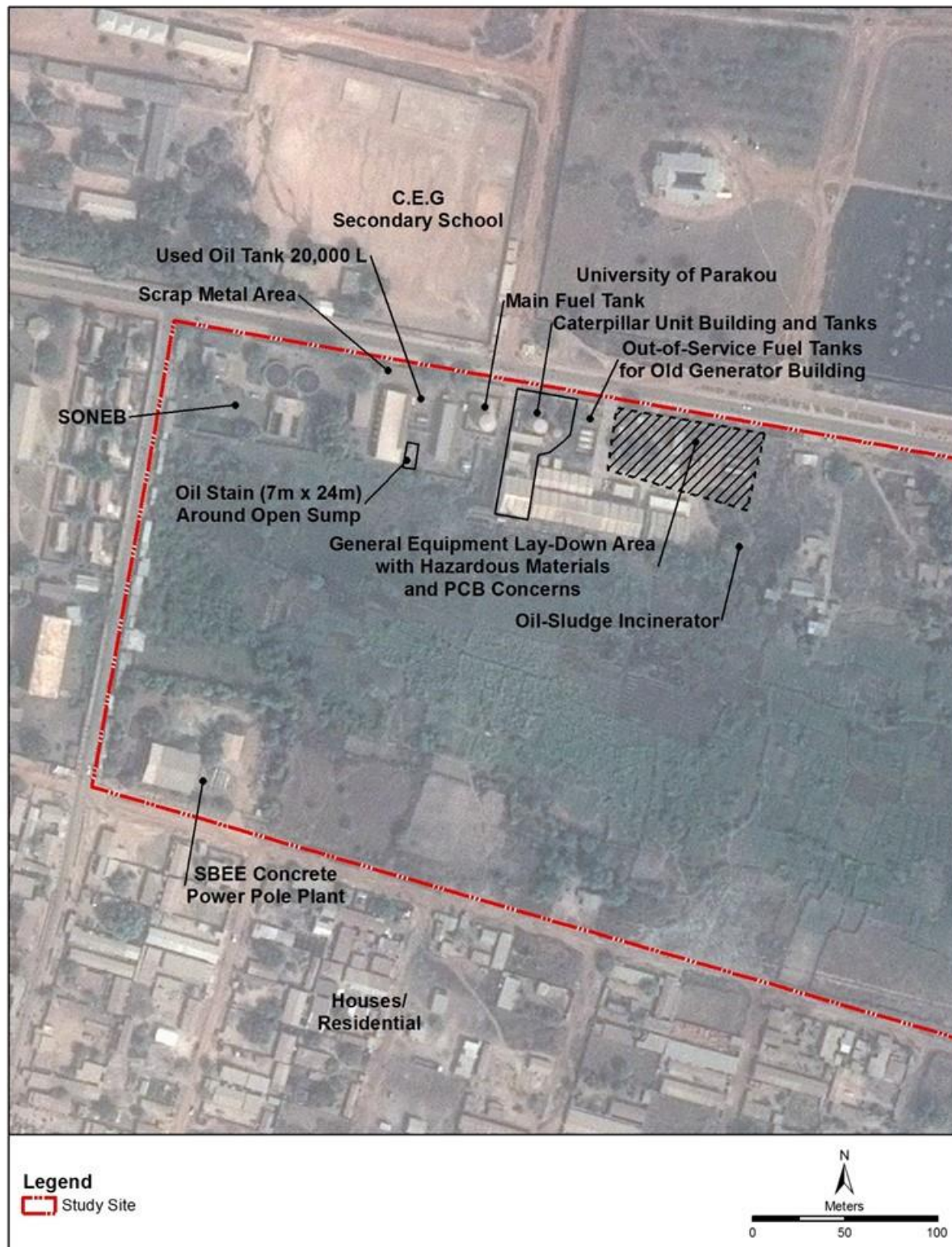
Table 1-3: Transformer stored / abandoned at Parakou thermal site

Brand	Trans-former serial number	Year	Made in	Power (kVA)	Total weight (kg)	Oil Weight (kg)	Leaking
Matelec	20146119	2012	Lebanon	100	645	145	No
Matelec	20146128	2012	Lebanon	160	?	?	No
Matelec	20181351	2012	Lebanon	100	645	145	No
Matelec	20146115	2012	Lebanon	100	645	145	No
Nexans	09001923	2009	Maroc	100	614	203	No
Energy Transfo	T1602529	2013	Maroc	160	830	190	No
Energy Transfo	T1602531	2013	Maroc	160	830	190	No
Asea	?	?	?	?	?	?	Yes
Nexans	10002329	2010	Maroc	160	1100	291	No
Pauwels Trafo	88N1952	1988	Ireland	100	550	110	No
Beltransfo	402305	2004	Maroc	400	1320	300	No
Trafo	50/33-2014009	2014	Turkey	50	440	122	No
Energy Transfo	T1602527	2013	Maroc	160	830	190	No
Energy Transfo	T1602534	2013	Maroc	160	830	190	No
Afric Transfo	12102467	2012	Maroc	160	694	200	Yes
Transfix	DN0193	1999	France	250	925	209	No
Nexans	07003015	2007	Maroc	250	1058	270	No

Table 1-4 List of material (other than transformers) stored / abandoned at Parakou site

Note: rough estimates based upon a quick inventory to give an order of magnitude of what is found at the site

Item	Quantity	Observations
200 L empty oil barrels	7	here since the old power plant
200 L full oil barrels	6	here since the old power plant
empty diesel tanks 3000 L	2	Owned by SONACOP (Société Nationale de Commercialisation des Produits Pétroliers) – oil supplier for SBEE
empty diesel tanks 5000 L	1	for disposal
old diesel tank 50 000 L	3	for disposal
old diesel tank 12 000 L	1	for disposal
old diesel tank 50 000 L	1	for disposal

Figure 1-2 Parakou thermal site and soil contamination area

Natitingou thermal plant

The site is approximately 2 ha in size, built in 2004 and the substation area was built in 2007 (See Figure 1-3).

It is located in the outskirts of Natitingou in a rural area, with houses, crops and pasture land nearby.

Coordinates: 10.2286303N / 1.398639102E

Groundwater was found to be at about 8 m below ground surface in July 2015, in one nearby well (10.2280 / 1.39704); however it may be much deeper at the end of the dry season.

The site is subdivided into:

- Power plant building with 6 engines (Wärtsilä 2 MW each) running on diesel, located on the north-western portion of the site; the building is surrounded by a backyard hosting the following equipment (the ground is unpaved):
 - 5 000 L feeding tanks for diesel and oil
 - A 5 000 L tank for used lubricating oil (from generators) within a secondary containment (oil is directly pumped from the generators to the tank); the containment is emptied out when it fills with water;
 - Cooling system, below which some equipment is stored
 - Oil separator: not working and spilling over whenever it rains, creating a large stain on the surrounding ground, and ultimately draining toward the national road drainage
 - Drainages around the building (probably) directing oil spills and rainwater toward the oil separator;
 - 1 transformer
- A backyard located on the central portion of the site, hosting
 - the main diesel tank (placed within a secondary containment) plus fueling area (unpaved and with no system to prevent / collect spills)
 - open ground used as storage space for various pieces of equipment (old and new; still operational or out of use / broken) as indicated in Tables 1-5 through 1-7, and including transformers and used oil filters. This equipment lies on unpaved ground, without any facility to protect it from degradation and prevent contamination (except a basic shelter for some transformers)
- A substation located on the southern portion of the site, with 1 operational transformer and a small building for the control units of the substation
- Along the western boundary, open space is used by staff for cultivation of crops
- The residence for the plant manager, south of the substation.

Contaminated areas were very roughly estimated based upon observation of visible stains (from diesel, lubricating oil, transformer oil), on the ground and current layout of facilities and equipment, and totalize about 800 m², including 400 m² with higher risk of contamination from diesel / lubricating oil, and 150 m² with higher risk of PCB contamination (where the transformers are currently stored). This does not include areas below existing buildings and large second containments. Also, it has to be noted that pieces of equipment may have been scattered and moved around over the years. Finally, runoff drains from the site toward the main road drainage just outside the site.

Figure 1-3. Natitingou Thermal Plant

Table 1-5. List of transformers in use at Natitingou thermal site

Brand	Trans-former serial number	Year	Place	Made in	Power (kVA)	Total weight (kg)	Oil Weight (kg)	Leaking
ABB	1LIT00701B	2004	Thermal plant	Italy	12500/16000	27000	6500	No
ABB	5215233	1999	Substation	Finland	20000/26600	33300	6100	Yes

Table 1-6. List of transformers stored / abandoned at Natitingou thermal site

Brand	Trans-former serial number	Year	Made in	Power (kVA)	Total weight (kg)	Oil Weight (kg)	Leaking
Alstom	8 60800-01	1976	France	5250	9185	1985	No
France Transfo	652202-01	1999	France	2500	5265	1015	No
France Transfo	163017-01	1989	France	2500	5110	1120	No
Transfix	109060370	2006	France	50	410	105	Yes
Transfix	135100754C	2010	France	160	720	175	No
Transfix	109060374	2006	France	50	410	105	No

Table 1-7. List of equipment (other than transformers) stored / abandoned at Natitingou thermal site that may require testing

Items	Quantity	Observations
tank 3000 L	1	for disposal
substation units	5	to be used
circuit breaker (gas SF ⁶)	3	2 to be used; 1 for disposal
200 L engine oil barrels (full)	9	new
container with electrical spare parts, oil, etc.	1	unknown conditions
substation units	2	to be used

Parakou PV site – Waste dump

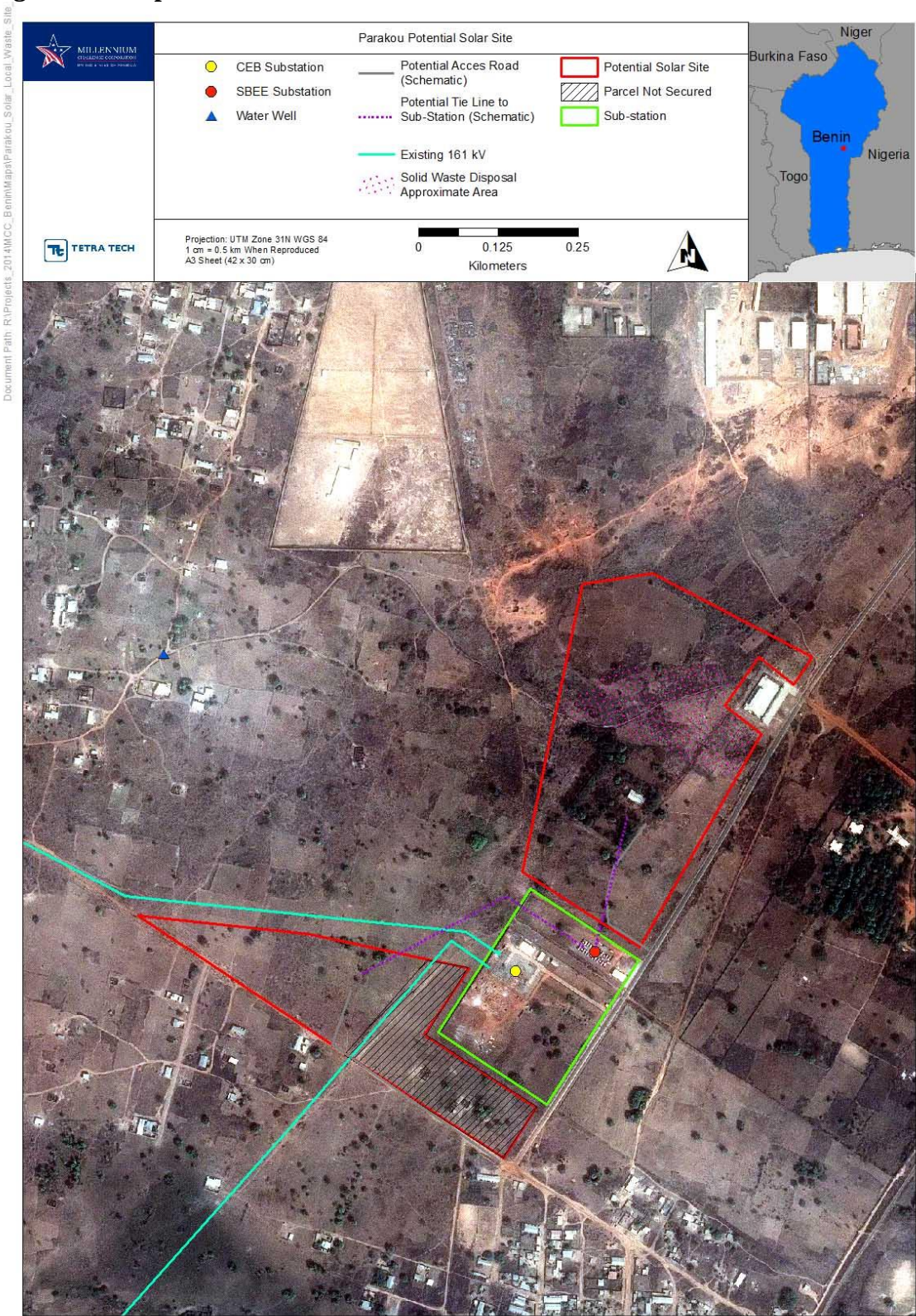
The entire PV site is about 25 ha, distributed in 2 plots. It is located within the suburban area of Parakou.

A relatively large area (estimated 3 ha, based upon visual observations and to be assessed as part of this TOR - see Figure 1-4) has been used for open dumping of communal wastes. This area is located on the northern portion of the proposed PV site (between the eastern boundary of the site, an old house and a cashew processing facility). Wastes contain domestic and commercial refuse and debris including old cans, plastic bags, general trash, areas of concentrated broken glass, occasional medicine bottles, and at least one used syringe was observed (plastics are roughly estimated to account for about 75% of the wastes). Wastes are randomly scattered in irregular piles disposed by trucks, reaching about 1.5 m high in some places. The density of trash on the ground surface precludes normal vegetative cover in many areas, although during the rainy season, weeds and even some crops may grow over the trash. It would need to be removed and replaced with clean fill material and soil to support grass and plants that are healthy enough to prevent erosion once the PV site is constructed.

The difficulty in Parakou is that there are poor capacities for waste management. The Commune currently uses a temporary site which is located in a lower area (bas-fond) and is therefore not appropriate for the project. The official waste dump was not operational yet; it is accessible via a narrow dirt road in poor condition. There were also questions regarding agricultural uses of this site and the vulnerability of groundwater. Existing data suggest that groundwater is likely to be at 6 to 10 m deep within this area.

Coordinates: N 10.29163 / E 1.33103

Figure 1-4 Proposed solar site in Parakou



DISTRIBUTION PROJECT

The distribution project involves the packages shown in Table 1-9. Sites to be assessed are subject to confirmation in Task 1. The exact number of transformers, capacitors or other equipment potentially subject to sampling will have to be determined during Task 1.

Within the towns of Cotonou and Porto Novo, substation buildings are often surrounded by typical urban activities in a developing country, such as small informal mechanic workshops, street vendors, etc. For at least one substation, a stain that was observed near the building may exist because the space was used as a mechanic workshop for motorcycles.

Coordinates of the substations are given in Table 1-10. Maps of these substations are given in Figures 1-5 to 1-14. The list of transformers in the substations is given in Annex 2.

Table 1-9. Distribution projects

Power Project Name ¹⁹	Location	Notes
Distribution Package #1 – Natitingou	New 161 kV Switchgear	Replace short overhead line (OHL)
	Finish North Substation	Work inside SBEE site
	Communication link to Yeripao	Attach to Existing Poles
Distribution Package #2 – Parakou	Connect 33 kV Switchgear	Replace short OHL
Distribution Package #3 – Djougou	New 161 kV Switchgear	Replace short OHL
Distribution Package #4 – Cotonou	(4.1) 63 kV Switchgear Vedoko	Work inside SBEE complex
	(4.2.a) 63 kV Connection Vedoko to Akpakpa	Install 63 kV cable from Vedoko to Akpakpa via Saint Michel & Gbedjromede
	(4.2.b) Substation Gbedjromede	New site required 20 x 40 m; No SBEE equipment in area
	(4.2.c) Substation Rep. D2 Croix Rouge	Existing Bldg. inadequate Find 20 x 40 m site nearby Bldg. is small and may be moved to re-use elsewhere
	(4.3.a) 63 kV Ring from Vedoko to Fidjrosse	Install 63 kV cables (3.5 km) The loop through Cadjeoun is not being funded – No analysis
	(4.3.b) Substation Cadjeoun	Find 20 x 40 m site nearby Existing structure
	(4.3.c) Substation Fidjrosse	Find 20 x 40 m site nearby Existing structure unknown but is too small (probably only a small cabinet or pole-mounted switch)
	(4.4) City Network Extension	Increase grid density in Cotonou, as many as 10,000 new connections to Low

¹⁹ The packages as defined here are those that have been proposed in the Feasibility Study. The packaging may be different in the tendering documents and contracts for the works.

Power Project Name ¹⁹	Location	Notes
		Voltage system.
Distribution Package #5 - Cotonou	(5.1) Maria Gleta Switchgears	Work inside SBEE complex
	(5.2) Substation Ancient Pont	Existing site has room to expand. Would demolish exiting building but use the space for new 20 x 40 m substation.
	(5.3) Substation St. Michel	Find 20 x 40 m site nearby Existing Bldg. is too small. Possibly retain existing building for low voltage connections
	(5.4) Substation OCBN	Find new 20 x 40 m site Existing building is too small. Possibly retain existing building for low voltage connections.
	(5.5) Seme Switchgear	Work inside SBEE complex
	(5.6) New Transf. at Bohicon	Work inside SBEE complex
Distribution Package #7 – Nationwide System Upgrades	Numerous switchgear and changes inside buildings to work with SCADA	All work inside existing facilities. No analysis
Distribution Package #8 – Upgrades to Porto Novo Connection	(8.1) New 63 kV line Cotonou – Porto Novo	Generally follow existing ROW: 30 km of OHL, Cotonou end-cables (4.5 km), Porto Novo cable (7.5 km)
	(8.2) Substation Repartition D1 – Cimbénin (located in Cotonou)	Existing Bldg. inadequate Find 20 x 40 m site nearby Bldg. is small and may be moved to re-use elsewhere
Distribution Package #9 – Gen. Projects	Numerous small mods to pole-mounted equipment and SBEE system meters	All work at/on existing facilities and equipment

Table 1-10. Coordinates of substations

Substation	N	E
Existing infrastructure		
Cadjehoun 15 kV SBEE	6.356403218	2.399090882
Ancient Pont	6.357144097	2.440803592
D1 CimBénin	6.377369509	2.449700314
D2 Croix Rouge	6.370409185	2.504514128
Saint-Michel	6.369862984	2.426702429
OCBN	6.353811531	2.431503684
Potential new sites		
Gbejromede	6°23'0.31"	2°25'26.03"

Please note that these are existing substations and new sites that are likely to be included in the project. These could be complemented by additional sites, as mentioned in the options section of the main body of the terms of reference and Annex 2.

Figure 1-5

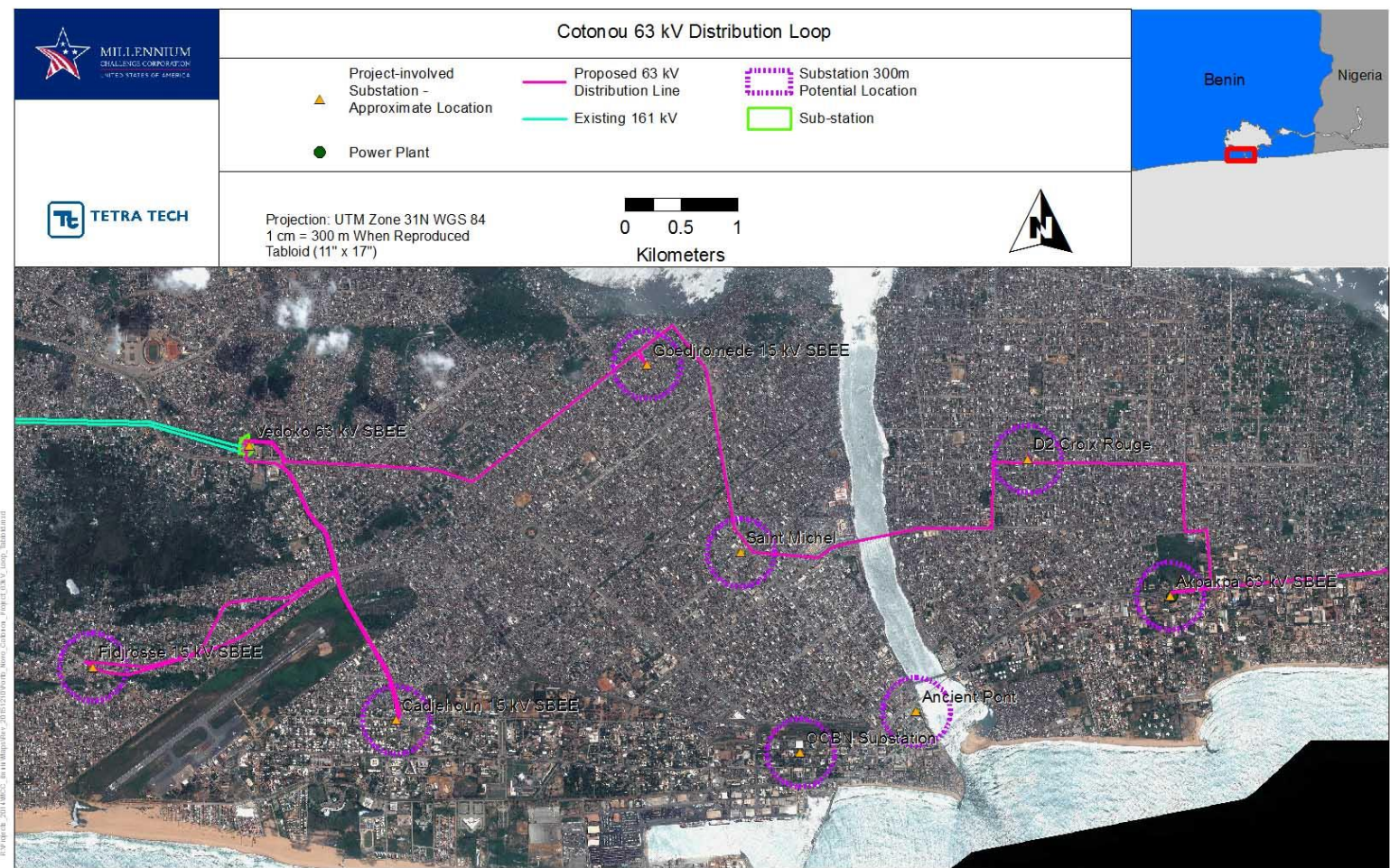


Figure 1-6



Figure 1-7

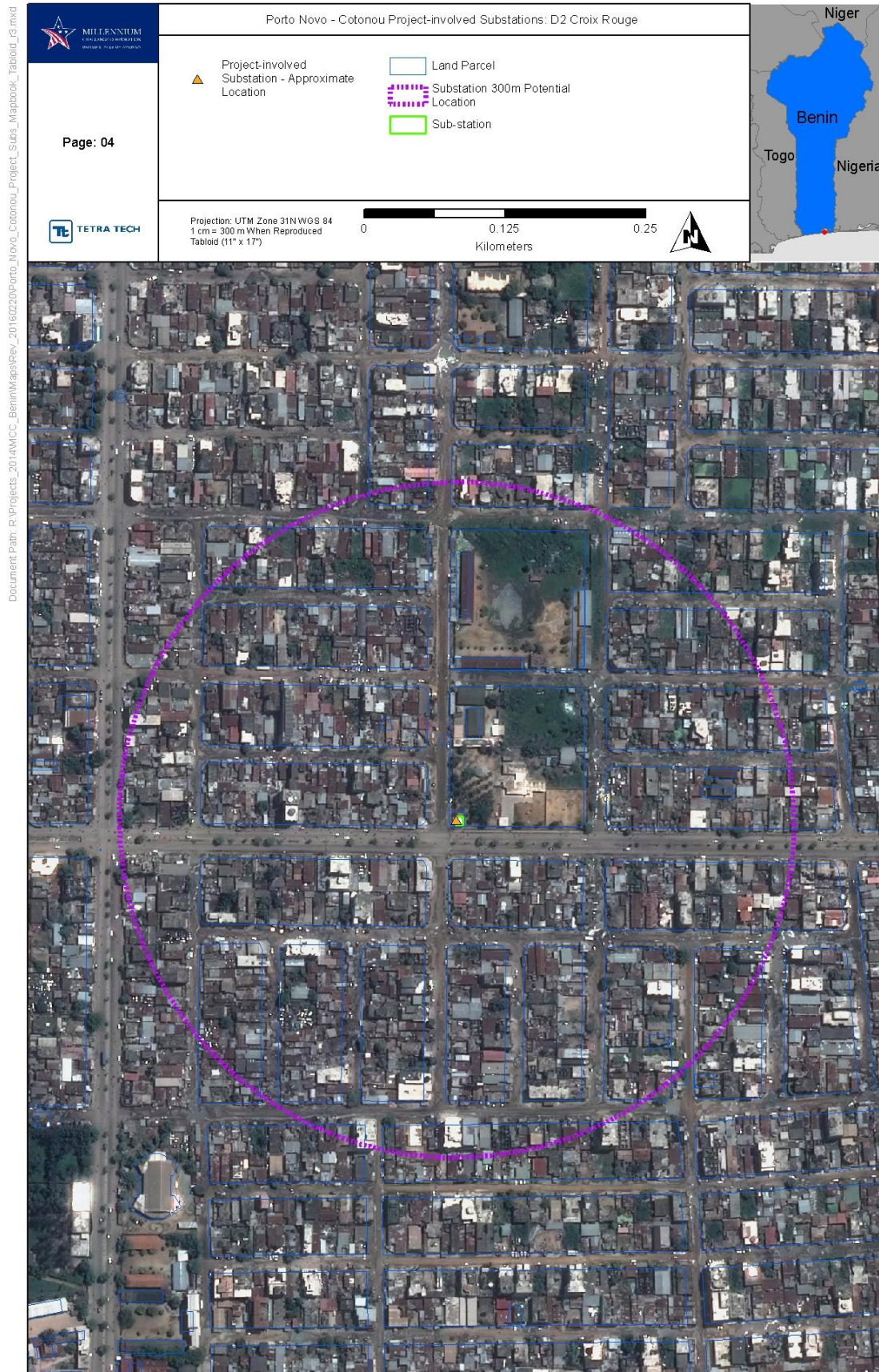


Figure 1-8



Figure 1-9

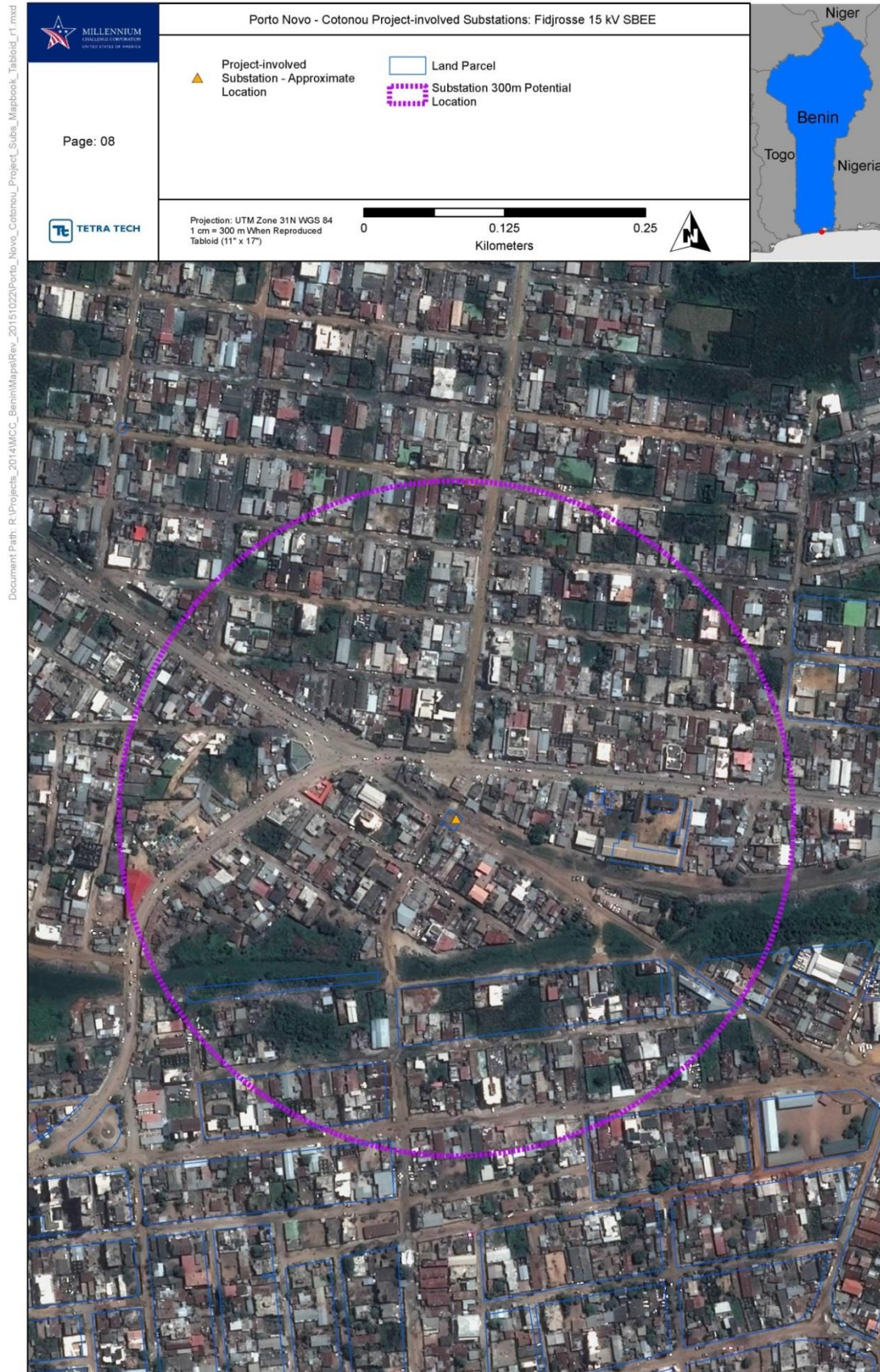


Figure 1-10



Figure 1-11



Figure 1-12

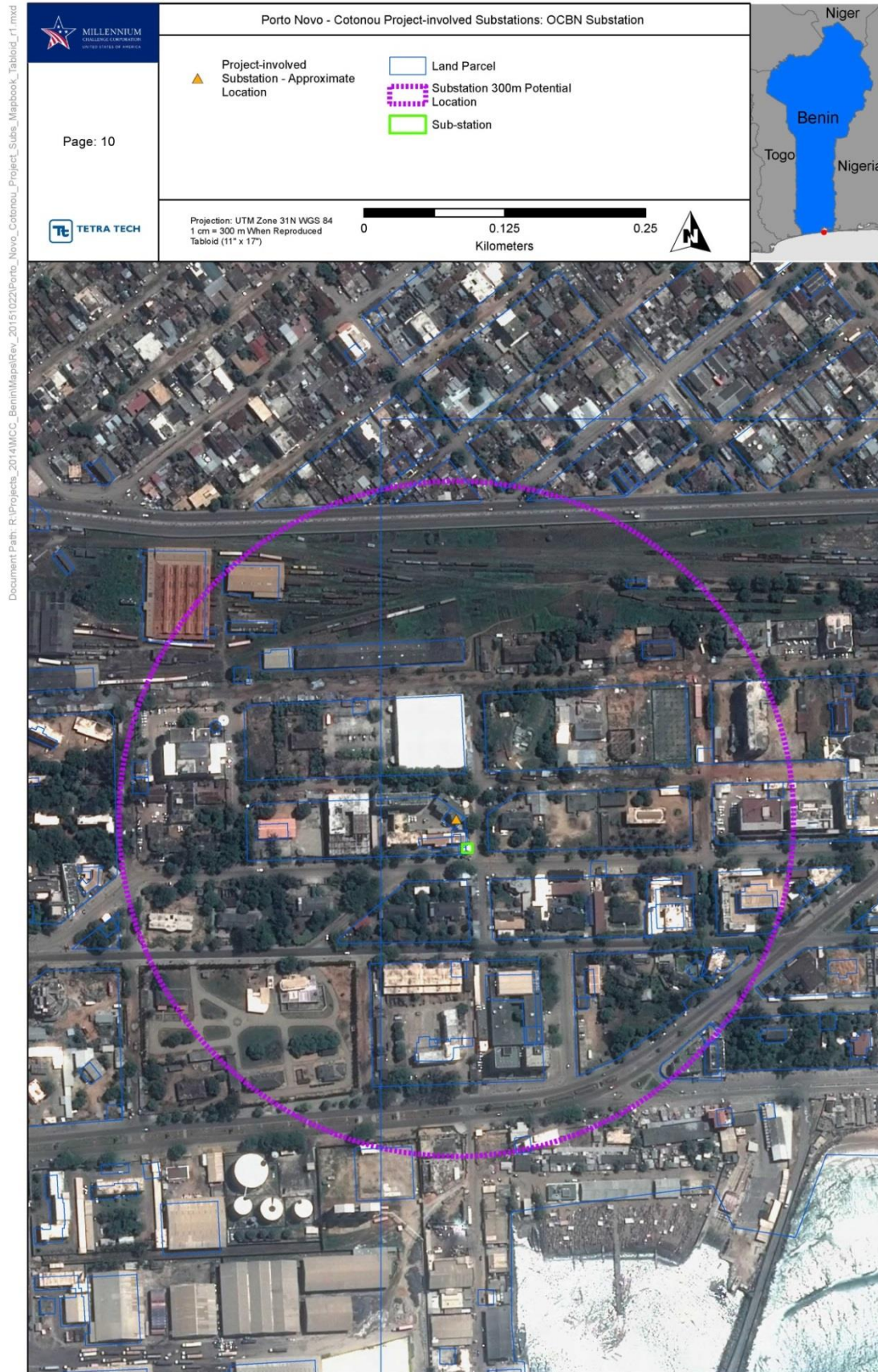
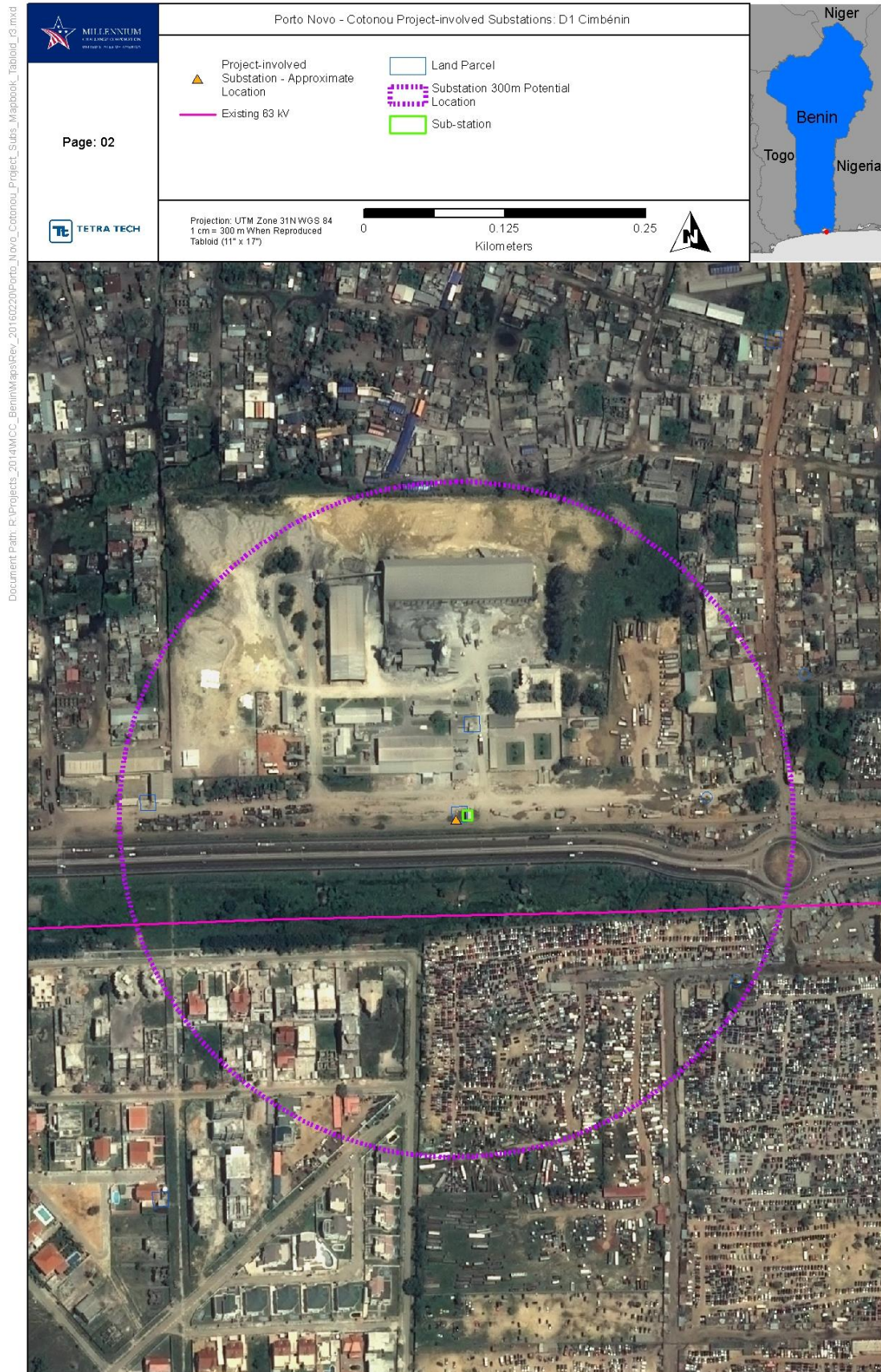


Figure 1-13



ANNEXE 2 LIST OF IN-USE TRANSFORMERS AT PROJECT SITES

DEPARTEMENT	ZONE	SITES	ELEMENTS IDENTIFIES	Fabricant	N° SERIE	Année de fabrication	Masse totale (Kg)	Masse d'huile (kg)	Robinet de vidange	OBSERVATIONS
ATACORA	NATTINGOU	BERECINGOU	Transfo H61 100KVA/33kV 4	Transfix	126060254	2006	535	130	oui	Pas de fuite
			Transfo H61 50KVA/33kV 3	Transfix	109060374	2006	410	105	oui	Pas de fuite
			Transfo H61 160KVA/33kV 2	Transfix	135100754C	2010	720	175	oui	Pas de fuite
			Transfo H61 50KVA/33kv 1	Transfix	109060370	2006	410	105	oui	Pas de fuite
			Transfo BPN SIIF 32 KVAR/11kV	EuroTrasformatori S.r.l.	6 1756/7/8	2004	910	300	oui	Pas de fuite
			Transfo G4 2500KVA/125-50kV	france transfo	652202-01	1999	5265	1015	oui	Pas de fuite
			Transfo G5 2500KVA	france transfo	163017-01	1989	5110	1120	oui	Pas de fuite
			Transfo bis de 2x5250KVA	ALSTHOM SAVOISIENNE	G 60800-01	1976	9185	1985	oui	Pas de fuite
			Transfo d'échange de 20MVA/33-11kV	ABB	5215233	1999	33300	6100	oui	un peu de fuite
			Transfo d'échange de 16MVA/11-15kV	ABB	1LIT00701B	2004	27000	6500	oui	Pas de fuite
		Yéripao	Transfo Auxiliaire SIIF 630KVA	CONTI-TRANSFO	10078	1999	1825	346	oui	Pas de fuite
BORGOU	PARAKOU	Poste de répartition de la SBEE	PARAKOU CENTRALE TR SIIF	ABB	1LIT00701C	2004			oui	Pas de fuite
			PARAKOU CENTRALE TR CATERPILLARD	ALSTHOM	42040550	2004	14300	3300	oui	Pas de fuite
			PARAKOU CENTRALE TR 1250KVA	CONTI-TRANSFO	10129	1999	2930	666	oui	Pas de fuite
			PARAKOU CENTRALE H61 9 non identifié	?	?	?	?	?	oui	Pas de fuite
			PARAKOU CENTRALE H61 20	CAHORS TRANSFIX	109140348C	2014	330	70	oui	Pas de fuite
			PARAKOU CENTRALE H61 19	france transfo	163019-01	1989	840	270	oui	Pas de fuite
			PARAKOU CENTRALE H61 18	france transfo	163018-01	1989	785	230	oui	Pas de fuite

PARAKOU CENTRALE H61 17	NEXANS (Sous licence AREVA)	O9OO1429	2009	614		oui	Pas de fuite
PARAKOU CENTRALE H61 16	ENERGY TRANSFO	T1602527	2013	830	190	oui	Pas de fuite
PARAKOU CENTRALE H61 15	CAHORS TRANSFIX	126150162C	2015	535	115	oui	Pas de fuite
PARAKOU CENTRALE H61 14	CAHORS TRANSFIX	126160146C	2015	535	115	oui	Pas de fuite
PARAKOU CENTRALE H61 13	NEXANS (Sous licence AREVA)	O9OO1923	2009	614		oui	Pas de fuite
PARAKOU CENTRALE H61 12	NEXANS (Sous licence ALSTOM)	36/160.HGLCT	2011	716		oui	Pas de fuite
PARAKOU CENTRALE H61 11	ENERGY TRANSFO	T1602531	2013	830	190	oui	Pas de fuite
PARAKOU CENTRALE H61 10	ENERGY TRANSFO	T1602529	2013	830	190	oui	Pas de fuite
PARAKOU CENTRALE H61 8	NEXANS (Sous licence AREVA)	10002329	2010	1100		oui	Pas de fuite
PARAKOU CENTRALE H61 7	PAUWELS TRAFO	88N1952	1988	550	110	oui	Pas de fuite
PARAKOU CENTRALE H61 6	ENERGY TRANSFO	T1602534	2013	830	190	oui	Pas de fuite
PARAKOU CENTRALE H61 5	AFRIC TRANSFO	12102467	2012	694	200	oui	Pas de fuite
PARAKOU CENTRALE H61 4	MATELEC S.a.l	20146115	2012	645	145	oui	Pas de fuite
PARAKOU CENTRALE H61 3	MATELEC S.a.l	20146128	2012	?		oui	Pas de fuite
PARAKOU CENTRALE H61 2	MATELEC S.a.l	20146119	2012	645	145	oui	Pas de fuite
PARAKOU CENTRALE H61 1	MATELEC S.a.l	20181351	2012	645	145	oui	Pas de fuite
PARAKOU CENTRALE H59 1	NEXANS (Sous licence AREVA)	O7OO3O15	2007	1058		oui	Pas de fuite
PARAKOU CENTRALE H59 2	BELTRANSFO	402305	2004	1320	300	oui	Pas de fuite
PARAKOU CENTRALE AUXI SIIF	CONTI-TRANSFO	10817	2004	1350	255	oui	Pas de fuite
PARAKOU CENTRALE TR 33	ABB	5215234	1999	33300	6100	oui	Pas de fuite

			PARAKOU CENTRALE SIIF BPN	EuroTrasformatori S.r.l.	8 1756/7/8	2004	910	300	oui	Pas de fuite
			PARAKOU CEB TR 20_16_7KVA	AREVA	P020LEG451-01	2007	58200	17000	oui	Pas de fuite
			PARAKOU CEB T AUX	France TRANSFO	198492-01	1993	520	110	oui	Pas de fuite
			PARAKOU CEB Réactance 1 en cours d'installation	ABB	1LFI4282524014	2014	41700	14400	oui	Pas de fuite
			PARAKOU CEB réactance2 en cours d'installation	ABB	1LFI4282524012	2014	41700	14400	oui	Pas de fuite
			PARAKOU CEB BPN	Transfix	BB0347	2007	1450	310	oui	Pas de fuite
DONG A	DJOUGOU	Sous station de la CEB	DJOUGOU TR 20_16_7MVA	AREVA	P020LEG451-02	2007	58200	17000	oui	Pas de fuite
			djougou BPN	Transfix	BB0848	2007	1450	310	oui	Pas de fuite
			PORTO TR SIIF	ABB	1LIT00701A	2004	36000	8500	oui	Pas de fuite
OUEME	PORTO-NOVO	Ouando	PORTO TR 36MVA	Société Normale de Transformateur-Duriez	93906	2006	31000	5800	oui	Pas de fuite
			PORTO TR 31,5MVA	CHINT	200901002	2009	64000	15000	oui	Pas de fuite
			PORTO T_AUX 36"	SAGEM	83639	2002	850	210	oui	Pas de fuite
			PORTO T_AUX 31,5MVA	Transfix	135070405C	2007	610	120	oui	Pas de fuite
			PORTO NOVO CENTRALE SIIF 320KVA	EUROTRANSFORMATORI	1756/7/8	2004	910		oui	Pas de fuite
			PORTO CENTRALE T AUX 1	CONTI-TRANSFO	10079	1999	1825	346	oui	Pas de fuite
			SEME TR FORCLUM	france transfo	844870-01	2009	15900	4500	oui	Pas de fuite
			SEME TR3	NEXANS	374 415	2010	25227	8700	oui	Pas de fuite
	Sèmè-Pkodji	Sèmè-ZFI	SEME TR2	NEXANS	374 414	2010	25227	8700	oui	Pas de fuite
			SEME TR1	NEXANS	374 413	2010	25227	8700	oui	Pas de fuite
			SEME T_AUX FORCLUM	Transfix	126070245C	2007	480	85	oui	Pas de fuite
			SEME T_AUX 3	NEXANS (Sous licence de AREVA)	O9OO1831	2009	1030		oui	Pas de fuite
			SEME T_AUX 2	NEXANS (Sous licence de AREVA)	O9OO1824	2009	1015		oui	Pas de fuite
			SEME T_AUX1	NEXANS (Sous licence de AREVA)	O9OO1830	2009	1030		oui	Pas de fuite

LITTORAL	AKPAKPA	CIM-Bé nin (D1)	Auxiliaire de 100KVA	EFACEC	L001626.01	2008		125	Non	Pas de fuite
		Centrale AKPA KPA G09	Transfo 5MVA	ALSTHOM SAVOISIER	g 60800-01	1979	3800kg	1600kg	oui	Pas de fuite
		Centrale AKPA KPA G10	Transfo 10MVA	ALSTHOM ATLANTIQUE	h68280-01	1983	18000kg	4000	oui	Pas de fuite
		Centrale AKPA KPA G11	Transfo 10MVA	ALSTHOM ATLANTIQUE	H68280-02	1983	18000kg	4000kg	oui	Pas de fuite
		Centrale Echange E1	Transfo 20MVA	Société Normale de Transformateur-Duriez	C4490	2005	33000kg	7500kg	oui	Pas de fuite
		Centrale Echange E2	Transfo 31,5MVA	CHNT ELECTRC CO LTD	1ZD83000002-1 57	2009	60500Kg	14700kg	oui	Pas de fuite
		Croix rouge (D2)	Auxiliaire de 100KVA	EFACEC	L001626.02	2008		125	Non	Pas de fuite
	Littoral 1	Cadjehoun	Auxiliaire de 50KVA	CAHORS TRANSFIX	109150115	2015	330kg	70Kg	Non	Pas de fuite
			Transfo de 250KVA	KOTSONS private limited	E-17544	2013	1200kg	300kg	Non	Pas de fuite
		Ancient Pont	Auxiliaire de 50KVA	CAHORS TRANSFIX	1009150110	2015	330kg	70Kg	Non	Pas de fuite
			Transfo 500KVA	france transfo	614786-01	1995	1350kg	255kg	Non	Pas de fuite
			Transfo de 400KVA	KOTSONS private limited	E-17541	2013	1500kg	400kg	Non	Pas de fuite
	VEDO KO	Sous Station de la	T2 = 19MVA	CANADIAN GENERAL ELECFCRIC	287833	1971	53650Kg	17350kg	oui	un peu de fuite

		CEB à Védoko	T3 = 55MVA	CIE ELECTRIC MECANIQUE	FHU27879	1985	68Tonnes	21,6Tonnes	oui	un peu de fuite
			T5 = 80MVA	A AREVA	316517	2004	112Tonnes	30,5Tonnes	oui	Pas de fuite
			T6 = 40MVA	A AREVA	316518	2004	76Tonnes	22,5Tonnes	oui	Pas de fuite
			Auxiliaire de 250KVA	A AREVA	14044531	2005	954Kg	270Kg	Non	Pas de fuite
			Auxiliaire de 400KVA	SOciété Nouvelle Transfix	EN0103	1998	1210Kg	250Kg	Non	Pas de fuite
ATLAN TIQUE	Abome y-Calavi	Sous-st ation de Maria- Gléta	Transfo de 19MVA	CANADIAN GENERAL ELECFRIC	287832	1971	536550Kg	17350kg	Non	un peu de fuite
			Transfo 50KVA	CHINT	251205021	2012	119500Kg	37500Kg	oui	Pas de fuite
ZOU	BOHICON	Sous-st ation de Bohicon	BOHICON TR2 20MVA	GEC ALSTHOM	51987/001	1993	36500	10600	oui	Pas de fuite
			BOHICON TR1 20MVA	GEC ALSTHOM	52008/001	1993	40000	12100	oui	Pas de fuite
			BOHICON T_ AUX 1	france transfo	195454-01	1993	520	110	oui	Pas de fuite
			BOHICON BPN avarié	france transfo	621143	1996	3850	1430	oui	Pas de fuite
			BOHICON BPN2	france transfo	195456-01	1993	720	180	oui	Pas de fuite
			BOHICON BPN	W TPQ	18132166	2013	6750	2670	oui	Pas de fuite

Note : ? = information unknown at this stage

TERMES DE REFERENCE
COMPACT DU BENIN - ELECTRICITE
EVALUATION DES MATIERES DANGEREUSES

1.0 INTRODUCTION

1.1 MCC et le Gouvernement du Bénin

Le Millennium Challenge Corporation (“MCC”) est une entité du Gouvernement des Etats-Unis d’Amérique créée en vertu du Titre VI du *Foreign Operations, Export Financing, and Related Programs Appropriations Act* (2004) et chargée de la gestion du Millennium Challenge Account (MCA). MCC travaille avec les pays en voie de développement pour promouvoir une croissance économique durable, afin de réduire la pauvreté. Les pays éligibles élaborent des programmes d’investissement spécifiques appelés à être financés par MCC à travers un Accord de Don ou Compact, sur une période de 5 ans et mis en œuvre par le pays partenaire.

Le 09 septembre 2015, agissant au nom du Gouvernement des Etats-Unis d’Amérique (“USG”), MCC a signé avec le Gouvernement du Bénin (le “Gouvernement” ou “GdB”) un deuxième Compact essentiellement axé sur le secteur de l’électricité. Le Compact porte sur un don de 375 millions de dollars américains du Gouvernement des Etats-Unis d’Amérique et d’une contrepartie nationale du Gouvernement du Bénin de 28 millions de dollars USD. Son objectif est de renforcer les capacités nationales du Bénin, d’attirer l’investissement du secteur privé, et de financer des investissements en infrastructures dans les domaines de la production et de la distribution d’électricité, de même que dans l’électrification hors-réseau au profit des ménages pauvres et non desservis.

Le Compact du Bénin sera mis en œuvre pour une période de cinq ans et devrait probablement entrer en vigueur²⁰ au cours du premier trimestre de 2017. Le Millennium Challenge Account-Bénin (“MCA-Bénin II” ou « MCA ») a été créé pour mettre en œuvre le programme du Compact. Le MCA-Bénin II a été créé comme une personne morale de droit béninois et sera dirigé par un Conseil d’Administration mixte public-privé devant rendre compte au Président de la République du Bénin.

1.2 Aperçu de l’Etendue des Services demandés

MCA-Bénin II, faisant office de Maître d’Ouvrage, procédera au recrutement d’un cabinet (the “Consultant”) chargé d’identifier sur les sites de projet, toutes les conditions de contamination qui nécessitent une analyse et de proposer des solutions de remédiation efficaces.

²⁰ La période de mise en œuvre du Compact du MCC commence avec l’entrée en vigueur.

Bien que MCA-Bénin II soit le Maître d’Ouvrage au titre du présent contrat, le Consultant devra également travailler en étroite collaboration avec d’autres ministères et agences du Gouvernement du Bénin qui seront en partenariat avec MCA-Bénin II dans le cadre du programme du Compact, lesquels sont dénommés Agences d’Exécution (“AE”). Chacune de ces agences devra signer un Accord d’Agence d’Exécution (“AAE”) avec MCA-Bénin II. Le Consultant devra, en particulier, collaborer étroitement avec la Société Béninoise d’Energie Electrique (“SBEE”), pour exécuter les présents termes de référence.

1.3 Organisation Institutionnelle

- **MCA-Bénin II:** MCA-Bénin II est, auprès de MCC, l’Agence Responsable (AR) du Gouvernement, chargée de la mise en œuvre du Compact. Au titre du Compact, MCA-Bénin II procédera à l’acquisition de tous biens et services, passera des contrats avec des prestataires de service et en assurera la gestion. MCA-Bénin II est également chargé de gérer les processus d’ordre politique, de produire des rapports trimestriels et annuels de performance, de mettre en œuvre le Plan de Suivi et Evaluation (“S&E”), et de s’occuper des relations publiques.
- **L’Agent Fiduciaire (“AF”) :** L’Agent Fiduciaire est un contractant engagé par MCA-Bénin II et chargé de gérer tous les fonds mis à disposition par MCC. L’Agent Fiduciaire devra fournir des données et des informations relatives à des cibles pour les étapes clés du processus, notamment les engagements et les décaissements relatifs aux contrats clés.
- **L’Agent de Passation de Marchés (« APM ») :** L’Agent de Passation de Marchés est un contractant engagé par MCA-Bénin II et chargé de gérer toutes les activités de passation des marchés en rapport avec le Compact.
- **Consultant en Gestion en Gestion Environnementale et Sociale et en Gestion de Programme (“PESMC”) :** MCA-Bénin II procédera au recrutement d’un cabinet chargé de l’assister dans l’accomplissement de ses fonctions d’agence d’exécution concernant les Projets d’infrastructure prévus dans le Programme du Compact. Ce Cabinet devra fournir, pour le compte de MCA-Bénin II, un large éventail de services de gestion et de supervision du programme, y compris la préparation et la mise en œuvre des Plans d’Action de Réinstallation (PAR) pour l’ensemble des projets du Compact.
- **Ministère de l’Energie, de l’Eau et des Mines (“MEEM”) :** Le MEEM contrôle la politique sectorielle dans le secteur de l’électricité au Bénin et sera, au titre du Compact, une agence d’exécution (AE) chargée d’appuyer la mise en œuvre de certains aspects des projets de Compact pour le compte du MCA-Bénin II.
- **Autorité de Régulation de l’Electricité au Bénin (“ARE”) :** L’ARE régule le secteur de l’électricité au Bénin et sera, au titre du Compact, une agence d’exécution qui sera chargée d’appuyer la mise en œuvre des activités spécifiées au titre du Projet « Réforme des Politiques et Renforcement des Institutions »

pour le compte du MCA-Bénin II, en vertu d'un Accord d'Agence d'Exécution entre MCA-Bénin II et ARE.

- **Agence Béninoise pour l'Environnement ("ABE")** : L'ABE est chargée de la supervision du processus d'évaluation environnementale au Bénin, du suivi et du respect de la législation et des réglementations relatives à l'environnement.
- **Société Béninoise d'Energie Electrique ("SBEE")** : La SBEE est le distributeur national d'électricité qui sera, au titre du Compact, une Agence d'Exécution et sera chargée d'appuyer la mise en œuvre des activités, notamment les Projets « Distribution d'Electricité » et « Production d'Electricité » et certains aspects du Projet « Réforme des Politiques et Renforcement des Institutions » pour le compte du MCA-Bénin II.
- **La Communauté Electrique du Bénin ("CEB")** : la CEB est une organisation binationale, propriété conjointe des Gouvernements du Bénin et du Togo, créée en 1968, qui s'occupe de la production, de l'importation, et du transport d'électricité vers les deux pays. La CEB sera, au titre du Compact, une agence d'exécution chargée d'appuyer la mise en œuvre des activités spécifiées en vertu du Projet « Distribution d'Electricité » pour le compte du MCA-Bénin II.

2.0 GENERALITES

2.1 Présentation du Pays

Le Bénin a une population de 10,3 millions d'habitants dont 36% vit en dessous du seuil national de pauvreté. L'incidence de la pauvreté est de 35% dans les zones rurales et de 27% dans les zones urbaines. L'essor économique lié à l'augmentation du transport de marchandises et à des prix élevés du coton s'est traduit par un taux de croissance moyen de 4% au cours des dix dernières années. Toutefois, la poussée démographique constante (3,5% par an au cours de la dernière décennie) a entraîné une augmentation nette de la pauvreté. L'extrême pauvreté est concentrée dans le Nord du pays où l'insécurité alimentaire est répandue. Le secteur agricole du Bénin qui est dominé par le coton représente 36% du PIB. Il emploie 48% de la population active et assure 80% des recettes d'exportation. L'économie béninoise est vulnérable aux chocs extérieurs découlant des fluctuations des prix des matières premières ou des changements de politique au Nigéria, le principal partenaire commercial du Bénin.

2.2 Programme Electricité du Bénin

Le deuxième compact entre le Gouvernement du Bénin et MCC cible le manque d'infrastructures électriques, contrainte majeure dans un pays où l'insuffisance de l'alimentation en électricité, aussi bien en qualité qu'en quantité, affecte la productivité,

les résultats et les investissements des entreprises, l'efficacité des services publics et sociaux, ainsi que le bien-être et les opportunités économiques des ménages²¹. Les causes profondes de ces problèmes résident non seulement dans la pauvreté du pays, mais également dans les politiques, les institutions et les principaux acteurs intervenant dans ce secteur.

Le Compact Electricité du Bénin a pour objectif de s'attaquer à ces problèmes cruciaux à travers des réformes de politiques et le renforcement des institutions, des investissements à grande échelle dans les infrastructures de production et de distribution d'électricité, ainsi que dans des activités d'électrification hors-réseau. Il se compose des quatre projets suivants:

- **Projet « Réforme des Politiques et Renforcement des Institutions ».** Ce projet appuiera des réformes profondes de politiques et contribuera à renforcer les institutions grâce à l'amélioration de la régulation, la réforme tarifaire, l'amélioration de l'exploitation et de la gestion de la SBEE, l'amélioration de l'efficacité énergétique et la promotion de l'investissement privé dans la production d'électricité. Le projet contribuera à atteindre les objectifs de réforme des politiques, y compris les conditions préalables prévues.
- **Projet « Production d'Electricité » :** Ce projet permettra d'accroître la production d'électricité totale au Bénin d'environ 78 MW – soit le tiers de la demande actuelle du pays en période de pointe – tout en réduisant sa dépendance vis-à-vis d'importations peu fiables d'électricité. Cet objectif sera atteint grâce à l'installation de centrales photovoltaïques d'une capacité de production de 45 MW, ainsi que la réhabilitation de centrales thermiques et hydroélectrique existantes, pour une capacité de 33 MW.
- **Projet « Distribution d'Electricité » :** Ce projet permettra de moderniser les infrastructures de distribution d'électricité du Bénin en vue d'étendre la capacité du réseau de manière à satisfaire la croissance future, améliorer sa fiabilité, et réduire les pertes et les coupures d'électricité. Le Projet « Distribution d'Electricité » contribuera à moderniser et à densifier le réseau desservant Cotonou, la capitale économique, de même que des réseaux régionaux sélectionnés pour accompagner les propositions d'investissement dans la production solaire. Sur le plan national, il appuiera la construction d'un centre de distribution et de contrôle (dispatching center) moderne susceptible de gérer plus efficacement le réseau, y compris l'énergie intermittente produite à partir de sources renouvelables.
- **Projet « Accès à l'Electricité Hors-réseau » :** Ce projet contribuera à accroître l'accès à l'électricité dans un pays où seulement un tiers de la population dispose de l'énergie électrique et ce, par la mise en place d'une Facilité de

²¹ Le Bénin a clôturé son premier Compact en octobre 2011. Ce Programme d'un montant de 307 millions de dollar US comprenait les projets ci-après : (i) modernisation et extension du port de Cotonou; (ii) promotion de la sécurité foncière; (iii) amélioration de l'accès au capital pour les micros, petites et moyennes entreprises; et (iv) création d'un système judiciaire plus efficace.

financement de projets énergétiques hors-réseau, couplée à la réforme des politiques et au renforcement des institutions, afin d'appuyer l'ensemble du secteur de l'électricité hors-réseau au Bénin.

3.0 ETENDUE DES SERVICES

3.1 Objectifs de la consultation

L'objectif principal de la présente consultation est de procéder à l'évaluation des matières dangereuses sur certains sites de projet et d'élaborer des propositions de mesures de remédiation.

Les prestations de services prévues dans le cadre cette mission sont regroupées en 11 tâches décrites ci-après :

1. Réunion et rapport de démarrage ;
2. Reconnaissance initiale des sites et Plan de Travail détaillé ;
3. Echantillonnage et analyse des équipements et de l'huile ;
4. Echantillonnage et analyses des sols et de l'eau ;
5. Résultats et interprétation des analyses chimiques ;
6. Evaluation des risques ;
7. Formulation d'options de remédiation à court-terme ;
8. Recommandation d'options de gestion à long-terme ;
9. Rapports d'étude ;
10. Préparer les spécifications et les TDR pour les actions de remédiation à court terme
11. Transfert de connaissance et de technologie.

3.2 Objectif et méthodologie

Grâce au financement MCC, MCA–Bénin II financera :

- des travaux de réhabilitation des équipements de production dans trois centrales thermiques et une centrale hydro-électrique appartenant à la SBEE qui en assure l'exploitation et l'entretien ;
- le remplacement de trois sous-stations ;
- le remplacement de transformateurs ;
- des activités de renforcement et d'extension dans d'autres sous-stations de la SBEE ;
- et l'installation de nouvelles centrales photovoltaïques sur quatre sites.

Il existe des conditions de contamination reconnues (CCR), y compris des fuites et des déversements d'huile de transformateur, de lubrifiants et de diesel sur bon nombre de ces sites. Il existe un risque de présence de PCB dans les équipements (en exploitation ou mis au rebut) présentant ou non des fuites, dans l'huile diélectrique stockée et dans les sols et eaux contaminés²².

²² La SBEE a effectué une analyse de pollution par les PCB sur un échantillon de 192 transformateurs sur l'ensemble des 2200 transformateurs ou plus dont elle dispose et constaté que 50 transformateurs ou 26% étaient

La contamination des sols par les hydrocarbures est évidente sur l'ensemble des centrales thermiques et les sols risquent d'être aussi contaminés par des PCB. Un des sites proposés pour une centrale solaire est utilisé comme décharge municipale non contrôlée. Il est possible que les eaux souterraines et de ruissellement soit contaminées sur tous ces sites.

Pendant l'exécution de la mission, le Consultant pourrait identifier d'autres cas de contamination devant faire l'objet d'une évaluation.

Les objectifs de cette mission sont les suivants :

- déterminer la nature et la portée de la contamination par les matières dangereuses existantes ;
- caractériser la contamination par les PCB et autres types de contamination sur chaque site ;
- évaluer les risques associés à cette pollution sur la santé et la sécurité de la main d'œuvre des entrepreneurs, du personnel de la SBEE [et de la CEB], des habitants riverains et sur l'environnement en général ;
- cartographier les équipements et zones contaminées et tout élément environnemental et social sensible susceptible d'être affecté (par exemple, zone d'habitations, puits, agriculture, bas-fonds marécageux, etc.);
- élaborer pour chaque site un plan d'actions de remédiation à court-terme, pour gérer les risques identifiés ;
- proposer des solutions à long terme, y compris mais sans s'y limiter, la décontamination des équipements, la gestion et l'élimination des PCB, ainsi que la dépollution et/ou la gestion des sols contaminés (PCB, hydrocarbures ou autres)
- préparer les spécifications et les TDR pour les actions de remédiation à entreprendre avant la construction.

MCA-Bénin II suivra une approche axée sur l'analyse de risque, telle que définie dans les directives de MCC²³ qui prévoit que MCA-Bénin II "mette en place des mesures d'intervention en relation avec l'intensité du risque, en tenant compte de la solution la plus rentable pour atténuer ou réduire le risque." Ces directives soulignent l'importance de définir avec soin les limites qui s'appliquent aux activités relatives à la gestion des risques :

Les obligations de MCC et de MCA-Bénin quant à la gestion des matières et déchets dangereux doivent être circonscrites en fonction de la portée du projet et des caractéristiques spécifiques du site de projet. En général, lesdites obligations devraient se limiter aux matières se trouvant dans les zones de chantier des contractants, y compris sur l'ensemble des zones directement ou indirectement utilisées ou impactées par ce dernier dans l'exécution de ses travaux. Les contractants sont responsables de la manipulation, gestion et mise en décharge

contaminés par les PCB. 32 de ces transformateurs avaient un degré de concentration en PCB dans la classe de contamination la plus faible selon le « US EPA », c'est-à-dire 50 à 500 parties par million. Les 17 transformateurs restants portaient un taux de contamination plus élevé. La liste des transformateurs qui ont été testés n'est pas disponible. Le rapport sera mis à la disposition du consultant après l'attribution du marché.

²³ "Guide de Clarification sur la mise en œuvre des Normes de Performance de la SFI en matière de gestion des Matières et Déchets Dangereux." MCC, Mai 2014 (version provisoire).

adéquates de toutes matières et déchets dangereux rencontrés ou résultant de leurs propres activités, y compris en dehors de leurs zones de chantier à proprement parler.

Dans certains cas, MCC et MCA-Bénin peuvent envisager de définir des mesures supplémentaires qui s'appliquent au-delà des zones de chantier des contractants, pour atténuer des risques plus larges et/ou pour garantir qu'un projet une fois terminé ne présente pas de risque pour la santé humaine et l'environnement. La nature et l'étendue des risques rencontrés sur le site doivent contribuer à décider des réponses appropriées.

Sur la base de ces directives, des CCR déjà identifiées, et des résultats de cette évaluation, MCA-Bénin II envisage de réduire les sources immédiates de contamination ; d'enlever, traiter ou mettre en décharge contrôlée les sols, matériaux et équipements contaminés trouvés sur les zones de chantier ou susceptibles d'être perturbés par les travaux planifiés ; et de s'assurer que les investissements du compact dans toute installation (telle qu'une sous-station) ne remettront pas en exploitation des équipements ou des sites contaminés. Ce dernier point est en conformité avec la politique de MCC sur les matières dangereuses qui prévoit qu'un projet une fois terminé ne présente pas de risque pour la santé humaine et l'environnement.

Cette évaluation sera immédiatement suivie d'une remédiation des sites, laquelle fera l'objet d'un autre appel d'offre, sur la base des plans que devra élaborer le Consultant dans le cadre de la présente mission. Cette évaluation devra recommander des mesures de remédiation pour la contamination par les PCB et les hydrocarbures sur les sites des projets de Production et Distribution d'Electricité. Sur les deux types de sites, les travaux de remédiation relatifs à la pollution par les PCB feront l'objet d'un contrat avec un contractant spécialisé dans ce domaine. Pour les hydrocarbures et autres types de matières dangereuses, les travaux de remédiation pourraient être exécutés par les entrepreneurs engagés pour conduire les travaux de réhabilitation ou d'extension des infrastructures. En cas de pollution par les hydrocarbures, les solutions peuvent être locales, soit par incinération dans un incinérateur bien géré, réglé à une température adéquate et muni d'un système de contrôle des émissions – le four de la cimenterie « Lafarge » à Onigbolo constitue une alternative et, il est possible que le Consultant en identifie d'autres – ou par enfouissement sur un site convenablement aménagé et sécurisé, peut-être sur les sites de décharges municipales – ou par d'autres techniques que proposera le Consultant. Par contre, les matériaux et équipements contaminés par des PCB seront nécessairement gérés par un spécialiste et probablement transportés hors du territoire national.

L'évaluation sera conduite d'une manière conforme aux normes de l'ASTM (*American Society for Testing Material* -) relatives à la Phase II d'Evaluation Environnementale de Site.²⁴ L'identification du PCB se fera conformément aux Directives de l'UNEP.²⁵

²⁴ Norme ASTM 1903-11, "Pratique courante en matière d'évaluation environnementale de sites : Phase II du processus d'évaluation environnementale de sites". ASTM International, 2011.

²⁵ "Directives pour l'Identification des PCB et Matières contenant du PCB." Produits Chimiques,

L'évaluation devra également être conforme à toute autre norme ou législation applicable.

3.3 Infrastructures à évaluer²⁶

Installations de production d'électricité – Voir les détails à l'Annexe 1

- Centrale Thermique de Natitingou (installations existantes)
- Centrale Thermique de Parakou (installations existantes)
- Centrale Thermique de Porto-Novo (installations existantes)
- Site de Production Solaire de Parakou (aucune infrastructure ; le site sert de décharge de déchets urbains à ciel ouvert).

Installations de distribution – six sous-stations existantes – Voir les détails à l'Annexe 1

- Cadjèhoun
- Ancien Pont
- D1 CimBénin
- D2 Croix rouge
- Saint-Michel
- OCBN

Sites prévus pour de nouvelles infrastructures de Distribution (A considérer comme des services additionnels que MCA-Bénin II pourrait demander: Ces sites sont considérés en vue de la mise en place de nouvelles infrastructures, telles que mentionnées dans la description du projet. Si MCA-Bénin II décide le cas échéant quels sites doivent être inclus dans cette évaluation, une fois les sites du Projet Distribution confirmés, un avenant sera fait au contrat sur la base de la ventilation des prix par rémunération du formulaire N°4 de la proposition financière. Nouvelles sous-stations à Gbèdjromèdè (atelier mécanique informel) et à Fidjrossè

- Nouvelle sous-station à l'Ancien Pont (station de bus)
- Nouvelle sous-station à l'OCBN (parking)
- Nouveaux sites du centre national de téléconduite et les relais
- Autres sous-stations le cas échéant (voir l'Annexe 2) en fonction de l'importance des travaux envisagés à ces sites.

3.4 Tâches

La mission porte sur 11 (onze) tâches décrites en détail ci-dessous :

Tâche 1. Réunion et rapport de démarrage. Dans les deux semaines après avoir

UNEP, 1999.

²⁶ La liste complète des installations et une estimation du nombre d'équipements et de sites effectivement contaminés sont disponibles dans les Annexes 1 et 2.

reçu la Notification Du Contrat (NDC), le Consultant organisera une réunion de démarrage dans les bureaux de MCA-Bénin II à Cotonou, où il présentera un rapport de démarrage qui inclura :

- Résumé des informations existantes
- Plan de travail initial
- Plan de Santé et Sécurité relatif à ce mandat
- Plan de gestion environnementale relatif à ce mandat
- Calendrier pour la reconnaissance du site
- Un plan d'engagement de la SBEE

Tâche 2. Reconnaissance de site, examen du cadre réglementaire et élaboration du

Plan de Travail Détaillé. Tout de suite après la réunion de démarrage, le Consultant effectuera une reconnaissance visuelle et conduira des discussions sur les installations sus-énumérées pour obtenir des données sur les contaminations actuelles et historiques, ainsi que toute autre information qui peut être nécessaire pour élaborer un plan d'échantillonnage pertinent, précis et sécuritaire (par exemple l'emplacement des câbles ou des tuyaux souterrains). Le consultant identifiera, examinera et présentera les textes législatifs et normes nationales et internationales pertinentes à la présente évaluation, notamment en ce qui concerne l'identification / inventaire, l'analyse et la gestion (utilisation, manipulation, transport et élimination) des PCB, huiles et produits pétroliers, et autres matières ou déchets dangereux susceptibles de se trouver sur les sites du projet. Le Consultant soulignera en particulier les principales obligations de MCA et du(des) bénéficiaire(s) du compact en tenant compte de la réglementation environnementale Béninoise (Loi-cadre No 98 – 030 sur l'environnement, Décret N° 2003-330, portant gestion des huiles usagées ; Décret No 87-15 portant code de l'hygiène public, Décret n°2001-109, fixant les normes de qualité des eaux résiduaires, etc.) ; des normes et standards internationaux (MCC, SFI, OMS, PNUE, etc.) ; des conventions internationales (Bâle, Stockholm, Rotterdam, etc.). Il est de la responsabilité du consultant d'identifier tous les textes / normes pertinentes.

Le Consultant élaborera et soumettra alors un plan de travail mis à jour et un plan d'échantillonnage détaillé, en conformité avec la réglementation nationale en vigueur et les normes internationales.

Le plan d'échantillonnage détaillé devra comporter un plan d'échantillonnage et d'analyses des matières dangereuses au niveau de chaque site ainsi qu'un plan pour les sols, eaux de surface et eaux souterraines des terres adjacentes si la pollution s'était éventuellement étendue hors du site de projet. Des méthodes d'échantillonnage/analyse en une ou deux étapes seront définies pour les PCB et autres matières dangereuses. Pour chaque installation, le plan indiquera: le nombre exact des échantillons de sols, d'eau souterraine (nécessité de réaliser des forages pour cette mission) et d'huile ; la localisation exacte des points d'échantillonnage ; les tests sur terrain et analyses de laboratoire ; le système d'identification des échantillons ; les procédures de prélèvement d'échantillons ; la description des types de sol et de leur granulométrie ; les méthodes de réalisation des tests/analyses chimiques ; les normes relatives à chaque paramètre ; les méthodes d'estimation des quantités de sols et d'eaux contaminés; un système approprié de d'Assurance et Contrôle Qualité (QA/QC) (y compris, représentativité des

points d'échantillonnage, analyse d'échantillons dupliqués et d'échantillons blancs, conservation et chaîne de documentation des échantillons depuis le site jusqu'au laboratoire ainsi que la certification du laboratoire).

La proposition financière s'appuiera sur les hypothèses suivantes :

- Pour chaque centrale thermique : 5 profils de prélèvement de sol sur site, 2 profils de prélèvement de sol hors site, 2 forages de prélèvement d'eau souterraine sur site, et 2 forages de prélèvement d'eau souterraine hors site (en amont et en aval); le cas échéant, 2 puits existants à proximité du site devraient aussi être échantillonnés ;
- Pour chaque sous-station : 2 profils de prélèvements de sol sur site, 1 forage de prélèvement d'eau souterraine sur site, et un forage de prélèvement d'eau souterraine hors site (en amont).

Les échantillons de sol doivent être prélevés au moins à 5 profondeurs représentatives différentes sur l'ensemble du profil exploré. Le profil exploré devra aller jusqu'à la nappe souterraine ou s'arrêter à une profondeur maximale de 3 m. Les forages de prélèvement d'eau souterraine devront atteindre la nappe souterraine ou s'arrêter à une profondeur maximale de 15 m (voir la profondeur approximative des eaux souterraines à l'Annexe 1). Cependant ceci est indicatif et le Consultant devrait confirmer le nombre de points d'échantillonnages et d'échantillons à prélever, et les profondeurs, en conformité avec les meilleures pratiques et les normes.

Le Consultant devra prendre toutes les mesures nécessaires pour éviter de polluer les eaux souterraines au cours des travaux de forage/prélèvement d'échantillons et prévenir toute pollution pouvant survenir plus tard après les travaux d'échantillonnage.

En ce qui concerne les PCB, au moins les éléments énumérés ci-dessous seront échantillonnés et analysés. Sur la base de la reconnaissance initiale ou des observations faites lors de l'échantillonnage, le Consultant pourra identifier d'autres échantillons et analyses à effectuer.

- a) L'huile de transformateurs contenue dans des équipements à remplacer au titre des activités du Programme²⁷ (voir l'Annexe 1 pour les détails) ;
- b) L'huile de transformateurs fuyant d'appareils abandonnés ou fonctionnels ou de fûts ;
- c) Les structures, sols ou eaux manifestement contaminés par l'huile des transformateurs (y compris les puits ou les plants d'eau existants à proximité des installations, si la nature de la pollution suggère qu'elle s'est étendue hors du site) ;
- d) L'huile de transformateurs contenue dans des équipements abandonnés et sans fuite ;
- e) L'huile de transformateurs contenue dans des fûts sans fuite ;
- f) L'huile de transformateurs contenue dans de nouveaux équipements, sans fuite et non encore installés ;

²⁷ Annexe 2 : liste des transformateurs dans la zone d'intervention

- g) L'huile de transformateurs contenue dans certains équipements sans fuite et fonctionnels qu'il faut identifier (ce point se rapporte plus probablement à des équipements que le projet ne touche pas en réalité et qui, par conséquent, resteront en service mais nécessitent d'être étiquetés et gérés).

Les points a, b, c, et d sont intégrés à la liste parce qu'ils comprennent des éléments qui seront mis hors d'usage dans le cadre des activités financées par MCC, ou qui constituent des dangers immédiats pour les ouvriers, les communautés et pour l'environnement, ou qui sont sur ou à proximité des sites de projet définis. Ils sont directement liés aux activités du Compact et nécessitent donc une attention immédiate. Les points e, f, et g y figurent parce que l'investissement de MCC dans l'exploitation d'une installation qui dépend d'équipements contaminés pourrait ne pas être durable à long-terme.

Tâche 3. Echantillonnage et analyses sur l'huile et les équipements. L'évaluation des capacités de la SBEE par MCC ainsi que son appréciation des compétences en matière de réalisation d'analyses de laboratoire sur le plan local, et la réglementation relative au transport de cette matière indiquent que les tests sur terrain constituent la meilleure option pour identifier les huiles/équipements contaminés par les PCB (screening). Les échantillons positifs et ceux pour lesquels un test sur terrain n'est pas possible seront envoyés dans le laboratoire retenu par le Consultant (soit un laboratoire déjà existant ou à mettre en place comme une installation temporaire dans le cadre de la présente mission) en vue de déterminer le degré de contamination. Les équipements et les fûts dont l'huile serait testée positive seront immédiatement marqués comme étant contaminés par les PCB. Après analyses en laboratoire, le niveau de contamination sera ajouté sur les labels des équipements contaminés. Le Consultant analysera d'autres contaminants dangereux sur l'huile de transformateurs s'il le juge pertinent dans le cadre du présent contrat.

Tâche 4. Échantillons et analyse de sols et eau. Des visites de sites effectuées par MCC/MCA, il ressort que les sols, eau de surface et eau souterraine devront être analysés au moins pour les PCB, les hydrocarbures et les métaux lourds au niveau des sous-stations et des sites de production d'électricité. Le Consultant aura à prévoir des équipements pour s'acquitter de cette tâche (mesures sur site ou prélèvements pour analyses en laboratoire) et pour réaliser d'autres analyses qu'il jugera nécessaire en fonction des constats issus de la reconnaissance initiale. Le Consultant décidera, le cas échéant, du type d'analyse requise pour le site de décharge de Parakou, après avoir identifié les différents types de déchets qui y ont été accumulés. La Tâche 4 devrait être exécutée en parallèle avec la Tâche 3. Le Consultant tiendra un registre détaillé des informations relatives aux échantillons, notamment les résultats des analyses de terrain et de laboratoire ainsi que la localisation, description et photographie des points d'échantillonnage.

Au cas où le Consultant découvrirait, pendant l'évaluation, que les eaux de surface ou les eaux de ruissellement sont polluées, il devra immédiatement en transmettre les informations détaillées au MCA-Bénin II, afin que les autorités compétentes puissent être informées et que l'accès des populations à ces sources d'eaux soit restreint.

Tâche 5. Résultats et Interprétation des analyses chimiques. Le Consultant procèdera à une compilation des résultats des tests de terrain et analyses chimiques. Ces résultats seront comparés aux normes et directives. Les zones/plans d'eau contaminés seront indiqués sur des cartes du site. Les volumes estimés de sols contaminés seront également calculés. Leur localisation et profondeur seront montrées sur carte. La nécessité éventuelle d'effectuer des prélèvements et analyses complémentaires sera documentée dans la présente tâche.

Tâche 6. Evaluation des Risques. Le Consultant effectuera une évaluation qualitative des risques liés aux huiles avec et sans PCB, et aux autres matières dangereuses trouvées sur les sites. Cette évaluation se fera en tenant compte de la situation géographique, du milieu environnemental ou du type d'équipements dans lesquels ces matières se trouvent, de la quantité de matériaux contaminés, du degré de contamination, de l'usage probable des équipements ou matériaux contaminés en l'absence de contrôle, du personnel sur site, de la population, des éléments de l'environnement qui sont affectés ou sont susceptibles de l'être, ainsi que de la probabilité et de l'intensité des impacts. Les actions correctives seront proposées dans le cadre de la tâche suivante. L'évaluation des risques doit être faite et les résultats devront être présentés conformément à la méthodologie définie dans le document d'orientation de MCC précédemment cité.

Tâche 7. Formulation d'Options de Remédiation à Court-Terme. En utilisant les résultats de l'évaluation des risques pour définir des priorités, le Consultant proposera une procédure de gestion (ou des options si elles sont des alternatives logiques) visant la réduction immédiate des risques. Cette tâche doit être réalisée en collaboration avec la SBEE. Une estimation des coûts et des délais sera fournie pour les options recommandées. Ces options devront être conformes à la législation du Bénin, aux conventions internationales signées/ratifiées par le Bénin et aux meilleures pratiques / normes internationales.

Ces options peuvent comprendre, mais sans s'y limiter, les points ci-après :

- a) Equipements à remplacer dans le cadre du Compact, sans fuite : étiquetage et stockage sécurisé réalisés par MCA-Bénin II et la SBEE – c'est-à-dire, *lieu inaccessible au public ou éloigné des communautés, avec un faible risque de pollution des eaux souterraines ou des eaux de surface, doté d'un système de protection contre l'incendie, muni d'un dispositif de confinement en cas de fuite, et placé sous la garde des forces de sécurité* – ceci en attendant leur élimination définitive.²⁸
- b) Equipements et fûts au rebus ou fonctionnels, ayant des fuites : contrôle ou maîtrise des fuites, étiquetage des appareils abandonnés ou des fûts,

²⁸ Le site actuel que la SBEE a retenu pour le stockage ne satisfait à aucun de ces critères.

enlèvement et conditionnement adéquat de l'huile, et transport vers un stockage sécurisé en attendant leur élimination définitive par un contractant spécialisé.

- c) Structures, sol, eau contaminés par des PCB : remédiation, transport vers un stockage sécurisé puis vers un lieu de traitement / élimination par un contractant spécialisé.
- d) Equipement au rebus contaminé par des PCB, sans fuites : étiquetage et transport vers un site de stockage sécurisé, en attendant leur traitement / élimination.
- e) Huile de transformateur contaminée au PCB en fûts, sans fuites : étiquetage et transport vers un stockage sécurisé, pour empêcher son utilisation dans les travaux de maintenance et par conséquent une nouvelle contamination, en attendant son traitement / élimination.
- f) Huile de transformateur contaminée au PCB dans des équipements sans fuite et fonctionnels mais non installés : étiquetage et retour aux fournisseurs si possible, ou étiquetage et transport vers un stockage sécurisé en attendant leur nettoyage et réutilisation éventuelle, et le traitement de l'huile.
- g) Equipements fonctionnels sans fuite, contaminés par les PCB, et qui ne seront pas remplacés (si ces appareils ne sont pas pris en compte dans les investissements financés par MCC) : étiquetage et maintien sur place jusqu'à obsolescence.
- h) Risques non associés avec les PCB, comme les contaminations d'eau et de sol par les hydrocarbures : recommandation de méthodes de gestion à intégrer dans les contrats applicables aux travaux de remédiation générale du site ou aux travaux de génie-civil. Outre la réduction de la pollution existante, la méthode de gestion devra inclure des méthodes correctives pour éviter la récurrence de ces contaminations, par exemple : éliminer les fuites sur les structures de confinement secondaire des cuves d'huile, réparer les séparateurs huile-eau, et empêcher l'accès du public aux infrastructures de stockage de l'huile usagée.
- i) La gestion des déchets sur le site de décharge de Parakou, et la pollution du sol et des eaux souterraines.

Dans le cadre de la gestion à court-terme, le Consultant devra fournir une conception préliminaire, ainsi qu'une estimation des coûts de construction et exploitation d'un Site de Stockage Sécurisé destiné aux équipements et matières dangereuses. Dans la conception préliminaire, le Consultant devra notamment identifier et étudier au moins trois sites potentiels viables pour le stockage en question. Si le Consultant décide de l'utilité de sites de stockage intermédiaires devant abriter temporairement les équipements ou les huiles contaminées trouvés dans des zones reculées jusqu'à leur transfert sur le site principal, il devra également procéder à une identification, conception et chiffrage préliminaires de ces sites.

Tâche 8. Propositions d'Options de Gestion à Long-Terme. Le Consultant recommandera des options de réduction "permanente" des risques, et ce, en utilisant les résultats de l'évaluation qualitative des risques pour définir des priorités dans les différentes actions et pour identifier celles qui doivent être exécutées au titre du Compact, par rapport à celles qui pourraient être différées ou retardées jusqu'à la mise en place éventuelle d'un dispositif régional (en Afrique de l'Ouest) destiné au traitement des matières dangereuses. Cette activité doit être réalisée en collaboration

avec la SBEE. Une estimation des coûts pour les options proposées devra être fournie. Ces options devront être conformes à la législation du Bénin, aux conventions internationales signées/ratifiées par le Bénin et aux meilleures pratiques / normes internationales.

Options relatives à la contamination par les PCB. En exécutant cette tâche, le Consultant doit avoir à l'esprit que le site de Bamako retenu comme faisant partie d'un programme régional de gestion de la pollution par les PCB n'existe pas encore. Le programme régional est moribond ; et donc Bamako ne constitue pas une option réaliste. Il existe d'autres possibilités qui incluent, mais sans s'y limiter, les points ci-dessous. Le Consultant devra fournir une estimation de coûts pour les propositions d'options.

- a) Mettre en place au Bénin, une procédure de traitement visant à purger et à conditionner les huiles, décontaminer les équipements qui peuvent être facilement décontaminés et expédier par bateau sur l'Europe ou sur l'Afrique du Sud en vue de leur traitement ou de leur élimination, les huiles et les équipements qui restent contaminés.
- b) Point a) mais avec un traitement au niveau local. Un projet intervenant dans le stockage des équipements et matières contaminés par les PCB au Nigéria a identifié un système "mobile" (c'est-à-dire, monté sur remorque) de traitement chimique qui permet de neutraliser les PCB en ôtant les atomes de chlore des molécules, et d'utiliser à nouveau l'huile décontaminée obtenue. Il serait nécessaire de documenter cette approche de manière approfondie. La destruction des PCB dans le four de la cimenterie Lafarge à Onigbolo ou dans d'autres fours à haute température que le Consultant pourra identifier au Bénin, au Togo et au Nigéria constitue une autre option qu'il faudrait étudier en termes de faisabilité, d'impact environnemental, de santé et de sécurité.
- c) Mettre en place un atelier de réparation de transformateurs (en conformité avec les normes techniques, environnementales et sociales) comprenant entre autres:
 - un bâtiment industriel équipé de palan de 20 à 25 tonnes ;
 - un banc d'essai moderne avec salle d'injection HT ;
 - un lot d'appareils de mesure (ratiomètre triphasé, mégohmètre 20 KV, micromètre, multimètre, analyseur de réponse en fréquence etc.) ;
 - un lot d'outillage (valise de clé facom, transpalette, échelle etc.).L'exploitation dudit atelier peut être confiée à un privé ou au personnel de la SBEE. Le Consultant devra préparer un plan de conception et estimer les coûts au cas où cette option s'avérerait utile, et proposer un programme de formation en réparation de transformateurs.
- d) Fournir les grandes lignes d'un programme de prévention contre un nouvel apport d'équipements et huiles contaminés par les PCB. Ce programme devra prévoir des activités telles que : (i) identifier des fournisseurs fiables d'huile sans PCB, (ii) identifier des fournisseurs fiables de transformateurs non contaminés par les PCB, et (iii) proposer un système permettant de garantir que tous les équipements et huiles achetés ont été testés pour les PCB avant réception ;
- e) Proposer des indicateurs de suivi et les lignes de responsabilité au sein de la SBEE et/ou de la DGE pour assurer ce suivi.

Options relatives aux autres types de contamination. Des estimations de coûts doivent être fournies pour les options proposées.

- a) Formuler des recommandations sur le stockage du diésel et des huiles usagées assorties des exigences techniques (spécifications minimales de conception technique) et des estimations de coûts, pour les centrales thermiques et tous autres sites de projet où se trouvent ces matières dangereuses (tel qu'identifié au cours des tâches précédentes). La conception des structures de confinement, drainages et séparateurs d'huile doit être faite de manière à éviter que l'eau contaminée ne déborde de ces structures lorsqu'il pleut.
- b) Formuler des recommandations sur le recyclage ou le traitement, au niveau local, des huiles usagées et faire l'estimation des coûts et l'évaluation des risques. Les recommandations peuvent inclure l'interdiction formelle de vendre ces produits au public en raison de leurs impacts potentiels sur la santé humaine et sur l'environnement. Une option au niveau local, à évaluer en termes de faisabilité, d'impact environnemental, de santé et de sécurité est la destruction des huiles de vidange dans le four de la cimenterie Lafarge à Onigbolo ou dans d'autres cimenteries que le Consultant pourrait identifier.
- c) Faire des recommandations relatives à l'agrément d'entreprises de recyclage des huiles.
- d) Faire des recommandations sur la réduction ou l'élimination d'autres sources de pollution, tels que les métaux lourds.
- e) Formuler des recommandations sur l'enlèvement, le traitement et la mise en décharge adéquats des déchets accumulés sur le site solaire de Parakou.
- f) Proposer des indicateurs de suivi et les lignes de responsabilité au sein de la SBEE et/ou de la DGE pour assurer ce suivi

Tâche 9. Préparer les spécifications et les TDR pour les actions de remédiation à court terme. Le consultant doit préparer les spécifications et les TDR pour la remédiation des sites à entreprendre dans le Compact par les contractants de MCA. Ceux-ci porteront sur les équipements avec ou sans PCB, les huiles avec ou sans PCB, et le sol et l'eau contaminée, y compris toutes les mesures de remédiation applicables, comme recommandées dans la Tâche 7, et telles que convenues avec le MCC / MCA et SBEE. Les spécifications et TDR seront structurées en tenant compte des éléments suivants:

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- les mesures de remédiation relatives à la contamination par des PCB seront entreprises par un ou plusieurs entrepreneurs qualifiés PCB; les contaminations non PCB pourront être gérées par les contractants chargés de la construction, s'ils sont qualifiés; les travaux de construction peuvent être divisés en différents lots, encore à déterminer. .

Tâche 10. Rapports. Le Consultant produira les rapports provisoires et finaux tels que prévus dans la Section 4 (Livrables) dans les délais contractuels. Ces rapports doivent être illustrés par des cartes montrant la localisation et l'agencement des sites, les points d'échantillonnage, les équipements et zones contaminés, les zones ou éléments sensibles à risque (par exemple, habitations, puits, agriculture, etc.), ainsi que les plans conceptuels des infrastructures ou équipements recommandés dans les options de gestion à court et long terme.

Tâche 11. Transfert de connaissance/compétences et de technologie. La SBEE identifiera des agents pour accompagner et assister le Consultant, et donc bénéficier d'une formation pratique dans l'évaluation et la gestion des matières dangereuses (y compris les méthodes et outils d'analyse des données). De même, la Direction Générale de l'Energie (DGE, une entité ministérielle) sera également impliquée, et identifiera un agent pour accompagner et assister le Consultant.

3.5 Installations, Equipements et Démarrage

La mission du Consultant sera exécutée par une combinaison de travaux effectués à son bureau, de travaux en laboratoire et de missions temporaires au Bénin. Tous les bureaux sur site nécessaires pendant la période du contrat relèvent de la responsabilité du Consultant, y compris le mobilier de bureau, le matériel informatique et le téléphone. La location des bureaux dont il aura besoin au Bénin relèvent de sa responsabilité.

Le Consultant se chargera d'apporter des matériels de bureau adéquats capables de supporter un travail professionnel dans le cadre de son mandat. A cet effet, il lui incombe de garantir la mise en place d'une connexion internet continue et performante, ce qui peut constituer un défi au Bénin. Il relève également de la responsabilité du Consultant de fournir son propre moyen de déplacement adapté aux exigences de la mission, notamment aux visites de terrain, relevés de terrain, échantillonnage et analyses ainsi que déplacements réguliers ou ad-hoc selon les besoins de la mission. Il revient aussi au Consultant de prendre une assurance complète qui couvre sa flotte automobile et son personnel.

Les équipements achetés ou utilisés par le Consultant pendant la période d'exécution de la présente mission (c'est-à-dire, le matériel de bureau, les programmes/logiciels, les équipements de topographie, etc.) devront être transférés à la fin de la mission au Client (ou à une entité d'exécution désignée) avec formation complète pour assurer la pérennité du programme.

Dès la réunion de démarrage, le Consultant devra se doter de personnel suffisant en vue de satisfaire aux exigences du présent contrat. Tout au long de la mission, le Spécialiste en gestion des matières dangereuses, les experts en charge des questions de pollution et remédiation des sols et des eaux, les ingénieurs, le personnel d'appui, les systèmes, les experts dédiés, et toutes les autres compétences seront maintenues à un niveau qui assure la réussite du projet.

Le Consultant devra noter que les sites proposés dans le cadre du projet sont répartis sur l'ensemble du Bénin. Par conséquent, plusieurs visites de sites et des déplacements prolongés doivent être programmées suffisamment à l'avance.

4.0 LIVRABLES

4.1 Aperçu des livrables

Après la signature du Contrat et l'émission de la Notification de Contrat (« NDC »), la consultation sera lancée par une réunion de démarrage formelle à Cotonou (Bénin). Le Consultant sera représenté par le Chef de Mission (Spécialiste en gestion des matières dangereuses dans le secteur de l'électricité) et par le Personnel Clé. L'objectif de la réunion de démarrage sera d'aborder toutes les questions relatives au contrat ou à

l'étendue des travaux et de clarifier les attentes relatives aux tâches à exécuter.

Le tableau suivant résume les livrables avec leurs dates d'échéance :

RAPPORTS ET DELAIS DE SOUMISSION REQUIS		
Livable	<u>Date de soumission du Projet de Rapport</u> *	<u>Date de soumission du Rapport Final</u>
1. Rapport de démarrage (y compris la réunion de démarrage)	Dans un délai de 2 semaines après NDC	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le rapport de démarrage provisoire
2. Evaluation préliminaire des sites, cadre réglementaire, plan de travail mis à jour et plan d'échantillonnage détaillé	Dans un délai de 6 semaines après NDC	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le rapport de démarrage provisoire
3. Rapport d'avancement comportant : i) résumé des activités menées depuis le rapport de démarrage, ii) liste détaillée de tous les points d'échantillonnages / analyses iii) liste détaillée des échantillons envoyés au laboratoire, iv) descriptif des principaux résultats obtenus des observations / tests de terrain, v) contraintes et limites de terrain, vi) rapport Santé et Sécurité, vii) point sur le transfert de connaissance et de technologie à la SBEE	Dans un délai de 15 semaines après NDC ¹	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le rapport d'avancement
4. Rapport intermédiaire pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) : i) rapport détaillé sur les observations et mesures de terrain ii) cartes montrant les zones contaminées et les points d'échantillonnage, iii) résultats de laboratoire, iv) analyse / interprétation de l'étendue et du degré de contamination, par rapport à la réglementation béninoise et aux normes internationales	Dans un délai de 22 semaines après NDC	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le rapport intermédiaire pour les sols et l'eau (PCB, hydrocarbures, métaux lourds, etc.)

5. Rapport intermédiaire pour les huiles et les équipements électriques (PCB et non PCB) : i) rapport détaillé sur les observations / mesures de terrain, ii) résultats de laboratoire, iii) analyse / interprétation de l'étendue et du degré de contamination par rapport aux dispositions de la réglementation béninoise et aux normes internationales	Dans un délai de 22 semaines après NDC	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le rapport intermédiaire pour les huiles équipements électriques (PCB et non PCB)
6. Rapport d'Evaluation des Risques (y compris Carte des risques)	Dans un délai de 22 semaines après NDC	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le Rapport d'Evaluation des Risques
7. Plan de remédiation à Court-Terme ³ pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) : i) résumé des principaux constats relatifs à la localisation, étendue et degré de contamination, ii) mesures détaillées de remédiation à court-terme, iii) estimation des coûts	Dans un délai de 29 semaines après NDC ²	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le plan de remédiation à court-terme pour les sols et l'eau
8. Plan de remédiation à Court-Terme ³ pour les huiles et équipements électrique (PCB et non PCB) : i) résumé des principaux constats relatifs à la localisation, étendue et degré de contamination, ii) mesures détaillées de remédiation à court-terme, iii) estimation des coûts,	Dans un délai de 29 semaines après NDC ²	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le plan de remédiation à court-terme relatif aux huiles et équipements électriques
9. Plan de Gestion à Long-Terme ⁴ (opérations de la SBEE après l'achèvement du compact) : i) résumé des principaux constats relatifs aux sources / causes de contamination, ii) mesures / installations détaillées de remédiation à long terme ; iii) estimation des coûts ; un rapport distinct doit être élaboré pour chaque centrale électrique et un pour	Dans un délai de 29 ² semaines après le début du contrat	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur le Plan de gestion à long-terme

l'ensemble des sous-stations.		
10. TDR et spécifications pour les travaux de remédiation à court terme	Dans un délai de 36 semaines après le début du contrat	Dans un délai de 2 semaines à compter de la date de réception des commentaires sur les TDR et spécifications

¹Le livrable # 2 doit être approuvé avant le début des activités d'échantillonnage

² Les livrables # 4, 5, 6 doivent être approuvés avant de commencer la préparation des plans à court et à long terme

³ Remédiation / nettoyage à entreprendre avant les travaux de construction (mise en œuvre du compact)

⁴ y compris toutes installations (à ajouter aux conceptions détaillées) et meilleures pratiques en matière d'exploitation à long-terme des sites.

L'échéancier ci-dessus est présenté à titre indicatif. Les soumissionnaires sont vivement invités à proposer un plan de travail et une organisation susceptibles de réduire la durée globale de l'étude.

MCA-Bénin II a l'intention de formuler des observations sur tous les rapports provisoires dans un intervalle de deux semaines à compter de la réception de ces rapports ; le Consultant devra ensuite procéder à la finalisation du rapport dans un délai de deux semaines, en tenant compte des observations recueillies.

4.2 Présentation des Livrables

Le Consultant devra présenter les livrables suivant l'échéancier indiqué précédemment. Tous les projets de livrables seront soumis sous forme électronique en langue française et toutes les versions finales des livrables seront transmises sous format électronique et en 15 exemplaires imprimés à envoyer à MCA-Bénin II à Cotonou. Tous les rapports finaux seront soumis en Anglais et en Français.

L'emballage et le conditionnement de tous les livrables produits dans le cadre des présentes doivent être convenables et conformes à la pratique commerciale et permettre de garantir l'acceptation par le transporteur et une bonne réception à destination. Le numéro du contrat doit figurer sur chaque colis, rapport, ou autre livrable.

En général, tous les documents électroniques doivent être accessibles par : (1) MS Office 2003 (ou version plus récente) basé sur le système d'exploitation MS Windows, y compris Word pour le traitement de texte, Excel pour les feuilles de calcul et les tableaux, PowerPoint pour les présentations et Project pour les échéanciers ; (2) AutoCAD 2002 (ou version plus récente) et en format PDF pour les fichiers de plans originaux; (3) format JPG pour les photos numériques ; et (4) Manifold (logiciel utilisé par la SBEE) et ArcGIS 10.3, pour les données SIG. Les données brutes qui ne sont pas fournies sur tableur doivent être transmises soit en Microsoft Access (*.accdb), STATA (*.dta), ou SPSS (*.sav). Tout autre format sera soumis à l'approbation préalable de MCA-Bénin II.

5. PERIODE D'EXECUTION ET ECHEANCIER DE PAIEMENT

5.1 Période d'exécution

Les services à fournir dans le cadre du présent contrat sont prévus pour être réalisés sur une période de quarante- (40) semaines soit neuf mois et demi (09.5) mois calendaires. Le Consultant peut proposer des ajustements au calendrier et à l'échéancier des livrables décrits ci-dessous, à condition que tout échéancier alternatif respecte les exigences de MCA-Bénin II.

<u>DUREE DU CONTRAT</u>	
<u>Tâches et Déroulement des activités</u>	<u>Durée prévisionnelle*</u>
Rapport et réunion de démarrage (Livrable 1)	2 semaines (rapport provisoire)
Evaluation initiale de sites, cadre réglementaire, plan de travail mis à jour et élaboration de plan de travail détaillé (travaux, échantillonnage et réalisation d'analyses, Plan de Gestion Environnementale, Santé et Sécurité, etc.) (Livrable 2)	8 semaines
Echantillonnage, observations et mesures de terrain, analyses en laboratoire, interprétation des résultats et des niveaux de contamination, et évaluation des risques (Livrable 3 à 6)	16 semaines
Plans de remédiation à court et long terme (livrable 7 et 9)	7 semaines
Spécifications et TDR pour les travaux de remédiation à court terme	7 weeks
Total	40 semaines ou 9.5 mois

* Y compris les délais de commentaires et de soumission du rapport final, sauf si spécifié autrement.

Il est attendu que le Consultant soit disponible pendant la période d'exécution de la mission et il sera chargé de gérer le déroulement des activités. Il s'agit, entre autres, de la supervision et de la gestion de l'étude, des relations avec MCA-Bénin II et avec les autres parties (notamment SBEE, CEB, Agences d'Exécution concernées par la présente mission), de la gestion administrative et du contrôle de la qualité des services. Dans le cadre de la mission, un certain nombre de réunions entre MCA-Bénin II et le Consultant pourraient être programmées à tout moment. Le Consultant devra rédiger les comptes-rendus de toutes ces réunions.

5.2 Echéancier de Paiement

Le Consultant doit produire les rapports indiqués à la Section 4 ci-dessus et énumérés dans le tableau ci-dessous conformément aux normes techniques internationales les plus élevées en la matière. Le tableau suivant présente la liste des livrables qui sont attendus du Consultant, leur date de soumission, et les paiements y afférents. Le Consultant proposera dans le rapport de démarrage, un échéancier mentionnant les dates précises

de soumission de ces rapports.

LISTE DES LIVRABLES ET PAIEMENTS CORRESPONDANTS					
<u>ID</u>	<u>Titre du rapport</u>	<u>Provisoire ou définitif</u>	<u>Date prévue (Nombre de semaines après NDC)</u>	<u>Paiement (% de la valeur du marché)</u>	<u>Paiement cumulé (% de la valeur du marché)</u>
Délai d'exécution					
1	Rapport de Démarrage (y compris la réunion de démarrage)	Final	6	15%	15%
3	Rapport de d'avancement	Final	19	10%	25%
4, 5, 6	Rapport intermédiaire pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) 4Rapport intermédiaire pour les huiles et les équipements électriques (PCB et non PCB) Rapport d'Evaluation des Risques	Final	26	25%	50%
7, 8, 9	Plan de remédiation à Court-terme pour les sols et l'eau (PCB, hydrocarbures, métaux, etc.) Plan de remédiation à Court-terme pour les huiles et les équipements électriques (PCB et non PCB) Plan de gestion à long terme (opérations de la SBEE après l'achèvement du compact)	Final	33	40%	90%
10	Spécifications et TDR pour les travaux de remédiation à court terme	Final	40	10%	100%

6.0 DOTATION EN PERSONNEL ET PERSONNEL CLE

6.1 Equipe du Consultant

Le Consultant devra réunir une équipe composée de personnel clé et d'agents disposant d'une expertise internationale approfondie sur les meilleures pratiques en matière de gestion et remédiation des matières dangereuses. L'équipe doit, en outre, avoir des connaissances sur l'environnement local et régional, une maîtrise parfaite de la langue française et un appui technique et administratif suffisant pendant toute la durée du contrat.

Le consultant proposera du personnel complémentaire s'il y a lieu et ce, sur la base de la méthodologie et de l'approche qu'il a proposées pour atteindre les objectifs de la mission. Le Consultant doit fournir l'ensemble du personnel clé et le maintenir tout au long de la mission. Tout changement se fera sous réserve de l'approbation préalable de MCA-Bénin II conformément aux modalités du contrat.

6.2 Qualifications du Personnel clé

Le Consultant proposera une équipe d'experts capables de satisfaire aux exigences en matière de qualifications requises pour la mission.

La proposition comprendra les informations ci-après :

- La fonction et les responsabilités de chaque agent au sein de l'équipe et par rapport à chaque tâche ;
- Le nombre de jours de travail par agent dans le Projet et pour chaque tâche ;
- Un bref résumé de l'équipe proposée indiquant l'expérience pertinente des membres par rapport à la mission ;
- Une attestation prouvant la disponibilité du personnel proposé à exécuter entièrement la mission ;
- Le Curriculum Vitae du personnel proposé précisant les compétences et expertise pertinentes de chaque agent ;

L'équipe envisagée se composera au moins de :

Personnel clé

1. Chef de mission et Spécialiste en Gestion des Matières Dangereuses dans le secteur de l'électricité ;
2. Spécialiste en pollution et traitement des sols et des eaux.
3. Hydrogéologue
4. Spécialiste de la gestion/élimination des huiles
5. Ingénieur en Génie-Civil
6. Spécialiste SIG / Cartographe
7. Expert en Logistique / transport (transport des matières dangereuses)

DOTATION EN PERSONNEL	
Personnel Clé	
Rôle	Qualifications
Chef de Mission et Spécialiste en gestion des matières dangereuses dans le secteur de l'électricité	<i>Formation</i> : Master (BAC + 5) en Sciences de l'Environnement assortie d'une spécialisation en gestion des matières dangereuses et contrôle de la pollution; ou d'un diplôme d'Ingénieur en électricité couplée avec une spécialisation en gestion environnementale, santé et sécurité et gestion des matières dangereuses. <i>Expérience déterminante</i> : • Au moins 15 ans d'expériences dans le domaine de l'évaluation et la gestion/élimination des matières dangereuses : • Au moins 5 ans d'expériences en tant que Chef de Mission (ou Directeur de projet) dans des missions similaires • Vaste expériences en rapport avec le secteur de l'électricité (notamment centrales thermiques et transport / distribution d'électricité) • Expérience spécifique dans l'échantillonnage, analyse et évaluation des PCB dans les transformateurs, les disjoncteurs et tous autres appareils susceptibles d'être pollués par les PCB • Expérience spécifique dans la gestion/élimination des équipements et huiles contaminés par les PCB • Expérience en rédaction de TDR et spécifications techniques pour les dossiers d'appel d'offre • • Expérience et connaissance des normes internationales en matière de gestion des déchets / matières dangereuses, contamination et remédiation, notamment les normes de Performance de la SFI, la Convention de Stockholm, la Convention de Basel, l'Organisation Mondiale de la Santé et le Programme d'Environnement des Nations Unies –UNEP (produits chimiques), l'Organisation Internationale de Normalisation (ISO), etc.
Spécialiste en pollution et traitement des sols et de l'eau	<i>Formation</i> : Master (BAC + 5) en Sciences de l'Environnement assortie d'une spécialisation dans le domaine de la contamination et décontamination des sols et de l'eau. <i>Expérience déterminante</i> : • Au moins 10 ans d'expériences dans l'évaluation et la remédiation des sols et de l'eau contaminés, particulièrement par les carburants (diésel / fuel lourd), lubrifiants et PCB • Vaste expériences dans l'échantillonnage et l'analyse des contaminants (notamment les PCB, hydrocarbures, métaux et autres substances dangereuses) contenus dans le sol et dans

	l'eau • Vaste expériences dans le traitement des sols contaminés • Expérience et connaissance des normes internationales en matière de décontamination des sols et de l'eau et de la réduction des pollutions, notamment les normes de Performance de la SFI, l'Organisation Mondiale de la Santé, la Convention de Stockholm, le Programme d'Environnement des Nations Unies –UNEP (produits chimiques), l'Organisation Internationale de Normalisation (ISO), etc.
hydrogéologue	<i>Formation</i> : Master (BAC + 5) en hydrogéologie ou dans des domaines équivalent <i>Expérience déterminante</i> : • Au moins 5 ans d'expériences dans l'évaluation de la pollution des eaux souterraines, particulièrement dans le domaine de la contamination par les carburants (diésel / fuel lourd), lubrifiants et PCB • Vaste expériences dans l'échantillonnage et l'analyse des contaminants (notamment PCB, hydrocarbures, métaux et autres substances dangereuses) contenus dans les eaux souterraines – y compris également installation de forages • Connaissance des questions de santé relatives à la qualité de l'eau potable et aux contaminants • Expérience et connaissance des normes internationales en matière de contamination/pollution des eaux souterraines, notamment les normes de Performance de la SFI, l'Organisation Mondiale de la Santé, la Convention de Stockholm, le Programme d'Environnement des Nations Unies –UNEP (produits chimiques), etc.
Spécialiste en gestion/élimination des huiles	<i>Formation</i> : Master (BAC + 5) en Sciences de l'Environnement assortie d'une Spécialisation en gestion des matières dangereuses et contrôle de la pollution <i>Expérience déterminante</i> : • Au moins 5 ans dans la gestion et l'élimination des huiles (notamment diésel, lubrifiants, huile diélectrique) et des matériaux contaminés par les huiles (tels que filtres, chiffons, matériaux absorbants, etc.) • Expérience dans la gestion environnementale (gestion des matières dangereuses ; contamination ; santé et sécurité) des usines de fabrication de ciment ou autres types d'infrastructures utilisant l'incinération à haute température • Expérience et connaissance des normes internationales notamment les normes de Performance de la SFI,

	l'Organisation Mondiale de la Santé, la Convention de Stockholm, la Convention de Basel, le Programme d'Environnement des Nations Unies –UNEP (produits chimiques), l'Organisation Internationale de Normalisation (ISO), etc. • Expérience dans le domaine de la contamination des huiles par les PCB
Ingénieur en Génie-Civil	<i>Formation</i> : un Diplôme d'ingénieur en Génie-Civil couplé avec une spécialisation en conception d'infrastructures environnementales <i>Expérience déterminante</i> : • Au moins 5 ans d'expériences dans la conception des infrastructures de protection de l'environnement, en particulier : séparateurs d'huile, structures de confinement, zones de dépotage d'hydrocarbures, sites de stockage de matières dangereuses, mais aussi les infrastructures de traitement et contrôle de la pollution et de drainage, etc.; • Expérience en rédaction de TDR et spécifications techniques pour les dossiers d'appel d'offre • Expérience et connaissance des normes internationales en matière de gestion des matières /déchets dangereux, notamment les normes de Performance de la SFI, l'Organisation Mondiale de la Santé, la Convention de Stockholm, le Programme d'Environnement des Nations Unies –UNEP (produits chimiques), l'Organisation Internationale de Normalisation (ISO), etc. • Expérience dans les pays en développement ; • Expérience dans le secteur de l'électricité (production thermique ; distribution).
Cartographe	<i>Formation</i> : Master (BAC + 5) en Systèmes d'Information Géographique, cartographie et relevés géo-référencés <i>Expérience déterminante</i> : • Au moins 5 ans d'expériences dans le domaine de la cartographie et des SIG; • Expérience pratique dans l'utilisation des GPS et d'au moins 4 logiciels de cartographie ; • Expérience dans l'utilisation du SIG et de la cartographie pour des Etudes d'Impact Environnementale et Sociale, études de pollution ou évaluations de risque
Expert en Logistique / transport (transport des matières)	<i>Formation</i> : Diplôme Supérieur en logistique/ fret/transport ou dans des domaines similaires, de préférence couplé avec une spécialisation dans le domaine du transport des marchandises ou produits/déchets dangereux <i>Expérience déterminante</i> :

dangereuses)	• Au moins 5 ans d'expériences dans le domaine du transport/ fret des marchandises ou produits/déchets dangereux ; • Expérience dans le domaine du transport transfrontalier des déchets dangereux en vertu de la Convention de Basel serait un atout ; • Expérience et connaissance des normes et de la réglementation internationales relatives aux marchandises ou produits /déchets dangereux notamment les normes de Performance de la SFI, la Convention de Stockholm, la Convention de Basel ;
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6.3 Support logistique (gestion des échantillons)

Le consultant devra donner la preuve qu'il fournira l'assistance indispensable à l'importation/ exportation des équipements d'échantillonnage / analyse, de produits dangereux (le cas échéant : réactifs, conservateurs, lubrifiants, etc.) et d'échantillons. A cet effet, il devra justifier de l'expérience suivante:

- Chaîne du froid;
- Emballage/conditionnement (notamment transport aérien des produits dangereux) ;
- Réglementation et obtention d'autorisation en matière d'importation / exportation ;
- Chaîne de documentation.

6.4 Laboratoires

Le Consultant devra fournir les détails d'un (ou au besoin, de plusieurs) laboratoire(s) agréé(s) où il fera les analyses d'échantillons, y compris les informations suivantes :

- Nom
- Adresse
- Email & contact(s) téléphonique(s)
- Site Web (le cas échéant)
- Références principales
- Agrément (A titre exceptionnel, dans le cas d'un laboratoire ouvert au Bénin mais qui ne serait pas agréé, il faudra fournir le CV du Responsable du laboratoire ou du Chimiste qui certifiera les résultats des analyses)
- Résumé du protocole d'Assurance et Contrôle Qualité (QA/QC)
- Bref descriptif des expériences sur les 10 dernières années relatives à l'analyse des hydrocarbures, métaux lourds et PCB sur des échantillons d'eau et de sol, et à l'analyse de PCB sur des échantillons d'huile diélectrique (préciser le type d'analyses réalisées, nombre d'échantillons analysés, clients et projets ou contexte)
- Méthode d'analyse et seuil de détection relatif à chaque paramètre à analyser.

6.5 Qualifications additionnelles

Tous les membres de l'équipe du Consultant sus-énumérés doivent justifier des qualifications complémentaires suivantes :

4. Ecrire et parler couramment l'Anglais et le Français (tous les rapports écrits doivent être soumis en Anglais et Français).
5. Maîtriser l'outil informatique.
6. L'expérience professionnelle au Bénin ou dans d'autres pays francophones d'Afrique est vivement souhaitée.

Le Consultant peut fournir, au besoin, un personnel complémentaire d'appui technique. Il est attendu que l'équipe soit composée d'une combinaison de consultants nationaux et étrangers afin d'accéder de manière optimale à toutes les parties prenantes locales et de faciliter le développement d'une expertise locale.

7. INFORMATIONS, APPUI ET DOCUMENTS A FOURNIR

7.1 Informations à fournir par le Consultant

Le principal lieu d'affectation de l'équipe du Consultant sera aux bureaux du Consultant et à Cotonou.

Le Consultant sera responsable de l'ensemble des ressources humaines nécessaires à la conduite de la mission, des bureaux, du déplacement (à l'intérieur et l'extérieur du pays), de l'hébergement, des fournitures de bureau, des communications, des ordinateurs et accessoires, de la traduction/interprétation (en cas de besoin), de l'assurance (le cas échéant), de la formation du personnel et d'autres coûts liés à ses responsabilités dans le cadre de la mission. Tous les équipements et/ou outils nécessaires à la réalisation des études, évaluations, et analyses décrites dans les présentes doivent être fournis par le Consultant sans coût additionnel.

7.2 Suivi de l'Exécution du Contrat

Le Consultant devra mettre en place et conserver un Plan de Contrôle de Qualité ("PCQ") qui expliquera tout au moins la manière dont il envisage de respecter les exigences de l'ensemble des objectifs de performance, de suivre et de gérer de façon proactive les exigences inhérentes aux travaux. Il devra également inclure le mécanisme par lequel l'entité MCA-Bénin II sera informée des incidents liés à l'exécution des tâches et qui sont susceptibles d'affecter la qualité des services ou d'avoir un impact sur la conduite de la mission. Le Consultant fournira une copie de son PCQ en même temps que le rapport de démarrage. Toute proposition de modification au PCQ sera soumise à l'entité MCA-Bénin II pour examen et commentaires au plus tard 10 jours ouvrables avant la date d'entrée en vigueur des modifications proposées.

7.3 Assistance fournie par MCA-Bénin II

La principale personne ressource du Consultant dans le cadre de cette mission sera le Chef de la Performance Environnementale et Sociale de MCA-Bénin II. Pour des questions détaillées d'ordre technique, d'autres personnes ressources seront identifiées et feront l'objet d'un accord au cours de la réunion de lancement, et indiquées dans la version finale du rapport de démarrage.

MCA-Bénin II doit fournir au Consultant les informations et l'assistance suivantes :

- (a) L'accès à tous les rapports, données et autres documents nécessaires en relation avec la mission et qui peuvent être déjà disponibles ;
- (b) Les lettres de recommandation pour faciliter le contact avec différentes catégories de parties prenantes, ministères, autorités gouvernementales et organismes dont les activités et les rôles sont essentiels pour la mission du Consultant ;
- (c) Les lettres d'invitation qui peuvent être nécessaires pour appuyer les demandes de visa d'entrée et de sortie pour le personnel expatrié du Consultant ;
- (d) Une facilitation pour l'obtention de tous permis nécessaires au personnel du Consultant pour l'accomplissement de sa mission au Bénin ;
- (e) Une facilitation pour l'importation et l'exportation des équipements et des échantillons dont pourrait avoir besoin le Consultant dans le cadre de l'exécution de ses services de consultation ainsi que les biens appartenant à son personnel expatrié ;
- (f) L'appui à l'organisation des réunions avec le Ministère du Cadre de vie et du développement durable et/ou l'Agence Béninoise pour l'Environnement (ABE).

7.4 Documents à fournir par MCA-Bénin II

Toute la documentation nécessaire relative au Compact devra être mise à la disposition du Consultant. Ces documents devront inclure, sans toutefois s'y limiter :

- a. Compact signé le 09 septembre 2015 ; Le Compact est également disponible sur le site internet www.mcc.gov
- b. Les aspects techniques des accords relatifs aux travaux des Agence d'Exécution au fur et à mesure qu'ils seront disponibles ;
- c. Les Politiques pertinentes de MCC : les Directives de MCC sur l'Environnement, la Politique de MCC pour le Suivi/Evaluation des Compacts et des Programmes-Seuil, les Directives de MCC en matière d'utilisation d'indicateurs communs, la Politique de MCC en matière d'égalité des sexes et d'intégration de l'approche genre, les Directives de la passation des marchés de MCC (disponible sur le site web www.mcc.gov)
- d. Les lois, réglementations et procédures officielles en vigueur au Bénin, particulièrement celles relatives aux exigences et processus d'octroi des permis environnementaux
- e. Les Rapports pertinents utilisés au cours du processus d'élaboration des activités du Programme :
 - (i) Le rapport sur l'inventaire des transformateurs de la SBEE
 - (ii) Le rapport de la SBEE sur les PCB
 - (iii) Autres études pertinentes.
- f. Les Rapports mentionnés aux présentes et préparés par d'autres Consultants.

7.5 Assistance fournie par la SBEE et la DGE

La SBEE est une partie prenante fondamentale qu'il faudra activement impliquer dans la présente évaluation des matières dangereuses, aussi bien en termes de concertation

que de transfert de technologie.

La SBEE fournira un accès aux sites, aux équipements, notamment aux transformateurs en exploitation.

La SBEE prendra les dispositions nécessaires pour garantir la santé et la sécurité de l'équipe, notamment par rapport à l'accès aux transformateurs en exploitation, conformément aux conseils du Consultant. Toutefois, le Consultant sera chargé de fournir un Equipement de Protection Personnelle (EPP) ou d'autres dispositifs spécifiques pour la santé et la sécurité dans le cadre de la présente mission, y compris les agents de la SBEE et DGE qui l'accompagneront.

La SBEE fournira des informations d'ordre technique sur les sites et sur la gestion des matières dangereuses qui s'y trouvent. Il sera nécessaire d'obtenir des informations précises de la SBEE sur les contaminations actuelles et historiques sur tous les sites, ainsi que toute autre information qui peut être nécessaire pour élaborer le plan d'échantillonnage (par exemple emplacement des câbles ou des tuyaux souterrains).

La DGE aussi est une partie prenante fondamentale qu'il faudra impliquer dans la présente évaluation des matières dangereuses, aussi bien en termes de consultation que de transfert de technologie.

La DGE facilitera l'identification et le suivi des indicateurs d'ordre juridique, elle fournira aussi suffisamment d'information d'ordre réglementaire.

LISTE DES ACRONYMES/ABREVIATIONS

AAE	Accord d'Agence d'Exécution
ABE	Agence Béninoise pour l'Environnement
ABERME	Agence Béninoise d'Electrification Rurale et de Maîtrise de l'Energie
AE	Agence d'Exécution
AF	Agent Fiduciaire
ANADER	Agence Nationale pour le Développement des Energies Renouvelables et de l'Efficacité Energétique
APM	Agent de Passation des Marchés
AR	Agence Responsable
ARE	Autorité de Régulation de l'Electricité
CCR	Conditions de contamination reconnue
CEB	Communauté Electrique du Bénin
DGE	Direction Générale de l'Energie
EPP	Equipement de Protection Personnelle
FCFA	Franc de la Communauté Financière Africaine
GdB	Gouvernement de la République du Bénin
GPS	Système de Positionnement Géospatial
MCA-Bénin II	Millennium Challenge Account-Bénin II
MCC	Millennium Challenge Corporation
MEF	Ministère de l'Economie et des Finances
MEEM	Ministère de l'Energie, de l'Eau et des Mines
NDC	Notification de contrat
OMS	Organisation Mondiale de la Santé
PCB	Polychlorobiphényles
PCQ	Plan du Contrôle de Qualité
PV	Photovoltaïque
PNUE	Programme des Nation Unies pour l'Environnement
QA/QC	Assurance et contrôle qualité

S&E	Suivi et Evaluation
SBEE	Société Béninoise d'Energie Electrique
SCADA	Système de Contrôle et d'Acquisition de Données
SFI	Société Financière Internationale (SFI)
SIG	Système d'Information Géographique
TDR	Termes de Référence
US EPA	United States Environmental Protection Agency

ANNEXE 1. DESCRIPTION DES SITES ET DES EQUIPEMENTS A ECHANTILLONNER ET ANALYSER

PROJET PRODUCTION D'ELECTRICITE

Centrale thermique de Porto Novo

Remarque : Les chiffres énumérés ci-dessous constituent des ordres de grandeur et devront être confirmés/fournis avec précision dans le cadre de cette mission.

Le site s'étend sur une superficie d'environ 2 ha et existe depuis 30 ans (Voir Figure 1-1), même si en 2005, il a été élargi à sa dimension actuelle grâce aux travaux de construction de la centrale thermique implantée sur un terrain où s'étendaient des jardins et des habitations. Le site se trouve dans la zone urbaine de Porto Novo.

Coordonnées: 6.498075033N / 2.618814221E

En juillet 2015, le niveau d'eau souterraine a été observé à environ 14 m de profondeur, dans deux puits situés à proximité du site (6.49766N / 2.61915E; 6.49861N / 2.61876E), mais cette profondeur pourrait être beaucoup plus importante à la fin de la saison sèche.

La subdivision du site comprend :

- Le bâtiment abritant la centrale électrique contenant 6 moteurs (Wärtsilä, de 2 MW chacun) fonctionnant à base de diesel, et situé dans l'espace triangulaire sud du site; le bâtiment est entouré d'une cour extérieure qui accueille les équipements ci-après (le sol n'est pas pavé mais partiellement recouvert de petits blocs en ciment) :
 - Des cuves d'alimentation de 5 000L pour le diesel et les huiles
 - Une cuve de 5 000L pour le lubrifiant usagé (provenant des groupes électrogènes) placée dans un bac de rétention (l'huile est directement pompée des groupes électrogènes vers la cuve) ; l'eau de pluie accumulée dans le bac de rétention est vidée sur le sol à l'extérieur du bac.
 - Un système de refroidissement (d'une hauteur d'environ 2 ou 3 m et en dessous duquel se trouve une dalle en béton où peuvent être stockés des équipements)
 - Un séparateur d'huile ne fonctionnant pas et débordant à chaque pluie, créant de larges marques sur le sol tout autour
 - Des drains mis en place autour du bâtiment drainent (probablement) les fuites d'huiles et les eaux de ruissellement vers le séparateur d'huile, qui n'est pas nettoyé et qui déborde chaque fois qu'il pleut
- La sous-station, implantée au centre du site, entre la centrale électrique et les cuves de diésel ; elle contient 5 transformateurs et un bâtiment abritant l'unité de contrôle de la sous-station
- Une cour-arrière située sur la partie nord du site accueille :

- Les principales cuves de diésel (disposées dans une structure de rétention secondaire) et le point de dépotage du diésel (non imperméabilisé et sans dispositif de prévention/collecte des déversements)
- Un terrain nu servant à stocker différentes sortes d'équipements (vieux et neufs ; encore fonctionnels ou au rebut) tel qu'indiqué dans les tableaux 1-1 et 1-2, y compris des transformateurs.

Les superficies des zones contaminées ont été estimées de façon approximative sur la base des marques visibles (diésel, lubrifiant, et huile de transformateur) laissées sur le sol et de la disposition actuelle des infrastructures et équipements. La superficie totale concernée est de 1300 m², y compris 300 m² d'espace à haut risque de contamination par les diesel/lubrifiants, et 300 m² à haut risque de contamination par les PCB (l'espace où sont stockés les transformateurs). Elle n'inclut pas les zones sous les bâtiments existants et les structures de rétention secondaires. Il est important de mentionner que des équipements ont probablement été éparpillés et déplacés ici et là au cours des années. De même, il faut faire remarquer qu'en général, des eaux de ruissellement probablement contaminées s'écoulent du site vers les drainages urbains le long des rues à l'extérieur de l'enceinte de la SBEE.

Tableau 1-1. Transformateurs en exploitation au niveau de la sous-station de Porto-Novo

Marque	Numéro de série du Transformateur	Année	Puissance (kVA)	Poids Total (kg)	Poids de l'huile (kg)	Fuite
ABB	LIT00701A	2004	12500 16000	36000	8500	Pas à notre connaissance
Société Normande de transformation	93906	2006	36000	31000	5800	Pas à notre connaissance
CHINT	200901002	2009	31500	64000	15000	Pas à notre connaissance
Tansfix	01320GBRC	2007	160	610	120	Pas à notre connaissance
N/A	83639	2002	160	850	210	Pas à notre connaissance

Tableau 1-2. Liste des transformateurs stockés / abandonnés sur le site de Porto Novo

Marque	Numéro de série du Transformateur	Année	Puissance (kVA)	Poids Total (kg)	Poids de l'huile (kg)	Fuite
Kotsons (India)	E17576	?	400	1500	400	Pas à notre connaissance
France Transfo	173276-04	1990	15	135	40	Pas à notre

						connaissance
Energy transfor (Maroc)	T160230	2013	160	830	190	Pas à notre connaissance
France Transfo	I73276-01	1990	15	135	40	Oui
Timsan tranformator (Turquie)	6318	?	100	779	148	Oui; brulé

Figure 1-1. Site de la Centrale thermique de Porto Novo et zones contaminées



Centrale thermique de Parakou

Le site s'étend approximativement sur une superficie de 2 ha, au cœur d'un large domaine d'environ 20 ha appartenant à la SBEE. Il existe depuis une quarantaine d'années (Voir Figure 1-2) et a été aménagé sur un espace vert.

Il est implanté dans la zone urbaine de Parakou, à côté d'un ensemble de bâtiments administratifs (y compris l'Université), d'habitations et d'une dépression non construite (zone marécageuse) exploitée à des fins agricoles et qui est en partie la propriété de la SBEE, tel que précédemment mentionné.

Coordonnées: 9.3356728N / 2.641450596E

En juillet 2015, le niveau de l'eau souterraine a été observé à environ 1 ou 2 m de profondeur dans deux puits à proximité du site (9.33518 / 2.64410; 9.33326/2.64055) ; dans le bas-fond marécageux adjacent, l'eau souterraine se trouve juste en dessous de la surface du sol, mais cette profondeur pourrait être beaucoup plus importante à la fin de la saison sèche.

Le site est subdivisé comme suit :

- Le bâtiment abritant la centrale électrique contenant 7 moteurs diesel (Wärtsilä de 2 MW chacun), situé dans la partie ouest du site, à proximité des installations de la SONEB (usine de traitement d'eau potable) ; le bâtiment est entouré d'une cour extérieure qui accueille les équipements ci-après (le sol n'est pas imperméabilisé mais partiellement remblayé afin d'élever son niveau par rapport au sol naturel) :
 - Des cuves d'alimentation de 5 000L pour le diesel et les huiles
 - Une cuve de 20 000L servant au stockage de lubrifiant usagé (émanant des groupes électrogènes) contenu dans un bac de rétention secondaire (l'huile est directement pompée des groupes électrogènes vers la cuve) ; un trou a été fait dans le bac de rétention pour évacuer l'eau de pluie et les huiles qui s'y sont déversées
 - Le système de refroidissement, au-dessous duquel se trouve une plateforme en béton pouvant servir à stocker des équipements
 - Un séparateur d'huile qui n'est pas fonctionnel et déborde chaque fois qu'il pleut, créant sur les sols tout autour, de larges marques d'huile qui sont finalement drainées vers la zone marécageuse
 - Des drains autour du bâtiment orientent (probablement) les fuites d'huile et les eaux de ruissellement vers le séparateur d'huile
 - Une cuve de stockage de diesel de 500 000 L (installée dans une structure de rétention secondaire) et un point de dépotage du diesel (non imperméabilisé et sans dispositif de prévention et collecte des déversements)
 - Un transformateur fabriqué en 2004
- L'ancienne centrale électrique située sur la partie centrale du site ; les vieux groupes électrogènes ont été démantelés en 1986 et il est possible qu'il y ait eu une pollution par l'amiante à cette époque (non confirmé) ; le bâtiment abrite actuellement un groupe électrogène Caterpillar vétuste de 5 MW ; il est rattaché aux cuves de stockage ci-après :

- Une cuve de fioul lourd d'une capacité de 500,000 L, une cuve de diésel d'une capacité de 10,000 L, une centrifugeuse de fuel lourd et une cuve pour fuel filtré d'une capacité de 10,000 L (tous disposés dans une structure de rétention secondaire) ; ces structures de rétention peuvent être aussi des sources de pollution à cause de leur système d'évacuation ; le bâtiment est équipé d'un dispositif d'évacuation apparemment orienté vers la zone marécageuse.
- Trois cuve de 50 000 L, une cuve de 12 000 L et une cuve de 1 000 L pour les anciens groupes électrogènes (tous sont disposés dans des structures de rétention secondaire) hors d'usage et apparemment en mauvais état de même que la structure de rétention ; tout cet ensemble peut également être source de pollution.
- Des ateliers et des entrepôts de stockage sont implantés le long de la limite sud du site ; les ateliers sont équipés d'un dispositif d'évacuation apparemment orienté vers la zone marécageuse ;
- Une cour-arrière située au nord-est du site sert d'espace de stockage pour différentes sortes d'équipements (vieux et neufs ; encore fonctionnels ou hors d'usage) tels que mentionnés dans les tableaux 1-3 and 1-4, et des transformateurs. Lesdits équipements sont entreposés sur le sol non imperméabilisé, sans aucune infrastructure pour les protéger de la dégradation et éviter les problèmes de pollution.
- Un incinérateur de résidus d'huile.

Les superficies contaminées ont été estimées de façon approximative sur la base des marques visibles (diésel, lubrifiant, et huile de transformateur) laissées sur le sol et de la disposition actuelle des infrastructures / équipements. La superficie totale couverte est de 7500 m², y compris 200 m² d'espace à fort risque de contamination par les diésel/lubrifiants, et 3 500 m² à fort risque de contamination par les PCB (l'espace où sont stockés les transformateurs). Elle n'inclut pas les espaces situés sous les bâtiments existants et les cuves. Il est important de mentionner que les équipements ont probablement été éparpillés et déplacés ici et là au cours des années. Par ailleurs, il se pourrait que la zone marécageuse située immédiatement en aval du site soit contaminée étant donné qu'elle reçoit les eaux de ruissellement (et probablement les eaux souterraines) provenant du site.

Table 1-3: Transformateurs stockés / abandonnés sur le site thermique de Parakou

Marque	Numéro de série du Transformateur	Année	Lieu de fabrication	Puissance (kVA)	Poids Total (kg)	Poids de l'huile (kg)	Fuite
Matelec	20146119	2012	Liban	100	645	145	Non
Matelec	20146128	2012	Liban	160	?	?	Non
Matelec	20181351	2012	Liban	100	645	145	Non
Matelec	20146115	2012	Liban	100	645	145	Non

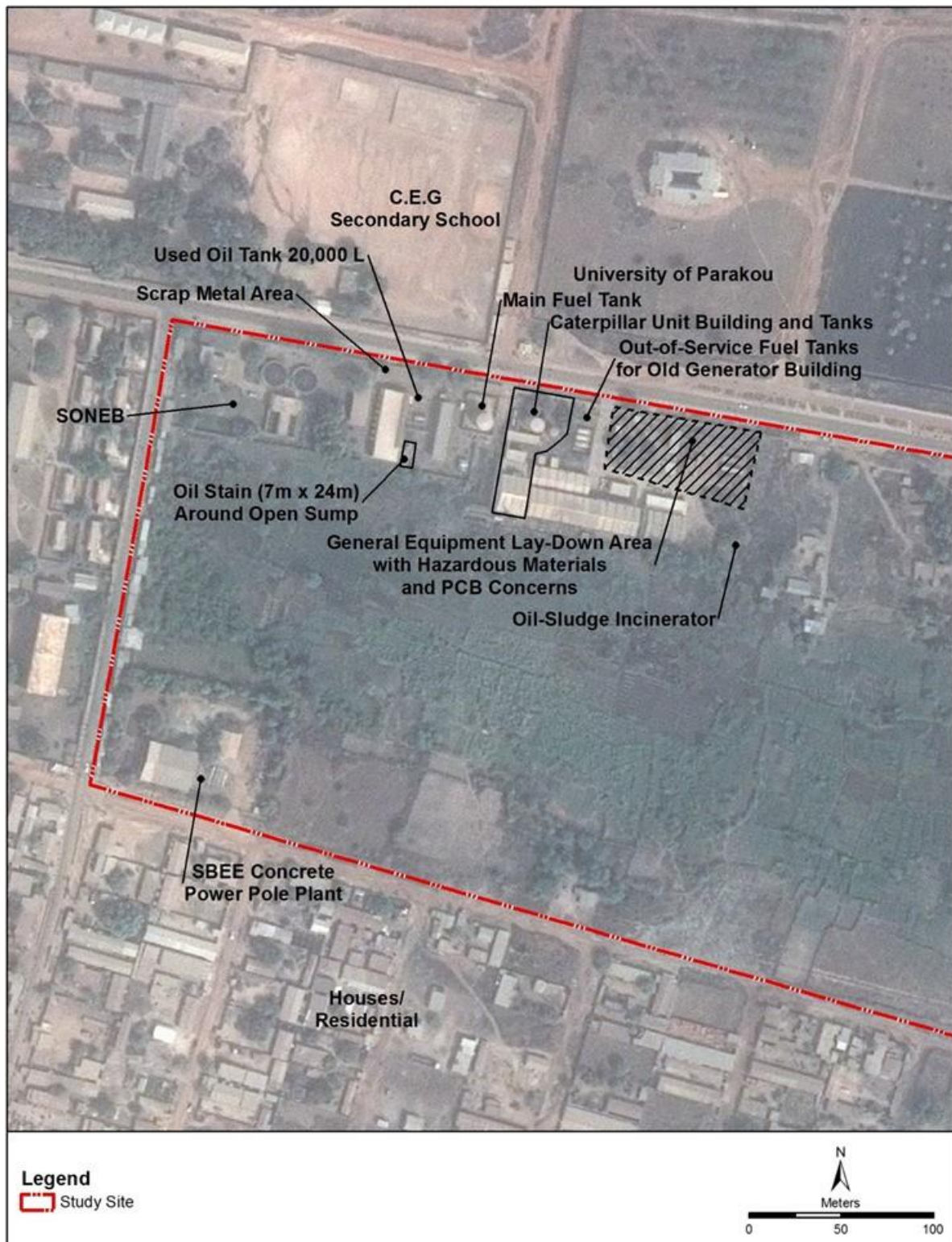
Nexans	09001923	2009	Maroc	100	614	203	Non
Energy Transfo	T1602529	2013	Maroc	160	830	190	Non
Energy Transfo	T1602531	2013	Maroc	160	830	190	Non
Asea	?	?	?	?	?	?	Oui
Nexans	10002329	2010	Maroc	160	1100	291	Non
Pauwels Trafo	88N1952	1988	Ireland	100	550	110	Non
Beltransfo	402305	2004	Maroc	400	1320	300	Non
Trafo	50/33-2014009	2014	Turquie	50	440	122	Non
Energy Transfo	T1602527	2013	Maroc	160	830	190	Non
Energy Transfo	T1602534	2013	Maroc	160	830	190	Non
Afric Transfo	12102467	2012	Maroc	160	694	200	Oui
Transfix	DN0193	1999	France	250	925	209	Non
Nexans	07003015	2007	Maroc	250	1058	270	Non

Tableau 1-4 Liste des matériels (autre que les transformateurs) stockés / abandonnés sur le site de Parakou

Remarque : Estimations brutes sur la base d'un inventaire rapide visant à établir un ordre de grandeur de l'existant sur le site

Article	Quantité	Observations
Fûts d'huile vides de 200 L	7	Sur le site depuis le temps de l'ancienne centrale électrique
Fûts d'huile pleins de 200 l	6	Sur le site depuis le temps de l'ancienne centrale électrique
Cuves à diesel vides de 3000 L	2	Propriété de la SONACOP (Société Nationale de Commercialisation des Produits Pétroliers) – Fournisseur de carburant de la SBEE
Cuves à diesel vides de 5000 L	1	A éliminer
Vieille cuve à diesel de 50 000 L	3	A éliminer
Vieille cuve à diesel de 12 000 L	1	A éliminer
Vieille cuve à diesel de 50 000 L	1	A éliminer

Figure 1-2 Site thermique de Parakou et zone de contamination du sol



Centrale thermique de Natitingou

Le site s'étend sur une superficie d'environ 2 ha. Il a été implanté en 2004 et la sous-station construite en 2007 (Voir Figure 1-3).

Il est implanté en zone rurale dans la périphérie de Natitingou et situé à proximité des habitations, des zones de cultures et d'une aire de pâturage.

Coordonnées: 10.2286303N / 1.398639102E

En juillet 2015, le niveau de l'eau souterraine a été observée à environ 8 m de profondeur, dans un puits à proximité du site (10.2280 / 1.39704) ; cette profondeur pourrait toutefois être beaucoup plus importante à la fin de la saison sèche.

La subdivision du site se présente comme suit :

- Le bâtiment abritant la centrale électrique contenant 6 moteurs diésel (Wärtsilä de 2 MW chacun), situé au nord-ouest du site ; le bâtiment est entouré d'une cour extérieure qui accueille les équipements ci-après (le sol n'est pas imperméabilisé) :
 - Des cuves d'alimentation de 5 000L pour le diésel et l'huile
 - Une cuve de 5 000L pour lubrifiant usagé (émanant des groupes électrogènes) contenu dans un bac de rétention secondaire (l'huile est directement pompée des groupes électrogènes vers la cuve) ; le bac de rétention est vidé sur le sol quand il se remplit d'eau ;
 - Un système de refroidissement en dessous duquel sont stockés des équipements
 - Un séparateur d'huile qui ne fonctionne pas et déborde à chaque pluie, créant de grosses marques sur le sol tout autour, cette huile est finalement évacuée vers le drainage de la route nationale ;
 - Des drains mis en place autour du bâtiment orientent (probablement) les fuites d'huile et les eaux de pluie vers le séparateur d'huile
 - Un transformateur ;
- Une cour-arrière située sur la partie centrale du site accueille :
 - Le principal réservoir de diésel (disposé dans une structure de rétention secondaire) et le point de dépotage du diésel (non imperméabilisé et sans dispositif de prévention/collecte des déversements)
 - Un terrain nu servant à stocker différentes sortes d'équipements (vieux et neufs; encore fonctionnels ou hors d'usage) tel qu'indiqué dans les tableaux 1-5 à 1-7, des transformateurs et des filtres d'huile usagés. Ces équipements sont entreposés sur le sol non imperméabilisé, sans aucune infrastructure pour les protéger de la dégradation et éviter les problèmes de pollution (à l'exception d'un abri basic pour certains transformateurs).
- Une sous-station située sur la partie ouest du site, avec un transformateur fonctionnel et un petit bâtiment abritant l'unité de contrôle de la sous-station
- Un espace libre le long de la limite ouest du site est exploité par le personnel pour la production agricole
- Le logement du chef de la centrale électrique est situé au sud de la sous-station.

Les superficies contaminées ont été estimées de façon approximative sur la base des

marques visibles (diésel, lubrifiant, et huile de transformateurs) laissées sur le sol et de la disposition actuelle des infrastructures / équipements. Leur superficie totale est d'environ 800 m², y compris 400 m² à fort risque de contamination par les diésel/lubrifiants, et 150 m² à fort risque de contamination par les PCB (l'espace où sont actuellement stockés les transformateurs). Ceci n'inclut pas les surfaces sous les bâtiments existants et les structures de rétention secondaires. De même, il faut faire remarquer que des équipements ont peut-être été éparpillés et déplacés ici et là au cours des années. Enfin, les eaux de ruissellement s'écoulent à l'extérieur du site vers la route principale adjacente.

Figure 1-3. Centrale thermique de Natitingou



Tableau 1-5. Liste des transformateurs en exploitation sur le site de la centrale thermique de Natitingou

Marque	Numéro de série du Transformateur	Année	Emplacement	Pays de fabrication	Puissance (kVA)	Poids Total (kg)	Poids de l'huile (kg)	Fuite
ABB	1LIT00701B	2004	Centrale thermique	Italie	12500/16000	27000	6500	Non
ABB	5215233	1999	Sous-station	Finlande	20000/26600	33300	6100	Oui

Tableau 1-6. Liste des transformateurs stockés / abandonnés sur le site de la centrale thermique de Natitingou

Marque	Numéro de série du Transformateur	Année	Pays de fabrication	Puissance (kVA)	Poids Total (kg)	Poids de l'huile (kg)	Fuite
Alstom	8 60800-01	1976	France	5250	9185	1985	Non
France Transfo	652202-01	1999	France	2500	5265	1015	Non
France Transfo	163017-01	1989	France	2500	5110	1120	Non
Transfix	109060370	2006	France	50	410	105	Oui
Transfix	135100754C	2010	France	160	720	175	Non
Transfix	109060374	2006	France	50	410	105	Non

Tableau 1-7. Liste des équipements (autre que les transformateurs) stockés /abandonnés sur le site de la centrale thermique de Natitingou et nécessitant d'être analysés

Articles	Quantité	Observations
Cuve de 3000 L	1	A éliminer
Unité de sous-station	5	A utiliser
Disjoncteur (gaz SF ⁶)	3	2 à utiliser ; 1 à éliminer
Fûts d'huile à moteur de 200 L (pleins)	9	Neuf
Conteneur contenant des pièces de rechange d'équipements électriques, de l'huile, etc.	1	Etat inconnu
Unités de sous-station	2	A utiliser

Site de la centrale photovoltaïque (PV) de Parakou – Site de décharge

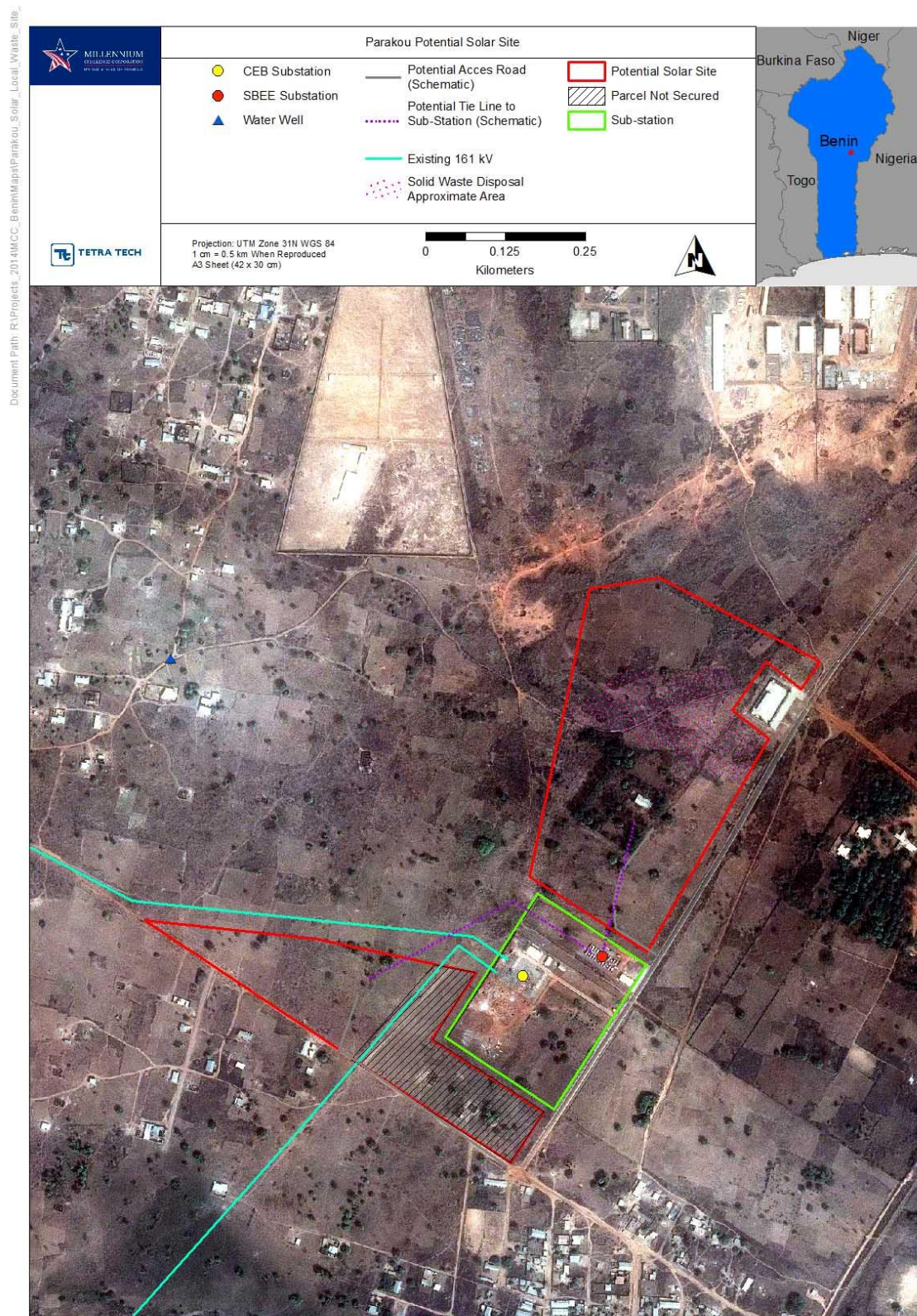
La superficie totale du site PV de Parakou avoisine 25 ha, partagée en deux parcelles. Il est situé dans la zone périurbaine de Parakou.

Un espace relativement vaste (estimé à 3 ha, sur la base d'observations visuelles et dont il faudra réaliser l'analyse dans le cadre des présents TDR – Voir Figure) a été utilisé comme décharge de déchets urbains. Cette zone se situe sur la partie nord du site PV proposé (entre la limite est du site, un vieux bâtiment et une installation de transformation de noix de cajou). Les déchets se composent de déchets ménagers et commerciaux, notamment de vieilles cannettes de boissons, des sachets plastiques, des ordures diverses, des amas de verre brisé, et quelques flacons de médicament ; au moins une seringue usagée a été observée (la quantité de plastics représente approximativement 75% de l'ensemble des déchets). Les camions déchargent au hasard leurs déchets qui atteignent environ 1.5 m par endroit. La densité de déchets amassés sur le sol excède la densité du couvert végétal à plusieurs endroits, quoique des herbes et même des cultures parviennent à pousser sur les tas d'ordures pendant la saison des pluies. Il s'avère nécessaire de déblayer le terrain et de remplacer les déchets par du matériau de remblai et des sols propres de manière à faciliter la croissance d'herbes et de plantes suffisamment tenaces pour éviter le phénomène d'érosion une fois que le site PV sera construit.

La difficulté identifiée au niveau de Parakou relève de la faible capacité de la ville à gérer les déchets. Actuellement, la Commune utilise un site temporaire situé dans une zone basse (bas-fond) qui n'est donc pas approprié pour le projet. La décharge officielle n'est pas encore fonctionnelle, et on y accède par une piste étroite et en mauvais état. Ce site de décharge pose aussi des questions par rapport à son utilisation agricole et à la vulnérabilité des eaux souterraines. D'après les données existantes, il est probable que l'eau souterraine soit à une profondeur de 6 à 10 m dans cette zone.

Coordonnées: N 10.29163 / E 1.33103

Figure 1-4 Site solaire proposé à Parakou



PROJET DISTRIBUTION

Le Projet Distribution porte sur les lots présentés dans les Tableaux 1-9. Les sites à évaluer devront être confirmés dans la Tâche 1. Il s'agira aussi de déterminer au cours de l'exécution de cette Tâche 1, le nombre exact de transformateurs, de condensateurs ou d'autres appareils qui feront éventuellement l'objet d'un échantillonnage.

Dans les villes de Cotonou et de Porto-Novo, les bâtiments abritant les postes de transformation sont souvent entourés d'activités typiques du milieu urbain dans des pays en voie de développement, comme par exemple : de petits ateliers de mécanique informels, des vendeurs ambulants, etc. Sur l'une des sous-stations, le sol à proximité du bâtiment était noir en raison de l'existence d'un atelier de mécanique pour motocyclettes.

Les coordonnées de ces postes de transformation sont présentées dans les tableaux 1-10. Leurs cartes sont également dressées dans les Figures 1-5 à 1.14. La liste des transformateurs présents dans ces sous-stations est disponible à l'Annexe 2.

Tableau 1-9. Projet Distribution

Dénomination du Projet ²⁹	Emplacement	Observations
Lot Distribution n 1 – Natitingou	Nouveau disjoncteur de 161 kV	Remplacement d'une courte ligne aérienne
	Achèvement de la sous-station nord	Travaux dans l'enceinte du site de la SBEE
	Liaison de communication avec Yéripao	Connexion aux pôles existants
Lot Distribution n° 2 – Parakou	Connexion du disjoncteur de 33 kV	Remplacement d'une courte ligne aérienne
Lot Distribution n° 3 – Djougou	Nouveau disjoncteur de 161 kV	Remplacement d'une Courte ligne aérienne
Lot Distribution n° 4 – Cotonou	(4.1) Disjoncteur de 63 kV de Vèdoko	Travaux dans l'enceinte du complexe de la SBEE
	(4.2.a) Connexion 63 kV entre Vèdoko et Akpakpa	Pose de câble 63 kV entre Vèdoko et Akpakpa via Saint Michel & Gbèjromèdé
	(4.2.b) Sous-station de Gbèjromèdé	Nouveau site de 20 x 40 m ; aucun équipement SBEE sur ce site
	(4.2.c) Sous-station Répartition D2 Croix Rouge	Bâtiment existant inadapté Trouver un site de 20 x 40 m à proximité Le bâtiment est petit et peut être

²⁹ Les lots définis ici sont ceux qui ont été proposés dans l'Etude de Faisabilité. Il est possible que la composition des lots soit différente dans les dossiers d'appel d'offres et dans les contrats applicables aux travaux.

Dénomination du Projet ²⁹	Emplacement	Observations
		déplacé pour d'autres utilisations
	(4.3.a) Pose de câble 63 kV entre Vèdoko et Fidjrossè	Installer des câbles de 63 kV (sur 3,5 km) La liaison en boucle avec Cadjèhoun n'est pas financée – Aucune analyse
	(4.3.b) Sous-station de Cadjèhoun	Trouver un site de 20 x 40 m à proximité de la structure existante
	(4.3.c) Sous-station de Fidjrossè	Trouver un site de 20 x 40 m à proximité, structure existante non identifiée, mais trop petite (probablement une petite armoire ou un appareil sur poteau)
	(4.4) Extension du réseau urbain	Augmenter la densité du réseau de Cotonou de 10 000 nouvelles connexions au réseau basse tension
Lot Distribution n° 5 – Cotonou	(5.1) Disjoncteurs de Maria Gléta	Travaux dans l'enceinte du complexe de la SBEE
	(5.2) Sous-station d'Ancien Pont	Le site dispose de possibilités d'extension. Démantèlement recommandé, mais réutilisation de l'espace pour une nouvelle sous-station de 20 x 40 m
	(5.3) Sous-station de Saint-Michel	Trouver un site de 20 x 40 m à proximité Bâtiment existant trop petit Possibilité de conserver le bâtiment existant pour les connexions basse tension
	(5.4) Sous-station de l'OCBN	Trouver un nouveau site de 20 x 40 m Bâtiment existant trop petit Possibilité de conserver le bâtiment existant pour les connexions basse tension
	(5.5) Disjoncteur de Sèmè	Travaux dans l'enceinte du complexe de la SBEE
	(5.6) Nouveau transformateur à Bohicon	Travaux dans l'enceinte du complexe de la SBEE
Lot Distribution n° 7 – Mise à niveau du réseau national	Nombreux Disjoncteurs et nombreuses modifications au niveau des bâtiments pour utiliser le système SCADA	Travaux dans l'enceinte des bâtiments existants Aucune analyse
Lot Distribution n° 8 –	(8.1) Nouvelle ligne de 63 kV entre	En général, va suivre les emprises existantes :

Dénomination du Projet ²⁹	Emplacement	Observations
Mise à niveau de la connexion avec Porto-Novo	Cotonou et Porto-Novo	30 km de lignes aériennes, câblage terminal de Cotonou (4,5 km), câblage de Porto-Novo (7,5 km)
	(8.2) Sous-station Répartition – Cimbénin (à Cotonou)	Bâtiment existant inadapté Trouver un site de 20 x 40 m à proximité Le bâtiment est petit et peut être déplacé pour d'autres utilisations
Lot Distribution n° 9 – Projets génériques	Nombreuses modifications mineures des équipements sur poteau et des compteurs du réseau de la SBEE	Travaux au niveau des bâtiments et sur les équipements existants

Tableau 1-10. Coordonnées des sous-stations

Sous-stations	N	E
Infrastructures existantes		
Cadjèhoun 15 kV SBEE	6.356403218	2.399090882
Ancient Pont	6.357144097	2.440803592
D1 CimBénin	6.377369509	2.449700314
D2 Croix Rouge	6.370409185	2.504514128
Saint-Michel	6.369862984	2.426702429
OCBN	6.353811531	2.431503684
Nouveaux sites potentiels		
Gbèjromèdé	6°23'0.31"	2°25'26.03"

Veillez noter que les éléments sus-énumérés sont les sous-stations existantes et les nouveaux sites qui seront probablement intégrés au projet. D'autres sites pourront s'y ajouter tels que mentionnés dans la section relative aux options qui fait partie des termes de référence et l'Annexe 2.

Figure 1-5

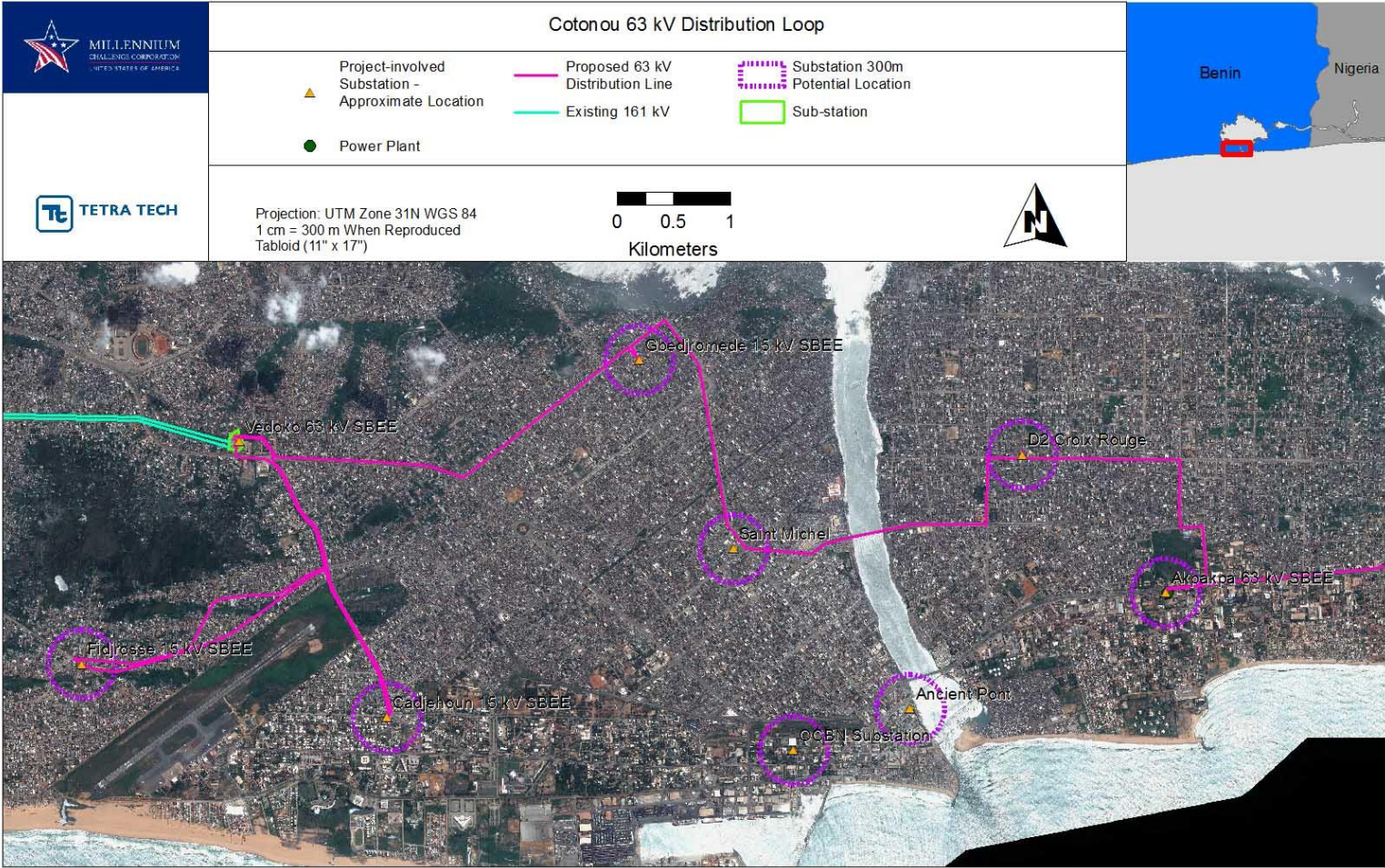


Figure 1-6



Figure 1-7

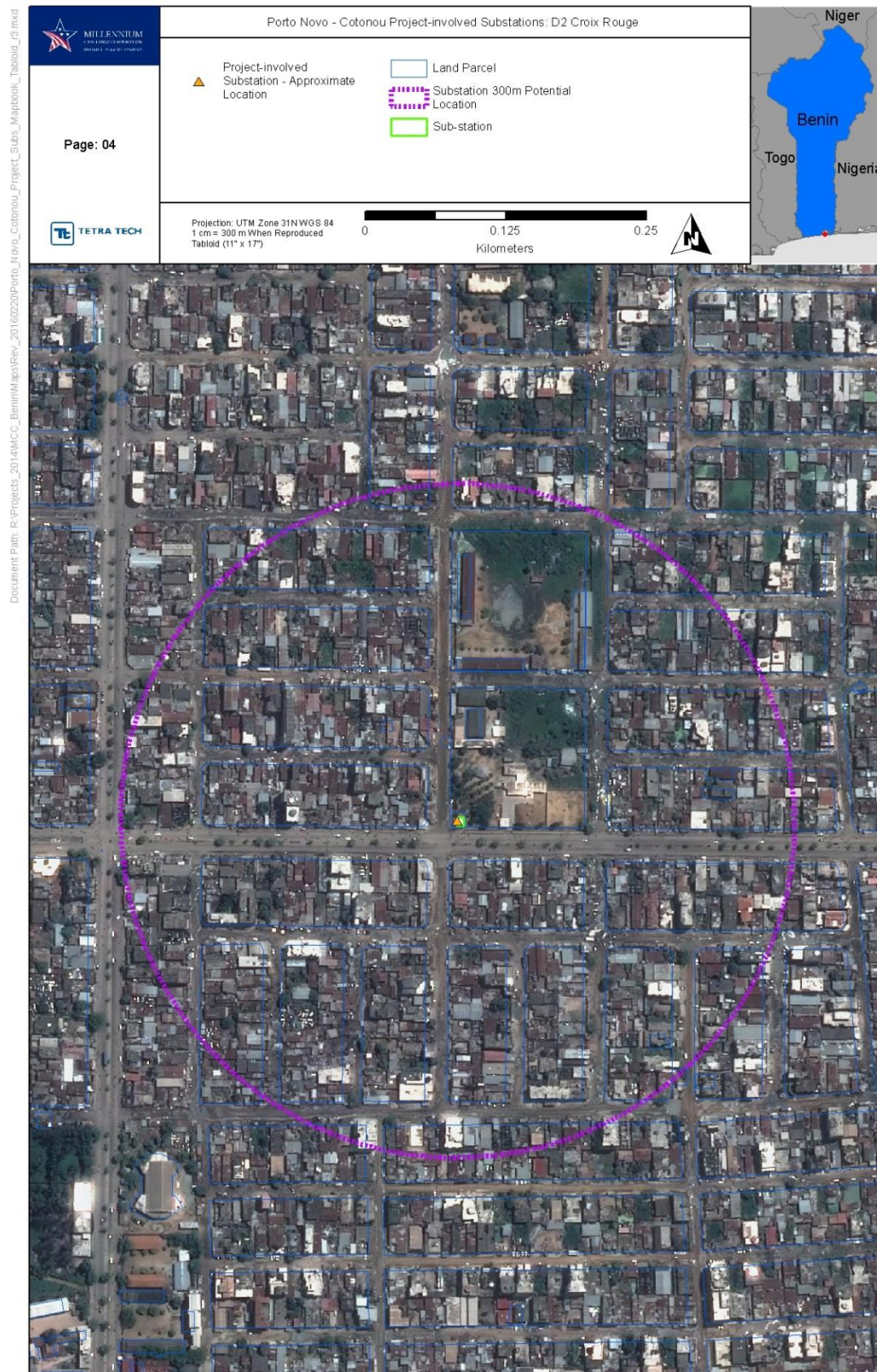


Figure 1-8



Figure 1-9



Figure 1-10



Figure 1-11

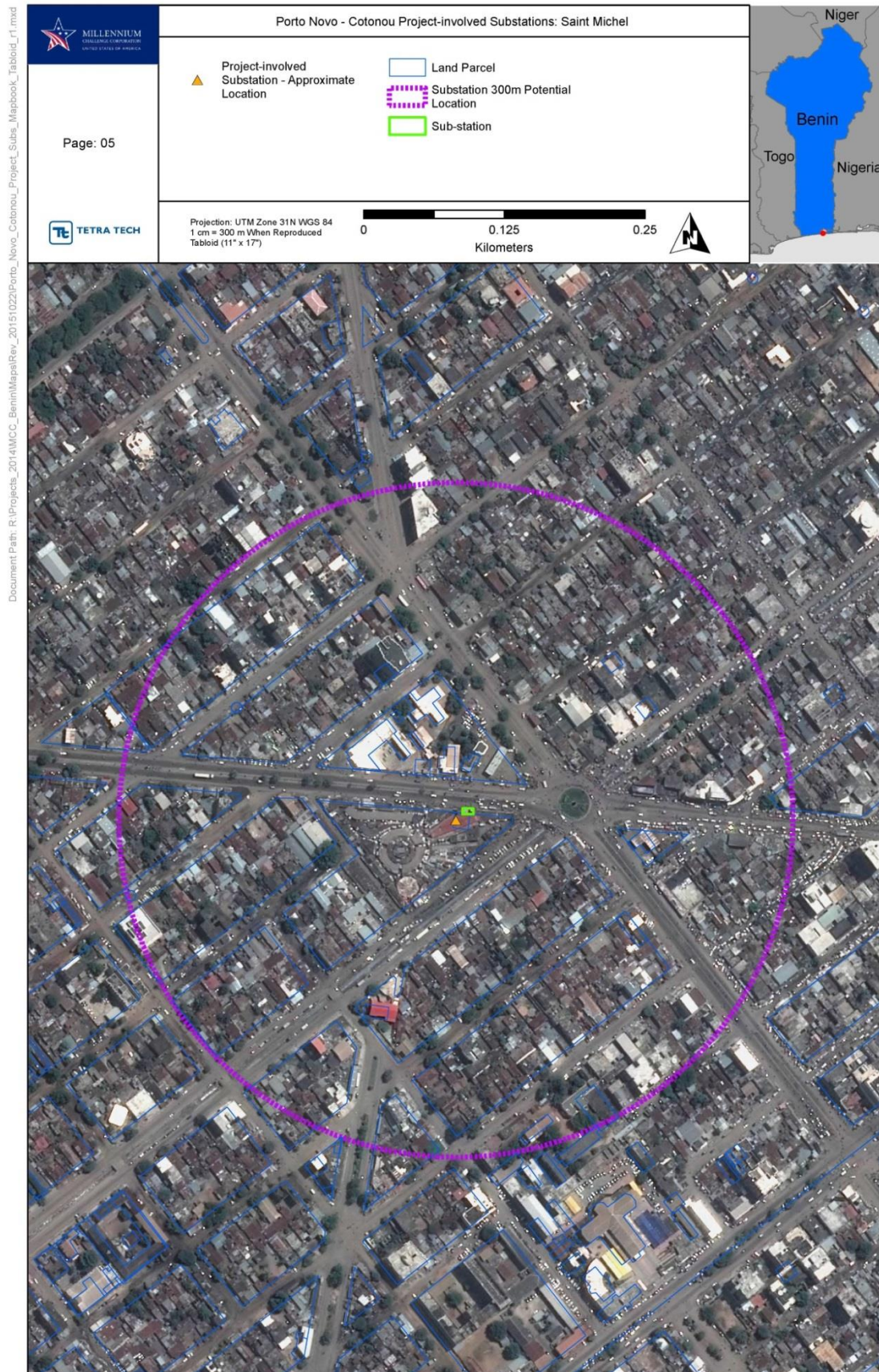
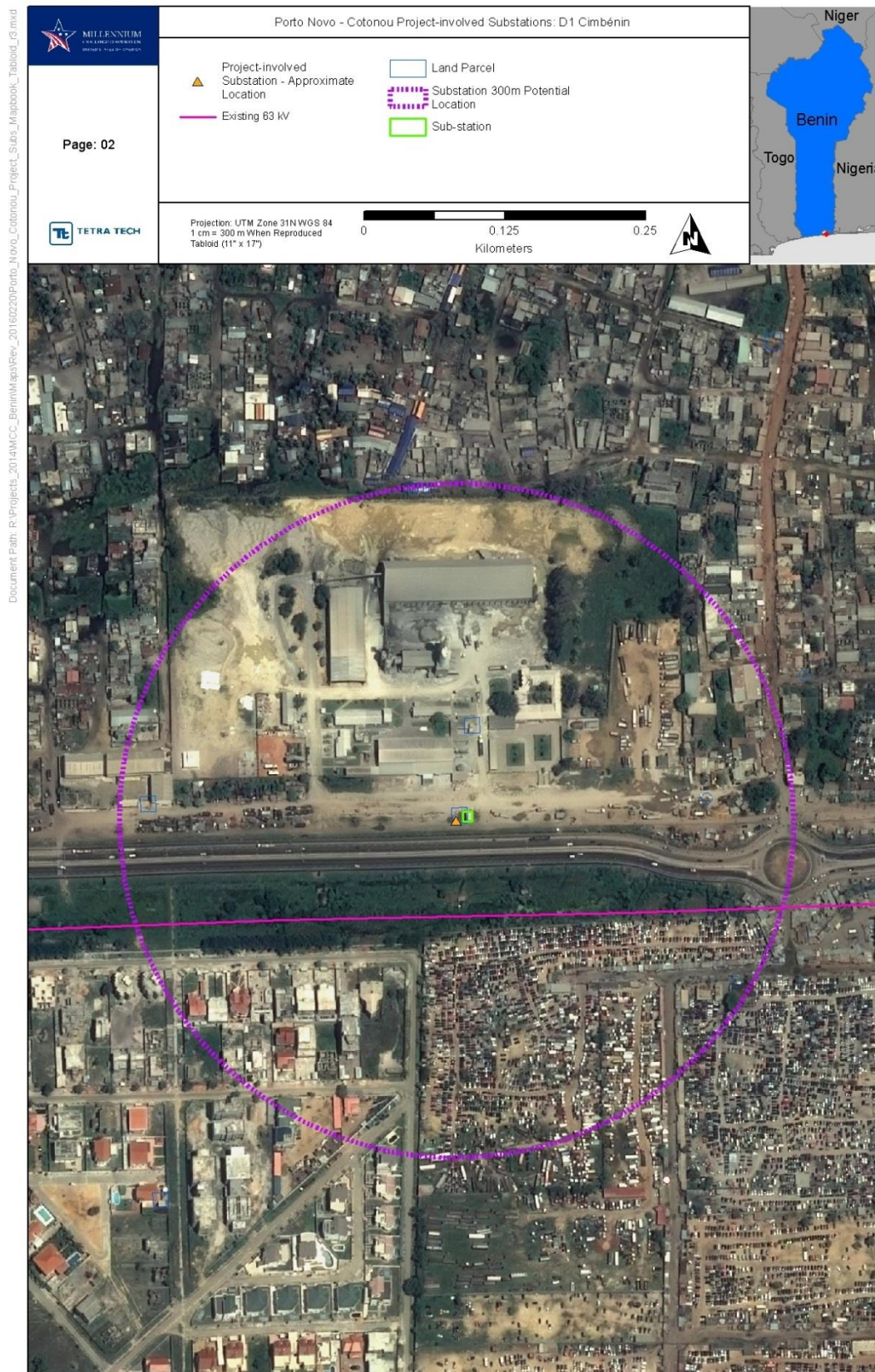


Figure 1-12



Figure 1-13



ANNEXE 2 LISTE DES TRANSFORMATEURS AU NIVEAU DES SITES DE PROJETS

DEPARTEMENT	ZONE	SITES	ELEMENTS IDENTIFIES	Fabricant	N° SERIE	Année de fabrication	Masse totale (Kg)	Masse d'huile (kg)	Robinet de vidange	OBSERVATIONS
ATACORA	NATTINGOU	BERECINGOU	Transfo H61 100KVA/33kV 4	Transfix	126060254	2006	535	130	oui	Pas de fuite
			Transfo H61 50KVA/33kV 3	Transfix	109060374	2006	410	105	oui	Pas de fuite
			Transfo H61 160KVA/33kV 2	Transfix	135100754C	2010	720	175	oui	Pas de fuite
			Transfo H61 50KVA/33kv 1	Transfix	109060370	2006	410	105	oui	Pas de fuite
			Transfo BPN SIIF 32 KVAR/11kV	EuroTrasformatori S.r.l.	6 1756/7/8	2004	910	300	oui	Pas de fuite
			Transfo G4 2500KVA/125-50kV	france transfo	652202-01	1999	5265	1015	oui	Pas de fuite
			Transfo G5 2500KVA	france transfo	163017-01	1989	5110	1120	oui	Pas de fuite
			Transfo bis de 2x5250KVA	ALSTHOM SAVOISIENNE	G 60800-01	1976	9185	1985	oui	Pas de fuite
			Transfo d'échange de 20MVA/33-11kV	ABB	5215233	1999	33300	6100	oui	un peu de fuite
			Transfo d'échange de 16MVA/11-15kV	ABB	1LIT00701B	2004	27000	6500	oui	Pas de fuite
		Yéripao	Transfo Auxiliaire SIIF 630KVA	CONTI-TRANSFO	10078	1999	1825	346	oui	Pas de fuite
PARAKOU CENTRALE H61 17	NEXANS (Sous licence AREVA)	O9001 429	2009	614		oui	Pas de fuite		oui	Pas de fuite
			PARAKOU CENTRALE TR CATERPILLARD	ALSTHOM	42040550	2004	14300	3300	oui	Pas de fuite
			PARAKOU CENTRALE TR 1250KVA	CONTI-TRANSFO	10129	1999	2930	666	oui	Pas de fuite
			PARAKOU CENTRALE H61 9 non identifié	?	?	?	?		oui	Pas de fuite
			PARAKOU CENTRALE H61 20	CAHORS TRANSFIX	109140348C	2014	330	70	oui	Pas de fuite
			PARAKOU CENTRALE H61 19	france transfo	163019-01	1989	840	270	oui	Pas de fuite
			PARAKOU CENTRALE H61 18	france transfo	163018-01	1989	785	230	oui	Pas de fuite

		PARAKOU CENTRALE H61 16	ENERGY TRANSFO	T1602527	2013	830	190	oui	Pas de fuite
		PARAKOU CENTRALE H61 15	CAHORS TRANSFIX	126150162C	2015	535	115	oui	Pas de fuite
		PARAKOU CENTRALE H61 14	CAHORS TRANSFIX	126160146C	2015	535	115	oui	Pas de fuite
		PARAKOU CENTRALE H61 13	NEXANS (Sous licence AREVA)	O9OO1923	2009	614		oui	Pas de fuite
		PARAKOU CENTRALE H61 12	NEXANS (Sous licence ALSTOM)	36/160.HGLCT	2011	716		oui	Pas de fuite
		PARAKOU CENTRALE H61 11	ENERGY TRANSFO	T1602531	2013	830	190	oui	Pas de fuite
		PARAKOU CENTRALE H61 10	ENERGY TRANSFO	T1602529	2013	830	190	oui	Pas de fuite
		PARAKOU CENTRALE H61 8	NEXANS (Sous licence AREVA)	10002329	2010	1100		oui	Pas de fuite
		PARAKOU CENTRALE H61 7	PAUWELS TRAFO	88N1952	1988	550	110	oui	Pas de fuite
		PARAKOU CENTRALE H61 6	ENERGY TRANSFO	T1602534	2013	830	190	oui	Pas de fuite
		PARAKOU CENTRALE H61 5	AFRIC TRANSFO	12102467	2012	694	200	oui	Pas de fuite
		PARAKOU CENTRALE H61 4	MATELEC S.a.l	20146115	2012	645	145	oui	Pas de fuite
		PARAKOU CENTRALE H61 3	MATELEC S.a.l	20146128	2012	?		oui	Pas de fuite
		PARAKOU CENTRALE H61 2	MATELEC S.a.l	20146119	2012	645	145	oui	Pas de fuite
		PARAKOU CENTRALE H61 1	MATELEC S.a.l	20181351	2012	645	145	oui	Pas de fuite
		PARAKOU CENTRALE H59 1	NEXANS (Sous licence AREVA)	O7OO3O15	2007	1058		oui	Pas de fuite
		PARAKOU CENTRALE H59 2	BELTRANSFO	402305	2004	1320	300	oui	Pas de fuite
		PARAKOU CENTRALE AUXI SIIF	CONTI-TRANSFO	10817	2004	1350	255	oui	Pas de fuite
		PARAKOU CENTRALE TR 33	ABB	5215234	1999	33300	6100	oui	Pas de fuite
		PARAKOU CENTRALE SIIF BPN	EuroTrasformatori S.r.l.	8 1756/7/8	2004	910	300	oui	Pas de fuite

			PARAKOU CEB TR 20_16_7KVA	AREVA	P020LEG451-01	2007	58200	17000	oui	Pas de fuite
			PARAKOU CEB T AUX	France TRANSFO	198492-01	1993	520	110	oui	Pas de fuite
			PARAKOU CEB Réactance 1 en cours d'installation	ABB	1LFI4282524014	2014	41700	14400	oui	Pas de fuite
			PARAKOU CEB réactance2 en cours d'installation	ABB	1LFI4282524012	2014	41700	14400	oui	Pas de fuite
			PARAKOU CEB BPN	Transfix	BB0347	2007	1450	310	oui	Pas de fuite
DONG A	DJOU GOU	Sous station de la CEB	DJOUGOU TR 20_16_7MVA	AREVA	P020LEG451-02	2007	58200	17000	oui	Pas de fuite
			djouougou BPN	Transfix	BB0848	2007	1450	310	oui	Pas de fuite
			PORTO TR SIIF	ABB	1LIT00701A	2004	36000	8500	oui	Pas de fuite
OUEME	PORTO-NOVO	Ouando	PORTO TR 36MVA	Société Normale de Transformateur-Duriez	93906	2006	31000	5800	oui	Pas de fuite
			PORTO TR 31,5MVA	CHINT	200901002	2009	64000	15000	oui	Pas de fuite
			PORTO T_AUX 36"	SAGEM	83639	2002	850	210	oui	Pas de fuite
			PORTO T_AUX 31,5MVA	Transfix	135070405C	2007	610	120	oui	Pas de fuite
			PORTO NOVO CENTRALE SIIF 320KVA	EUROTRANSFORMATORI	1756/7/8	2004	910		oui	Pas de fuite
			PORTO CENTRALE T AUX 1	CONTI-TRANSFO	10079	1999	1825	346	oui	Pas de fuite
	Sèmè-Pkodji	Sèmè-ZFI	SEME TR FORCLUM	france transfo	844870-01	2009	15900	4500	oui	Pas de fuite
			SEME TR3	NEXANS	374 415	2010	25227	8700	oui	Pas de fuite
			SEME TR2	NEXANS	374 414	2010	25227	8700	oui	Pas de fuite
			SEME TR1	NEXANS	374 413	2010	25227	8700	oui	Pas de fuite
			SEME T_AUX FORCLUM	Transfix	126070245C	2007	480	85	oui	Pas de fuite
			SEME T_AUX 3	NEXANS (Sous licence d'AREVA)	O9OO1831	2009	1030		oui	Pas de fuite
			SEME T_AUX 2	NEXANS (Sous licence d'AREVA)	O9OO1824	2009	1015		oui	Pas de fuite
			SEME T_AUX1	NEXANS (Sous licence d'AREVA)	O9OO1830	2009	1030		oui	Pas de fuite

LITTORAL	AKPAKPA	CIM-Bé nin (D1)	Auxiliaire de 100KVA	EFACEC	L001626.01	2008		125	Non	Pas de fuite
		Centrale AKPA KPA G09	Transfo 5MVA	ALSTHOM SAVOISIER	g 60800-01	1979	3800kg	1600kg	oui	Pas de fuite
		Centrale AKPA KPA G10	Transfo 10MVA	ALSTHOM ATLANTIQUE	h68280-01	1983	18000kg	4000	oui	Pas de fuite
		Centrale AKPA KPA G11	Transfo 10MVA	ALSTHOM ATLANTIQUE	H68280-02	1983	18000kg	4000kg	oui	Pas de fuite
		Centrale Echange E1	Transfo 20MVA	Société Normale de Transformateur-Duriez	C4490	2005	33000kg	7500kg	oui	Pas de fuite
		Centrale Echange E2	Transfo 31,5MVA	CHNT ELECTRC CO LTD	1ZD83000002-1 57	2009	60500Kg	14700kg	oui	Pas de fuite
		Croix rouge (D2)	Auxiliaire de 100KVA	EFACEC	L001626.02	2008		125	Non	Pas de fuite
	Littoral 1	Cadjehoun	Auxiliaire de 50KVA	CAHORS TRANSFIX	109150115	2015	330kg	70Kg	Non	Pas de fuite
			Transfo de 250KVA	KOTSONS private limited	E-17544	2013	1200kg	300kg	Non	Pas de fuite
		Ancient Pont	Auxiliaire de 50KVA	CAHORS TRANSFIX	1009150110	2015	330kg	70Kg	Non	Pas de fuite
			Transfo 500KVA	france transfo	614786-01	1995	1350kg	255kg	Non	Pas de fuite
			Transfo de 400KVA	KOTSONS private limited	E-17541	2013	1500kg	400kg	Non	Pas de fuite
	VEDO KO	Sous Station de la	T2 = 19MVA	CANADIAN GENERAL ELECFRIC	287833	1971	53650Kg	17350kg	oui	un peu de fuite

		CEB à Vèdoko	T3 = 55MVA	CIE ELECTRIC MECANIQUE	FHU27879	1985	68Tonnes	21,6Tonnes	oui	un peu de fuite
			T5 = 80MVA	A AREVA	316517	2004	112Tonnes	30,5Tonnes	oui	Pas de fuite
			T6 = 40MVA	A AREVA	316518	2004	76Tonnes	22,5Tonnes	oui	Pas de fuite
			Auxiliaire de 250KVA	A AREVA	14044531	2005	954Kg	270Kg	Non	Pas de fuite
			Auxiliaire de 400KVA	SOciété Nouvelle Transfix	EN0103	1998	1210Kg	250Kg	Non	Pas de fuite
ATLAN TIQUE	Abome y-Calavi	Sous-st ation de Maria- Gléta	Transfo de 19MVA	CANADIAN GENERAL ELECFCRIC	287832	1971	536550Kg	17350kg	Non	un peu de fuite
			Transfo 50KVA	CHINT	251205021	2012	119500Kg	37500Kg	oui	Pas de fuite
ZOU	BOHICON	Sous-st ation de Bohicon	BOHICON TR2 20MVA	GEC ALSTHOM	51987/001	1993	36500	10600	oui	Pas de fuite
			BOHICON TR1 20MVA	GEC ALSTHOM	52008/001	1993	40000	12100	oui	Pas de fuite
			BOHICON T_AUX 1	france transfo	195454-01	1993	520	110	oui	Pas de fuite
			BOHICON BPN avarié	france transfo	621143	1996	3850	1430	oui	Pas de fuite
			BOHICON BPN2	france transfo	195456-01	1993	720	180	oui	Pas de fuite
			BOHICON BPN	W TPQ	18132166	2013	6750	2670	oui	Pas de fuite

Remarque : ? = information inconnue à l'étape actuelle

PART 2:

CONDITIONS OF CONTRACT AND CONTRACT FORMS

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CONTRACT AGREEMENT

This CONTRACT AGREEMENT (this “Contract”) made as of the [day] of [month], [year], between [full legal name of the MCA Entity] (the “MCA Entity”), on the one part, and [full legal name of Consultant] (the “Consultant”), on the other part.

[Note: If the Consultant consists of more than one entity, the following should be used]

This CONTRACT AGREEMENT (this “Contract”) made as of the [day] of [month], [year], between **MCA-Benin II** (the “MCA Entity”), on the one part, and [full legal name of lead Consultant] (the “Consultant”) in [joint venture / consortium / association] with [list names of each joint venture entity], on the other part, each of which will be jointly and severally liable to the MCA Entity for all of the Consultant’s obligations under this Contract and is deemed to be included in any reference to the term “Consultant.”

RECITALS

WHEREAS,

- (a) The Millennium Challenge Corporation (“MCC”) and the Government of **Benin** (the “Government”) have entered into a Millennium Challenge Compact for Millennium Challenge Account assistance to help facilitate poverty reduction through economic growth in **Benin** on **September 9th, 2015** (the “Compact”) in the amount of approximately **375 000 000 USD** (“MCC Funding”). The Government, acting through the MCA Entity, intends to apply a portion of the proceeds of MCC Funding to eligible payments under this Contract. Payments made under this Contract will be subject, in all respects, to the terms and conditions of the Compact and related documents, including restrictions on the use, and conditions to disbursement, of MCC Funding. No party other than the Government and the MCA Entity shall derive any rights from the Compact or have any claim to the proceeds of MCC Funding; and
- (b) The MCA Entity has requested the Consultant to provide certain consulting Services as described in Annex A to this Contract; and
- (c) The Consultant, having represented to the MCA Entity that it has the required professional skills, and Personnel and technical resources, has agreed to provide such Services on the terms and conditions set forth in this Contract.

NOW THEREFORE, the Parties to this Contract agree as follows:

- 1. In consideration of the payments to be made by the MCA Entity to the Consultant as set forth in this Contract, the Consultant hereby covenants with the MCA Entity to perform the Services in conformity in all respects with the provisions of this Contract.
- 2. Subject to the terms of this Contract, the MCA Entity hereby covenants to pay the Consultant, in consideration of the performance of the Services, the Contract Price (as defined below) or such other sum as may become payable pursuant to the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS whereof the Parties hereto have caused this Contract to be executed in accordance with the laws of **[Country]** as of the day, month and year first indicated above.

For Millennium Challenge Account – Benin For **[full legal name of the Consultant]:**
II :

Signature

Samuel O. BATCHO

Witnessed By:

Signature

Name

Witnessed By:

[Note: If the Consultant consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:]

For and on behalf of each of the Members of the Consultant

[Name of Member]

[Authorized Representative]

[Name of Member]

[Authorized Representative]

GENERAL CONDITIONS OF CONTRACT

1. Definitions
 - 1.1 Capitalized terms used in this Contract and not otherwise defined have the meanings given such terms in the Compact or related document. Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:
 - (a) “Applicable Law” has the meaning given the term **in the SCC**.
 - (b) “Associate” means any entity that is a member of the Association that forms the Consultant. A Sub-Consultant is not an Associate.
 - (c) “Association” or “association” means an association of entities that forms the Consultant.
 - (d) “Compact” has the meaning given the term in the recital clauses to the Contract Agreement.
 - (e) “Consultant” has the meaning given the term in the initial paragraph of the Contract Agreement.
 - (f) “Contract” means this agreement entered into between the MCA Entity and the Consultant, to provide the Services, and consists of the Contract Agreement, these GCC, the SCC, and the Annexes (each of which forms an integral part of this agreement), as the same may be amended, modified, or supplemented from time to time in accordance with the terms of this agreement.
 - (g) “Contract Price” means the price to be paid for the performance of the Services, in accordance with GCC Sub-Clause 17.1.
 - (h) “Effective Date” has the meaning given the term in GCC Clause 16.2.
 - (i) “Force Majeure” has the meaning given the term in GCC Clause 22.1.
 - (j) “GCC” means these General Conditions of Contract.
 - (k) “Government” has the meaning given the term in the recital clauses to the Contract Agreement.
 - (l) “Key Professional Personnel” means the Personnel listed in Annex D to this Contract.
 - (m) “Local Currency” has the meaning given the term **in the SCC**.
 - (n) “MCA Country” has the meaning given the term **in the SCC**.

- (o) “MCA Entity” has the meaning given the term in the initial paragraph of the Contract Agreement.
- (p) “MCC” has the meaning given the term in the recital clauses to this Contract.
- (q) “Member” means any of the entities that make up a joint venture or other association; and “Members” means all these entities.
- (r) “Party” means the MCA Entity or the Consultant, as the case may be, and “Parties” means both of them.
- (s) “Personnel” means persons hired by the Consultant or by any Sub-Consultants and assigned to perform the Services or any part thereof.
- (t) “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented.
- (u) “Services” means the activities to be performed by the Consultant pursuant to this Contract, as described in Annex A to this Contract.
- (v) “Sub-Consultant” means any person or entity to whom/which the Consultant subcontracts any part of the Services.
- (w) “Tax” and “Taxes” have the meanings given the terms in the Compact or related agreement.
- (x) “Trafficking in Persons” has the meaning given at GCC Clause 25.
- (y) “US Dollars” means the currency of the United States of America.

2. Interpretation

2.1 In interpreting this Contract, unless otherwise indicated:

- (i) “confirmation” means confirmation in writing;
- (ii) “in writing” means communicated in written form (e.g., by mail, e-mail, or facsimile) delivered with proof of receipt;
- (iii) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular;
- (iv) the feminine means the masculine and vice versa; and
- (v) the headings are for reference only and shall not limit, alter or affect the meaning of this Contract.

3. Language and Law

3.1 This Contract has been executed in language(s) **specified in the SCC**. If the Contract is executed in both English and a specified local language, the English language version shall be the binding and controlling language for all matters relating to

the meaning or interpretation of this Contract.

- 3.2 This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

4. Communications

- 4.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Subject to Applicable Law, any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when delivered to such Party at the address **specified in the SCC**, or sent by confirmed facsimile or confirmed email, in either case if sent during normal business hours of the recipient Party.

- 4.2 A Party may change its name or address for receiving notice under this Contract by giving the other Party notice in writing of such change to the address specified in SCC 4.1.

5. Subcontracting

- 5.1 If the Consultant intends to subcontract for a major item of its contracted consulting services (deemed major if valued in excess of \$100,000 USD) it shall seek the MCA Entity's prior written approval of the subcontractor. Subcontracting shall not alter the Consultant's obligations under this Contract.

6. Relationship Between the Parties

- 6.1 Nothing contained in this Contract shall be construed as establishing a relationship of master and servant or of principal and agent as between the MCA Entity and the Consultant. The Consultant, subject to this Contract, has complete charge of Personnel and Sub-Consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf in connection with this Contract.

7. Location

- 7.1 The Services shall be performed at such locations as are specified in Annex A to this Contract and, where the location of a particular task is not so specified, at such locations, whether in the MCA Country or elsewhere, as the MCA Entity may approve.

8. Authority of Member in Charge

- 8.1 In case the Consultant consists of a joint venture or other association of more than one entity, the Members hereby authorize the entity **specified in the SCC** to act on their behalf in exercising all the Consultant's rights and obligations toward the MCA Entity under this Contract, including without limitation the receiving of instructions and

payments from the MCA Entity.

- | | | |
|---|------|---|
| 9. Authorized Representatives | 9.1 | Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the MCA Entity or the Consultant may be taken or executed by the officials specified in the SCC . |
| 10. Description and Approval of Personnel; Adjustments; Approval of Additional Work | 10.1 | The title, agreed job description, minimum qualification and estimated period of engagement in the carrying out of the Services of each of the Consultant's Key Professional Personnel are described in Annex D. The Key Professional Personnel and Sub-Consultants listed by title as well as by name in Annex D are hereby approved by the MCA Entity. |
| | 10.2 | GCC Sub-Clause 38.1 shall apply in respect of other Personnel and Sub-Consultants which the Consultant proposes to use in the carrying out of the Services, and the Consultant shall submit to the MCA Entity for review and approval a copy of their Curricula Vitae (CVs). |
| | 10.3 | Adjustments with respect to the estimated periods of engagement of Key Professional Personnel set forth in Annex D may be made by the Consultant without the prior approval of the MCA Entity only if (a) such adjustments shall not alter the originally estimated period of engagement of any individual by more than ten percent (10%) or one week, whichever is larger and (b) the aggregate of such adjustments shall not cause payments under this Contract to exceed the Contract Price. If so indicated in the SCC , the Consultant shall provide written notice to the MCA Entity of any such adjustments. Any other adjustments shall only be made with the MCA Entity's prior written approval. |
| | 10.4 | If additional work is required beyond the scope of the Services specified in Annex A, the estimated periods of engagement of Key Professional Personnel set forth in Annex D may be increased by agreement in writing between the MCA Entity and the Consultant. In a case in which such additional work would result in payments under this Contract exceeding the Contract Price, such additional work and payments will be explicitly described in the agreement and shall be subject in all respects to the provisions of GCC Sub-Clauses 16.4, 16.5 and 17.4. |
| Resident Project Manager | 10.5 | If required by the SCC , the Consultant shall ensure that at all times during the Consultant's performance of the Services in the MCA Country a resident project manager, acceptable to the MCA Entity, shall take charge of the performance of such |

Services.

11. Working Hours, Overtime, Leave, etc. 11.1 Working hours and holidays for Key Professional Personnel are set forth in Annex D. To account for travel time, foreign Personnel carrying out Services inside the MCA Country shall be deemed to have commenced, or finished work in respect of the Services such number of days before their arrival in, or after their departure from the MCA Country as is specified in Annex D.
- 11.2 The Consultant and Personnel shall not be entitled to reimbursement for overtime nor to take paid sick leave or vacation leave except as specified in Annex D, and except as specified in Annex D, shall the Consultant's remuneration be deemed to cover these items. All leave to be allowed to the Personnel is included in the staff-months of service set forth in Annex D. Any taking of leave by Personnel shall be subject to the prior approval by the Consultant who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.
12. Removal and/or Replacement of Personnel 12.1 Except as the MCA Entity may otherwise agree, no changes shall be made in the Key Professional Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Professional Personnel, the Consultant shall, subject to GCC Sub-Clause 38.1(a), provide as a replacement a person of equivalent or better qualifications.
- 12.2 If the MCA Entity (a) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (b) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the MCA Entity's written request specifying the grounds therefore and subject to GCC Sub-Clause 38.1(a), provide as a replacement a person with qualifications and experience acceptable to the MCA Entity.
- 12.3 The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.
13. Settlement of Disputes
- Amicable Settlement 13.1 The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of this Contract and

the success of the assignment. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

Dispute Resolution	13.2	Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after the receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SCC.
14. Commissions and Fees	14.1	The Consultant shall disclose any commissions or fees that may have been paid or are to be paid to agents, representatives, or commission agents with respect to the selection process or execution and performance of this Contract. The information disclosed must include at least the name and address of the agent, representative, or commission agent, the amount and currency, and the purpose of the commission or fee.
15. Entire Agreement	15.1	This Contract contains all of the covenants, stipulations and provisions agreed to by the Parties. No agent or representative of either Party has the authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth in this Contract.
16. Commencement, Completion and Modification of Contract		
Contract Entry into Force	16.1	This Contract shall come into full force, and be legally binding on the Parties in all respects, on the date this Contract is signed by the Parties or such other date as may be stated in the SCC.
Effective Date and Commencement of Services	16.2	The Consultant shall commence the Services on the date specified in the SCC , which shall be defined as the "Effective Date."
Expiration of Contract	16.3	Unless terminated earlier pursuant to GCC Clause 20, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.
Modifications or Variations	16.4	Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. Pursuant to GCC Sub-Clause 50.1, however, each Party shall give due consideration to any

proposals for modification or variation made by the other Party.

- Substantial Modification
- 16.5 In cases of any of the below, the prior written consent of MCC is required:
- (a) the Contract value of a Contract that did not require approval under an MCC policy is raised to a value that would require approval
 - (b) the original Contract duration is extended by 25% or more, or
 - (c) the original value of the Contract is increased by ten percent (10%) or 1 million US Dollars or more (whichever may apply); once the 10% Contract (or 1 million US Dollars) threshold for modifications or change orders has been reached for a Contract, any subsequent Contract modification or change order that individually or collectively exceed 3% of the original Contract value will also require MCC approval.

17. Payments to the Consultant

- Contract Price
- 17.1 Except as provided in GCC Sub-Clause 17.5, the total payment due to the Consultant shall not exceed the Contract Price **set forth in the SCC** (as may be adjusted in accordance with the terms of the SCC). The Contract Price is an all-inclusive fixed-price covering all costs required to provide the Services in accordance with the terms of this Contract. The Contract Price may only be increased above the amounts **stated in the SCC** (including, without limitation, pursuant to the terms of GCC Sub-Clauses 10.4, 46.2 and 48.2) if the Parties have agreed to additional payments in accordance with GCC Sub-Clauses 16.4, 16.5 and 17.4.
- Currency of Payment
- 17.2 Payments shall be made in US Dollars, or the Local Currency, or, if justified for sound business reasons and approved by the MCA Entity, a combination of the two currencies.
- Terms, Conditions and Mode of Billing and Payment
- 17.3 Payments will be made to the account of the Consultant and according to the payment schedule stated in SCC 17.1 and against an invoice. Any other payment shall be made after the conditions **listed in the SCC** for such payment have been met, and the Consultant has submitted an invoice to the MCA Entity specifying the amount. In all cases, invoices shall be delivered to the MCA Entity no later than thirty (30) days prior to the requested payment date and will not be deemed delivered until they are in form and substance satisfactory to the MCA Entity. Payments will be made to the Consultant within thirty (30) days of the date of receipt by the MCA

Entity of a valid and proper invoice or the date of the MCA Entity's acceptance of required deliverables (e.g., the delivery of reports), whichever is later. The Consultant shall comply with any other instructions related to payment as may be reasonably requested by the MCA Entity.

Payment for Additional Services	17.4	For the purposes of determining the remuneration due for additional Services as may be granted under GCC Sub-Clause 16.4, a breakdown of the Contract Price is provided in Annexes E and F.
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Interest on Delayed Payments	17.5	If the MCA Entity has delayed payments beyond thirty (30) days after the payment date determined in accordance with GCC Sub-Clause 17.3, interest shall be paid to the Consultant for each day of delay at the rate stated in the SCC .
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18. Taxes and Duties

- (a) The Section 2.8 of the Compact provides a comprehensive series of tax exemptions that cover the use of all funding under the Compact to protect against the payment of any taxes, duties, levies or similar charges of or in Benin by any natural or legal person, except natural persons who are citizens or permanent residents of Benin or legal persons (unless residency has been created or formed because of the Compact). The terms and a detailed description of the exemptions are provided in the Tax Schedules ("***Tax Schedules***") at Annex II to the Program Implementation Agreement. The Consultant, (including its associates, if any), Sub-Consultants, and their respective Personnel shall otherwise pay all other Taxes, as applicable. In the event that any taxes are imposed on the Consultant, its associates, Sub-Consultants, or their respective Personnel, the Contract price shall not be adjusted to account for such taxes. The MCA-Entity shall have no obligation to pay or compensate the Consultant, its associates, Sub-Consultants, or their respective Personnel for any Taxes.
- (b) In conjunction with the exemption and requirements under the Tax Schedules, the Consultant, the Sub-Consultants and their respective Personnel, and their eligible dependents, shall follow the usual customs procedures of the MCA Country in importing property into the MCA Country.
- (c) If the Consultant, the Sub-Consultants or any of their respective Personnel, or their eligible dependents, do not withdraw, but dispose of any property in the MCA Country upon which customs duties or other Taxes have been exempted, the Consultant, the Sub-Consultants or such Personnel, as the case may be, (i) shall bear such customs

duties and other Taxes in conformity with Applicable Law, or (ii) shall reimburse such customs duties and Taxes to the MCA Entity if such customs duties and Taxes were paid by the MCA Entity at the time the property in question was brought into the MCA Country.

- (d) Without prejudice to the rights of the Consultant under this clause, the Consultant, the Sub-Consultants and their respective Personnel will take reasonable steps as requested by the MCA Entity or the Government with respect to the determination of the Tax status described in this GCC Clause 18.
- (e) If the Consultant is required to pay Taxes that are exempt under the Compact or a related agreement, the Consultant shall promptly notify the MCA Entity (or such agent or representative designated by the MCA Entity) of any Taxes paid, and the Consultant shall cooperate with, and take such actions as may be requested by the MCA Entity, MCC, or either of their agents or representatives, in seeking the prompt and proper reimbursement of such Taxes.
- (f) The MCA Entity shall use reasonable efforts to ensure that the Government provides the Consultant, the Sub-Consultants, and their respective Personnel the exemptions from taxation applicable to such persons or entities, in accordance with the terms of the Compact or related agreements. If the MCA Entity fails to comply with its obligations under this paragraph, the Consultant shall have the right to terminate this Contract in accordance with GCC Sub-Clause 20.2(d).

19. Suspension

- 19.1 The MCA Entity may, by giving thirty (30) days' written notice to the Consultant, suspend all payments to the Consultant under this Contract if the Consultant fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (a) shall specify the nature of the failure, and (b) shall request the Consultant to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

20. Termination

By the MCA Entity

- 20.1 Without prejudice to any other remedies that may be available to it for breach of this Contract, the MCA Entity may, upon written notice to the Consultant, terminate this Contract in case of the occurrence of any of the events specified in

sub-paragraphs (a) through (i) of this GCC Sub-Clause 20.1, and in the case of the occurrence of any of the events specified in paragraphs (h) or (i) of this GCC Sub-Clause 20.1, the MCA Entity may suspend this Contract.

- (a) If the Consultant, in the judgment of the MCA Entity or MCC, fails to perform its obligations relating to the use of funds set out in Annex B. Termination under this provision shall (i) become effective immediately upon delivery of the notice of termination and (ii) require that the Consultant repay any and all funds so misused within a maximum of thirty (30) days after termination.
- (b) If the Consultant does not remedy a failure in the performance of its obligations under this Contract (other than failure to perform obligations relating to use of funds as set forth in GCC Sub-Clause 20.1(a) of this Contract, which such failure shall not be entitled to a cure period) within thirty (30) days after delivery of the notice of termination or within any further period of time approved in writing by the MCA Entity. Termination under this provision shall become effective immediately upon the expiration of the thirty (30) days (or such further period as may have been approved by the MCA Entity) or on such later date as may be specified by the MCA Entity.
- (c) If the Consultant (or any Member or Sub-Consultant) becomes insolvent or bankrupt, and/or fails to exist or is dissolved. Termination under this provision shall become effective immediately upon delivery of the notice of termination or on such other date as may be specified by the MCA Entity in such notice of termination.
- (d) If the Consultant (or any Member or Sub-Consultant), in the judgment of the MCA Entity has engaged in coercive, collusive, corrupt, prohibited, obstructive or fraudulent practices in competing for or in the performance of this Contract or another MCC funded contract. Termination under this provision shall become effective immediately upon delivery of the notice of termination.
- (e) If, as the result of an event of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days. Termination under this provision shall become effective upon the expiration of thirty (30) days after

delivery of the notice of termination or on such later date as may be specified by the MCA Entity.

- (f) If the MCA Entity, in its sole discretion and for any reason whatsoever, decides to terminate this Contract. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination or on such later date as may be specified by the MCA Entity.
- (g) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to GCC Clause 13. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination or on such later date as may be specified by the MCA Entity.
- (h) If the Compact expires, is suspended or terminates in whole or in part in accordance with the terms of the Compact. Suspension or termination under this provision shall become effective immediately upon delivery of the notice of suspension or termination, as the case may be, in accordance with the terms of the notice. If this Contract is suspended pursuant to this GCC Sub-Clause 20.1(h), the Consultant has an obligation to mitigate all expenses, damages and losses to the MCA Entity during the period of the suspension.
- (i) If an event has occurred that would be grounds for suspension or termination under Applicable Law. Suspension or termination under this provision shall become effective immediately upon delivery of the notice of suspension or termination, as the case may be, in accordance with the terms of the notice. If this Contract is suspended pursuant to this GCC Sub-Clause 20.1(i), the Consultant has an obligation to mitigate all expenses, damages and losses to the MCA Entity during the period of the suspension.

By the Consultant

20.2 The Consultant may terminate this Contract, upon written notice to the MCA Entity in accordance with the time period specified below, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this GCC Sub-Clause 20.2.

- (a) If the MCA Entity fails to pay any money due to the Consultant pursuant to this Contract that is not otherwise subject to dispute pursuant to GCC Clause 13 hereof within forty-five (45) days after receiving

written notice from the Consultant that such payment is overdue. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination unless the payment that is the subject of such notice of termination is made by the MCA Entity to the Consultant within such thirty (30) days.

- (b) If, as the result of an event of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination.
- (c) If the MCA Entity fails to comply with any final decision reached as a result of arbitration pursuant to GCC Clause 13. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination.
- (d) If the Consultant does not receive a reimbursement of any Taxes that are exempt under the Compact within one hundred and twenty (120) days after the Consultant gives notice to the MCA Entity that such reimbursement is due and owing to the Consultant. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination unless the reimbursement that is the subject of such notice of termination is made to the Consultant within such thirty (30) days.
- (e) If this Contract is suspended in accordance with GCC Sub-Clauses 20.1(h) or (i) for a period of time exceeding three (3) consecutive months; provided that the Consultant has complied with its obligation to mitigate in accordance with GCC Sub-Clauses 20.1(h) or (i) during the period of the suspension. Termination under this provision shall become effective upon the expiration of thirty (30) days after delivery of the notice of termination.

21. Payment
Termination

Upon 21.1

Upon termination of this Contract pursuant to GCC Sub-Clauses 20.1 or 20.2, the MCA Entity shall make, or cause to be made, the following payments to the Consultant:

- (a) payment pursuant to GCC Clause 17 for Services satisfactorily performed prior to the effective date of termination; and

(b) except in the case of termination pursuant to paragraphs (a) through (d) and (g) of GCC Sub-Clause 20.1, reimbursement of any reasonable cost (as determined by the MCA Entity or MCC) incidental to the prompt and orderly termination of this Contract; provided, that in the case of suspension of this Contract pursuant to GCC Sub-Clauses 20.1 (h) or (i), the Consultant has complied with its obligation to mitigate in accordance with such clauses.

Disputes about Events of Termination 21.2 If either Party disputes whether an event specified in paragraphs (a), (b), (c), (e) or (g) of GCC Sub-Clause 20.1 or paragraphs (a) through (d) of GCC Sub-Clause 20.2 has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to dispute resolution in accordance with GCC Clause 13, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

Cessation of Rights and Obligations 21.3 Upon termination of this Contract pursuant to GCC Clause 20, or upon expiration of this Contract pursuant to GCC Sub-Clause 16.3, all rights and obligations of the Parties under this Contract shall cease, except (a) such rights and obligations as may have accrued on the date of termination or expiration, (b) the obligation of confidentiality set forth in GCC Clause 33, (c) the Consultant's obligation to permit inspection, copying and auditing of its accounts and records set forth in GCC Clause 37 and Annex B and (d) any right or obligation which a Party may have under the Applicable Law.

Cessation of Services 21.4 Upon termination of this Contract by notice of either Party to the other pursuant to GCC Sub-Clauses 20.1 or 20.2, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the MCA Entity, the Consultant shall proceed as provided, respectively, by GCC Clauses 34 or 41.

22. Force Majeure

Definition 22.1 For the purposes of this Contract, "Force Majeure" means an event or condition that (a) is not reasonably foreseeable and is beyond the reasonable control of a Party, and is not the result

of any acts, omissions or delays of the Party relying on such event of Force Majeure, (or of any third person over whom such Party has control, including any Sub-Consultant), (b) is not an act, event or condition the risks or consequence of which such Party has expressly agreed to assume under this Contract, (c) could not have been prevented, remedied or cured by such Party's reasonable diligence, and (d) makes such Party's performance of its obligations under this Contract impossible or so impractical as to be considered impossible under the circumstances.

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| No Breach of Contract | 22.2 | The failure of a Party to fulfil any of its obligations under this Contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as practicable (and in no event later than five (5) days after the occurrence) about the occurrence of an event giving rise to a claim of Force Majeure. |
| Measures to be Taken | 22.3 | Subject to GCC Sub-Clause 22.6, a Party affected by an event of Force Majeure shall continue to perform its obligations under this Contract as far as is reasonably practical, and shall take all reasonable measures to minimize and otherwise mitigate the consequences of any event of Force Majeure. |
| | 22.4 | A Party affected by an event of Force Majeure shall provide evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible. |
| | 22.5 | Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure. |
| | 22.6 | During the period of its inability to perform the Services as a result of an event of Force Majeure, the Consultant, upon instructions by the MCA Entity, shall either:

(a) demobilize, in which case the Consultant shall be reimbursed for additional costs it reasonably and necessarily incurred and, if the Consultant is required by the MCA Entity to reactive its performance of the Services at the time of restoration of normal conditions, |

the additional costs the Consultant reasonably and necessarily incurred as part of such reactivation; or

- (b) continue with the Services to the extent possible, in which case the Consultant shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred.

- 22.7 In the case of disagreement between the Parties as to the existence or extent of and event of Force Majeure, the matter shall be settled in accordance with GCC Clause 13.

23. Required Provisions; Flow Through Provisions

- 23.1 For the avoidance of doubt, the Parties agree and understand that the provisions set forth in Annex B reflect certain obligations of the Government and the MCA Entity under the terms of the Compact and related documents that are also required to be transferred onto any Consultant, Sub-Consultant or Associate who partakes in procurements or contracts in which MCC Funding is involved and that, as with other clauses of this Contract, the provisions of Annex B are binding obligations under this Contract.

- 23.2 In any subcontract or sub-award entered into by the Consultant, as permitted by the terms of this Contract, the Consultant shall ensure the inclusion of all the provisions contained in Annex B in any agreement related to such subcontract or sub-award.

24. Fraud and Corruption Requirements

- 24.1 MCC requires that the MCA Entity and any other beneficiaries of MCC Funding, including any bidders, suppliers, contractors, Sub-Consultants and Consultants under any MCC-funded contracts, observe the highest standards of ethics during the procurement and execution of such contracts.

MCC's Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations ("MCC's AFC Policy") is applicable to all procurements and contracts involving MCC Funding and can be found on the MCC website. MCC's AFC Policy requires that companies and entities receiving MCC funds acknowledge notice of MCC's AFC Policy and certify that they have acceptable commitments and procedures in place to address the potential for fraudulent and corrupt practices.

Any entity receiving an award (including, but not limited to, both contracts and grants) of MCC Funding of over \$500,000 will be required to certify that they will adopt and implement a code of business ethics and conduct within ninety (90) days of Contract award. Such entity will also include the substance of this clause in subcontracts that have a value in excess of

\$500,000. Information regarding the establishment of business ethics and conduct programs can be obtained from numerous sources, including but not limited to:

<http://www.oecd.org/corruption/Anti-CorruptionEthicsComplianceHandbook.pdf>;

<http://cctrends.cipe.org/anti-corruption-compliance-guide/>

- (a) For purposes of the Contract, the terms set forth below are defined as follows, and sometimes referred to collectively in this document as “Fraud and Corruption”:
 - (i) **“coercive practice”** means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of any party, to influence improperly the actions of a party in connection with the implementation of any contract supported, in whole or in part, with MCC Funding, including such actions taken in connection with a procurement process or the execution of a contract;
 - (ii) **“collusive practice”** means a tacit or explicit agreement between two or more parties to perform a coercive, corrupt, fraudulent, obstructive or prohibited practice, including any such agreement designed to fix, stabilize, or maintain prices or to otherwise deprive the MCA Entity of the benefits of free and open competition;
 - (iii) **“corrupt practice”** means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of a public official, MCA Entity staff, MCC staff, consultants, or employees of other entities engaged in work supported, in whole or in part, with MCC Funding, including such work involving taking or reviewing selection decisions, otherwise advancing the selection process, or contract execution, or the making of any payment to any third party in connection with or in furtherance of a contract;
 - (iv) **“fraudulent practice”** means any act or omission, including any misrepresentation, that knowingly or recklessly misleads or attempts to mislead a party in order to obtain a financial or

- other benefit in connection with the implementation of any contract supported, in whole or in part, with MCC Funding, including any act or omission designed to influence (or attempt to influence) a selection process or the execution of a contract, or to avoid (or attempt to avoid) an obligation;
- (v) ***“obstructive practice”*** means any act taken in connection with the implementation of any contract supported, in whole or in part, with MCC Funding:
- (aa) that results in the deliberate destroying, falsifying, altering or concealing of evidence or making false statement(s) to investigators or any official in order to impede an investigation into allegations of a coercive, collusive, corrupt, fraudulent or prohibited practice;
 - (bb) that threatens, harasses or intimidates any party to prevent him or her from either disclosing his or her knowledge of matters relevant to an investigation or from pursuing the investigation; and/or
 - (cc) intended to impede the conduct of an inspection and/or the exercise of audit rights of MCC and/or an authorized Inspector General of MCC provided for in the Contract and under the Compact and related agreements; and
- (vi) ***“prohibited practice”*** means any action that violates Section E (Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions) of Annex B (Additional Provisions) of the Contract.
- (b) MCC may cancel any portion or all of the MCC Funding allocated to the Contract if it determines at any time that representatives of the MCA Entity, the Consultant or any other beneficiary of the MCC Funding were engaged in any coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices during the selection process or the performance of the Contract, or another MCC-funded contract, without the MCA Entity, the Consultant or such other

beneficiary having taken timely and appropriate action satisfactory to MCC to remedy the situation.

- (c) MCC and the MCA Entity may pursue sanction of the Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded any MCC-funded contract if at any time either MCC or the MCA Entity determines that the contractor has, directly or through an agent, engaged in any coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices in competing for, or in performance of, the Contract or another MCC-funded contract.
- (d) If the MCA Entity or MCC determines that the Consultant, any subcontractor, any of the Consultant's Personnel, or any agent or affiliate of any of them has, directly or indirectly, engaged in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices, in competing for or in the performance of the Contract, then the MCA Entity or MCC may, by notice, immediately terminate the Contract, and the provisions of GCC Sub-Clause 20.1 shall apply.
- (e) Should any of the Consultant's Personnel be determined to have engaged in coercive, collusive, corrupt, fraudulent, obstructive or prohibited practices during the competition for or execution of the Contract, but the MCA Entity or MCC determines not to terminate the Contract in accordance with the immediately preceding sub-paragraph, then the relevant Consultant's Personnel shall be removed in accordance with GCC Clause 12.

25. Combatting Trafficking in Persons 25.1

MCC, along with other United States Government entities, has adopted a zero tolerance policy with regard to Trafficking in Persons ("TIP") through its Counter-Trafficking in Persons Policy.³⁰ In pursuance of this policy:

- (a) **Defined Terms.** For purposes of the application and interpretation of this Sub-Clause:
 - (i) The terms "coercion," "commercial sex act," "debt bondage," "employee," "forced labor," "fraud,"

³⁰ <https://www.mcc.gov/resources/doc/policy-counter-trafficking-in-persons-policy>

“involuntary servitude,” and “sex trafficking” have the meanings given such terms in the MCC Counter-Trafficking in Persons Policy (“MCC C-TIP Policy”) and such definitions are incorporated by reference into this Sub-Clause; and

(ii) “Trafficking in Persons” means (A) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; (B) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(b) **Prohibition.** Contractors, subcontractors, Consultants, Sub-Consultants and any of their respective Personnel shall not engage in any form of Trafficking in Persons during the period of performance of any contract funded, in whole or in part, with MCC funding and must also comply with those prohibitions described in U.S. laws and Execute Orders regarding TIP, including using misleading recruitment practices; charging employees recruitment fees; or destroying, concealing, confiscating, or otherwise denying access by an employee to the employee’s identity documents.

(c) **Consultant Requirements.**

(i) Each contractor, subcontractor, Consultant or Sub-Consultant shall:

- a. notify its employees of the MCC C-TIP Policy and of the actions that will be taken against Personnel for violations of this policy. Such actions may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and
- b. take appropriate action, up to and including termination, against Personnel or subcontractors or Sub-Consultants that violate the prohibitions set out in this policy.

(ii) Each Consultant shall:

- a. certify that it is not engaged in, facilitating, or allowing any activities constituting Trafficking in Persons, or related activities also prohibited under this policy, for the duration of the

- Contract;
 - b. provide assurances that activities constituting Trafficking in Persons, or related activities also prohibited under this policy, will not be tolerated on the part of its Personnel, subcontractors or Sub-Consultants (as the case may be), or their respective employees; and
 - c. acknowledge that engaging in such activities is cause for suspension or termination of employment or of the Contract.
- (iii) A bidder, supplier, contractor, subcontractor, Consultant or Sub-Consultant shall inform the MCA Entity immediately of:
- a. any information it receives from any source (including law enforcement) that alleges its Personnel, subcontractor, Sub-Consultant, or the employee of a subcontractor or Sub-Consultant, has engaged in conduct that violates this policy; and
 - b. any actions taken against any Personnel, subcontractor, subcontractor/consultant, or the employee of a subcontractor or Sub-Consultant, pursuant to these requirements.
- (d) **Remedies.** Once the incident has been confirmed and depending on the severity of each case, the MCA Entity will apply remedies, which could include:
- (i) the MCA Entity requiring the Consultant to remove the involved Personnel, Sub-Consultant or any of its involved Personnel, or any involved agent or affiliate;
 - (ii) the MCA Entity requiring the termination of a subcontract or sub-award;
 - (iii) suspension of Contract payments until the breach is remedied to the satisfaction of the MCA Entity;
 - (iv) loss of incentive payment, consistent with the incentive plan set out in the Contract, if any, for the performance period in which the MCA Entity determined non-compliance;
 - (v) the MCA Entity pursuing sanctions against the Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded any MCC-funded contract; and

(vi) termination of the Contract by the MCA Entity for default or cause in accordance with the termination clause of the Contract

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| 26. Gender and Social Inclusion | 26.1 | The Consultant shall ensure that its activities under the Contract comply with the MCC Gender Policy ³¹ and the MCA Entity's Social and Gender Integration Plan, as relevant to the activities performed under this Contract. The MCC Gender Policy requires that activities funded by MCC specifically address social and gender inequalities to ensure opportunities for the participation and benefit of women and vulnerable groups, as well as to ensure that its activities do not cause significant negative social and gender impacts. |
| 27. | 27.1 | [Intentionally Deleted.] |
| 28. Prohibition of Harmful Child Labor | 28.1 | The Consultant shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. The Consultant will identify the presence of all persons under the age of eighteen (18). Where national laws have provisions for the employment of minors, the Consultant will follow Applicable Law. Children under the age of eighteen (18) will not be employed in hazardous work. All work of persons under the age of eighteen (18) will be subject to an appropriate risk assessment and regular monitoring of health, working conditions, and hours of work. |
| 29. Prohibition of Sexual Harassment | 29.1 | The Consultant shall prohibit sexual harassment behaviors directed at Compact beneficiaries, MCA Entity employees or MCA Entity consultants. Examples of sexual harassment include, but are not limited to, the following behaviors: unwelcome sexual advances; requests for sexual favors; verbal or physical harassment of a sexual nature; or offensive remarks about a person's sex, sexual orientation or non-conformity with gender stereotypes. The MCA Entity may investigate allegations of sexual harassment as it determines appropriate. The Consultant shall fully cooperate with any investigation conducted by the MCA Entity regarding breach of this provision. The Consultant will ensure that any incident of |

³¹ Available at: <https://assets.mcc.gov/guidance/mcc-policy-gender.pdf>

sexual harassment investigated by the MCA Entity has been resolved to the MCA Entity's satisfaction.

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| 30. Non-Discrimination
Equal Opportunity | and 30.1 | The MCA Entity adheres to the principle of equal opportunity and fair treatment in its employment practices. The MCA Entity expects that the Consultant shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. Personal characteristics include sex, race, nationality, ethnic, social and indigenous origin, religion or belief, disability, age, sexual orientation, and gender identity. The MCA Entity expects that the Consultant shall base its employment decisions on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination. |
| 31. Standard of Performance | 31.1 | The Consultant shall perform the Services and carry out its obligations under this Contract with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the MCA Entity, and shall at all times support and safeguard the MCA Entity's legitimate interests in any dealings with Sub-Consultants or third parties. |
| Law Governing Services | 31.2 | The Consultant shall perform the Services in accordance with Applicable Law and shall take all practicable steps to ensure that any Sub-Consultants, as well as the Personnel of the Consultant and any Sub-Consultants, comply with the Applicable Law. |
| 32. Conflict of Interests | 32.1 | The Consultant shall hold the MCA Entity's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or its own corporate interests. |
| Consultant Not to Benefit from
Commissions, Discounts, etc. | 32.2 | The payment of the Consultant pursuant to GCC Clause 17 |

shall constitute the Consultant's only payment in connection with this Contract and, subject to GCC Clause 32.3, the Consultant shall not accept for its own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or in the discharge of its obligations under this Contract, and the Consultant shall use its best efforts to ensure that any Sub-Consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional payment.

32.3 Furthermore, if the Consultant, as part of the Services, has the responsibility of advising the MCA Entity on the procurement of goods, works or services, the Consultant shall comply with the "MCC Program Procurement Guidelines" from time to time in effect as posted on the MCC website at www.mcc.gov/ppg and shall at all times exercise such responsibility in the best interest of the MCA Entity. Any discounts or commissions obtained by the Consultant in the exercise of such procurement responsibility shall be for the account of the MCA Entity.

Consultant and Affiliates Not to Engage in Certain Activities

32.4 The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub-Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Services.

Prohibition of Conflicting Activities

32.5 The Consultant shall not engage, and shall cause its Personnel as well as its Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities that would conflict with the activities assigned to them under this Contract.

33. Confidential Information; Rights of Use

33.1 Except with the prior written consent of the MCA Entity, or as may be required to comply with Applicable Law, the Consultant and its Personnel shall not (and shall cause any Sub-Consultants and their Personnel not to) at any time (a) communicate to any person or entity any confidential information acquired in the course of the Services, or (b) make public the recommendations formulated in the course of, or as a result of, the Services.

33.2 The Consultant and its Personnel shall not (and shall cause any Sub-Consultants and their Personnel not to), without the previous written consent of the MCA Entity, disclose this

Contract, or any provision of this Contract, or any specification, plan, drawing, pattern, sample or information provided by or on behalf of the MCA Entity in connection therewith, to any person other than a person employed by the Consultant in the performance of this Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

33.3 The Consultant and its Personnel shall not (and shall cause any Sub-Consultants and their Personnel not to), without the previous written consent of the MCA Entity, make use of any document or information related to or delivered in connection with this Contract, except for the purpose of performing this Contract.

33.4 Any document related to or delivered in connection with this Contract, other than this Contract itself, shall remain the property of the MCA Entity and shall be returned (including, except as provided in GCC Clause 34, all the copies) to the MCA Entity on completion of the Consultant's performance under this Contract.

34. Documents Prepared by the Consultant to be the Property of the MCA Entity

34.1 All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultant under this Contract shall become and remain the property of the MCA Entity, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the MCA Entity, together with a detailed inventory thereof in accordance with this GCC Sub-Clause 34.1 and Sub-Clause 33.4, and in format and substance specifically required in the Terms of Reference. The Consultant may retain a copy of such documents and software, and use such software for its own use with prior written approval of the MCA Entity. If license agreements are necessary or appropriate between the Consultant and third parties for purposes of the development or use of any such computer programs, the Consultant shall obtain the MCA Entity's prior written approval to such agreements, and the MCA Entity shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned. Other restrictions about the future use of these documents and software, if any, shall be **specified in the SCC**.

35. Liability of the Consultant

35.1 Subject to additional provisions, if any, **set forth in the SCC**, the Consultants' liability under this Contract shall be

provided by the Applicable Law.

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| 36. Insurance to be taken out by the Consultant | 36.1 | The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain, at its (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the MCA Entity, insurance against the risks, and for the coverage specified in the SCC and in Annex B, and (b) at the MCA Entity's request, shall provide evidence to the MCA Entity showing that such insurance has been taken out and maintained and that the current premiums have been paid. |
| 37. Accounting, Inspection and Auditing | 37.1 | The Consultant shall keep accurate and systematic accounts and records in respect of the provision of the Services under this Contract, in accordance with the provisions of Annex B and internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, receipt and use of goods and services and the basis thereof, together with a detailed inventory thereof. |
| Reporting Obligations | 37.2 | The Consultant shall maintain such books and records and submit to the MCA Entity the reports, documents and other information specified in Annexes B and C, in the form, in the numbers and within the time periods set forth in such Annexes. The Consultant shall submit to the MCA Entity such other reports, documents and information as may be requested by the MCA Entity from time to time. Final reports shall be delivered in an electronic form specified by the MCA Entity in addition to the hard copies specified in Annexes B and C. The Consultant consents to the MCA Entity's sharing of the reports, documents and information delivered by the Consultant pursuant to this Contract with MCC and the Government. |
| 38. Consultant's Actions Requiring the MCA Entity's Prior Approval | 38.1 | <p>In addition to any modification or variation of the terms and conditions of this Contract pursuant to GCC Sub-Clause 16.4, the Consultant shall obtain the MCA Entity's prior approval in writing before taking any of the following actions:</p> <ul style="list-style-type: none"> (a) any change or addition to the Personnel listed in Annex D; (b) entering into a subcontract with a Sub-Consultant for the performance of any part of the Services; and (c) any other action that may be specified in the SCC. |
| 39. Obligations with Respect to Subcontracts | 39.1 | Notwithstanding the MCA Entity's approval for the Consultant to enter into a subcontract pursuant to GCC |

Clause 38, the Consultant shall retain sole and full responsibility for the Services and all payments due to subcontractors thereof. In the event that any Sub-Consultants are found by the MCA Entity to be incompetent or incapable in discharging assigned duties, the MCA Entity may require that the Consultant provide a replacement, with qualifications and experience acceptable to the MCA Entity, or to resume the performance of the Services itself.

40. Use of Funds 40.1 The Consultant shall ensure that its activities do not violate provisions relating to use of funds and the prohibition of activities likely to cause a significant environmental, health or safety hazard, as set out in Annex B. Environmental, health, and safety hazards are defined in Appendix A of the MCC Environmental Guidelines available at www.mcc.gov.
41. Equipment, Vehicles and Materials Furnished by the MCA Entity 41.1 Equipment, vehicles and materials made available to the Consultant by the MCA Entity, or purchased by the Consultant wholly or partly with funds provided by the MCA Entity, shall be the property of the MCA Entity and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultant shall make available to the MCA Entity an inventory of such equipment, vehicles and materials and shall dispose of such equipment, vehicles and materials in accordance with the MCA Entity's instructions. While in possession of such equipment, vehicles and materials, the Consultant, unless otherwise instructed by the MCA Entity in writing, shall insure them in an amount equal to their full replacement value.
42. Equipment and Materials Provided by the Consultant 42.1 Equipment, vehicles or materials brought into the MCA Country by the Consultant, Sub-Consultants and Personnel, or purchased by them without funds provided by the MCA Entity, and used either for provision of the Services or personal use shall remain the property of the Consultant, its Sub-Consultants or the Personnel concerned, as applicable.
43. Assistance and Exemptions 43.1 Unless otherwise **specified in the SCC**, the MCA Entity shall use its best efforts to ensure that the Government shall:
- (a) Provide the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
 - (b) Arrange for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits,

exchange permits and any other documents required for their stay in the Government's country.

- (c) Facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their eligible dependents.
- (d) To the extent permitted by Applicable Law, exempt the Consultant, Sub-Consultants and their Personnel employed for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity.
- (e) Grant to the Consultant, Sub-Consultants and their Personnel the privilege, pursuant to the Applicable Law, of bringing into the MCA Country reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Personnel and their dependents and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services.

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| 44. Access to Land | 44.1 | The MCA Entity warrants that the Consultant, Sub-Consultants and their Personnel shall have, free of charge, unimpeded access to all land in the MCA Country in respect of which access is required for the performance of the Services. The MCA Entity will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Consultant, Sub-Consultants and their Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultant or Sub-Consultants or their Personnel. |
| 45. Change in the Applicable Law Related to Taxes and Duties | 45.1 | If, after the date of this Contract, there is any change in the Applicable Law with respect to Taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, payments to the Consultant shall not be adjusted. However, the provisions of GCC Sub-Clause 18(e) shall be applicable in such a situation. |
| 46. Services, Facilities and Property of the MCA Entity | 46.1 | The MCA Entity shall make available to the Consultant and the Personnel, for the purposes of performing the Services and free of any charge, the services, facilities and property described in Annex G at the times and in the manner specified in Annex G. |
| | 46.2 | In case that such services, facilities and property shall not be made available to the Consultant as and when specified in |

Annex G, the Parties shall agree on (a) any time extension that it may be appropriate to grant to the Consultant for the performance of the Services, (b) the manner in which the Consultant shall procure any such services, facilities and property from other sources, and (c) the additional payments, if any, to be made to the Consultant as a result thereof pursuant to GCC Sub-Clause 17.1.

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| 47. Payment | 47.1 In consideration of the Services performed by the Consultant under this Contract, the MCA Entity shall make to the Consultant payments in the manner provided in GCC Clause 17. |
| 48. Counterpart Personnel | <p>48.1 The MCA Entity shall make available to the Consultant free of charge such professional and support counterpart personnel, to be nominated by the MCA Entity with the Consultant's advice, if specified in Annex G.</p> <p>48.2 If counterpart personnel are not provided by the MCA Entity to the Consultant as and when specified in Annex G, the MCA Entity and the Consultant shall agree on (a) how the affected part of the Services shall be carried out, and (b) the additional payments, if any, to be made by the MCA Entity to the Consultant as a result thereof pursuant to GCC Sub-Clause 17.1.</p> <p>48.3 Professional and support counterpart personnel, excluding the MCA Entity's liaison personnel, shall work under the exclusive direction of the Consultant. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultant that is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the MCA Entity shall not unreasonably refuse to act upon such request.</p> |
| 49. Good Faith | 49.1 The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract. |
| 50. Operation of the Contract | 50.1 The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of this Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either |

Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness.

SPECIAL CONDITIONS OF CONTRACT

Amendments of, and Supplements to, Clauses in the General Conditions of Contract of this Contract	
GCC 1.1	(a) “Applicable Law” means the laws and any other instruments having the force of law in Benin, as they may be issued and in force from time to time. (m) “Local Currency” means XOF. (n) “MCA Country” means the country of Benin.
GCC 3.1	This Contract shall be executed in the English language Yes [☒] No [☐] and in French language Yes [☐] No [☒].
GCC 4.1	The addresses for serving notices under this Contract are: <u>For the MCA Entity:</u> Millennium Challenge Account-Benin II (MCA-Benin II) Attn.: The National Coordinator <u>Address:</u> Immeuble KOUGBLENOU, 3eme étage Domaine de l’OCBN Derrière la Compagnie Territoriale de Gendarmerie du Littoral Cotonou, République du Bénin Tel. : 00 229 21 31 78 25 Fax. : 00 229 21 31 46 92 <u>Email:</u> info-benin@charleskendall.com and copy to: info@mcabenin2.bj <u>For the Consultant:</u>
GCC 8.1	The Member in charge is [insert name of member] <i>[Note: If the Consultant consists of a joint venture or another association of more than one entity, the name of the entity whose address is specified in SCC 9.1 should be inserted here. If the Consultant consists only of one entity, this SCC 8.1 should be deleted from the SCC.]</i>
GCC 9.1	The Authorized Representatives are: <u>For the MCA Entity:</u> Attention Millennium Challenge Account – Benin (MCA-Benin II) Address : Immeuble KOUGBLENOU, 3^{ème} étage Domaine de l’OCBN Derrière la Compagnie Territoriale de Gendarmerie du Littoral Cotonou, République du Bénin Téléphone : + 229 21 31 78 25 Fax : + 229 21 31 46 92

	Email : info@mcabenin2.bj <u>For the Consultant:</u>
GCC 10.3	Written notification to the MCA Entity of adjustments is required.
GCC 10.5	A resident project manager shall be required for the duration of this Contract.
GCC 13.2	All disputes shall be settled by arbitration in accordance with the following provisions: 1. <u>Selection of Arbitrators.</u> Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions: (a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the International Chamber of Commerce] for a list of not fewer than five (5) nominees and, on receipt of such list, the Parties shall alternately strike names therefrom, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, the International Chamber of Commerce shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute. (b) Where the Parties do not agree that the dispute concerns a technical matter, the MCA Entity and the Consultant shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by the International Chamber of Commerce, Paris. (c) If, in a dispute subject to SCC Sub-Clause 13.2.1(b), one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the International Chamber of Commerce, Paris to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute. 2. <u>Rules of Procedure.</u> Except as stated herein, arbitration proceedings shall be

	conducted in accordance with the rules of procedure for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as in force on the date of this Contract. These rules, in the version in force at the time of the request for Arbitration, will be deemed to form part of this Contract. 3. <u>Substitute Arbitrators</u>. If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator. 4. <u>Nationality and Qualifications of Arbitrators</u>. The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) through (c) of Sub-Clause SCC 13.2.1 shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute and shall not be a national of the Consultant's home country [Note: If the Consultant consists of more than one entity, add: or of the home country of any of their Members or Parties] or of the Government's country. For the purposes of this Clause, "home country" means any of: (a) the country of incorporation of the Consultant [Note: If the Consultant consists of more than one entity, add: or of any of their Members or Parties]; or (b) the country in which the Consultant's [or any of their Members' or Parties'] principal place of business is located; or (c) the country of nationality of a majority of the Consultant's [or of any Members' or Parties'] shareholders; or (d) the country of nationality of the Sub-Consultants concerned, where the dispute involves a subcontract. 5. <u>Costs</u>. Upon the occurrence of a dispute, the Parties shall agree on the allocation of the costs associated with any settlement efforts before arbitration or associated with arbitration. Where the Parties fail to agree on the allocation, the allocation shall be determined by the arbitrator. 6. <u>Miscellaneous</u>. In any arbitration proceeding under this Contract: (a) proceedings shall, unless otherwise agreed by the Parties, be held in [select a country which is neither the MCA Entity's country nor the Consultant's country]; (b) the English language shall be the official language for all purposes; and (c) the decision of the sole arbitrator or of a majority of the arbitrators shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.
	7. <u>MCC Right to Observe</u>. MCC has the right to be an observer to any

	arbitration proceeding associated with this Contract, at its sole discretion, but does not have the obligation to participate in any arbitration proceeding. Whether or not MCC is an observer to any arbitration associated with this Contract, the Parties shall provide MCC with written English transcripts of any arbitration proceedings or hearings and a copy of the reasoned written award within ten (10) days after (a) each such proceeding or hearing or (b) the date on which any such award is issued. MCC may enforce its rights under this Contract in an arbitration conducted in accordance with this provision or by bringing an action in any court that has jurisdiction. The acceptance by MCC of the right to be an observer to the arbitration shall not constitute consent to the jurisdiction of the courts or any other body of any jurisdiction or to the jurisdiction of any arbitral panel.																														
GCC 16.1	This Contract shall enter into force on the date of signing of the Contract by both parties.																														
GCC 16.2	The Effective Date shall be Twenty-one (21) days after contract entry into force date.																														
GC C 16.3	The Contract shall expire on [insert date].																														
GCC 17.1	The amount of the fixed price Contract is XXXXXX [US Dollars] OR XXXXX XOF OR XXXXX [US Dollars] and XXXXX XOF (the “Contract Price”). The accounts are: For US Dollars: [insert account number] For XOF : [insert account number] Payments for the deliverables shall be made according to the following schedule of percentages of the amounts included in the Contract: Payment Schedule <table><tr><th colspan="6">LIST OF DELIVERABLES AND ASSOCIATED PAYMENTS</th></tr><tr><th><u>ID</u></th><th><u>Report Title</u></th><th><u>Draft or Final</u></th><th><u>Expected Date (Weeks from NTP)</u></th><th><u>Payment (% of contract price)</u></th><th><u>Cumulative Payment (% of contract price)</u></th></tr><tr><th colspan="6">Contract Period</th></tr><tr><td>1</td><td>Inception report (also including kick-off meeting)</td><td>Final</td><td>6</td><td>15%</td><td>15%</td></tr><tr><td>3</td><td>Progress report</td><td>Final</td><td>19</td><td>10%</td><td>25%</td></tr></table>	LIST OF DELIVERABLES AND ASSOCIATED PAYMENTS						<u>ID</u>	<u>Report Title</u>	<u>Draft or Final</u>	<u>Expected Date (Weeks from NTP)</u>	<u>Payment (% of contract price)</u>	<u>Cumulative Payment (% of contract price)</u>	Contract Period						1	Inception report (also including kick-off meeting)	Final	6	15%	15%	3	Progress report	Final	19	10%	25%
LIST OF DELIVERABLES AND ASSOCIATED PAYMENTS																															
<u>ID</u>	<u>Report Title</u>	<u>Draft or Final</u>	<u>Expected Date (Weeks from NTP)</u>	<u>Payment (% of contract price)</u>	<u>Cumulative Payment (% of contract price)</u>																										
Contract Period																															
1	Inception report (also including kick-off meeting)	Final	6	15%	15%																										
3	Progress report	Final	19	10%	25%																										

	4, 5, 6	Interim report for soil and water (PCB, hydrocarbons, metals, etc.) Interim report for electrical equipment and oil (PCB and non PCB) Report of risk assessment	Final	26	25%	50%
	7, 8, 9	Short-term remediation plan for soil and water (PCB, hydrocarbons, metals, etc.) Short-term remediation plan ¹ for electrical equipment and oil (PCB and non PCB) Long term management plan (SBEE operations after completion of compact)	Final	33	40%	90%
	10	Specifications and TORs for short term remediation work	Final	40	10%	100%
The Consultant should note that payment of fees for the services is linked to approval of individual deliverables by MCA-Benin II. They should note that all reports will be considered draft until they are reviewed and approved by MCA-Benin II. MCA-Benin II will coordinate comments from other reviewing parties (e.g., IEs, MCC, etc.).						
GCC 17.5	The interest rate to be applied in the case of late payments is the Federal Funds Rate as stated on the website: http://www.federalreserve.gov/releases/h15/current/default.htm					
GCC 34.1	The Consultant shall not use the documents for purposes unrelated to this Contract without the prior written approval of MCA-Benin II.					
GCC 36.1	The risks and the minimum coverage shall be as follows: (a) third party motor vehicle liability insurance in respect of motor vehicles operated in BENIN by the Consultant or its Personnel or any					

	Sub-Consultants or their Personnel, with a minimum coverage of 100 000 USD; (b) third party liability insurance, with a minimum coverage of 3 000 000 USD; (c) professional liability insurance, with a minimum coverage of 3 000 000 USD; (d) employer's liability and workers' compensation insurance in respect of the Personnel of the Consultant and of any Sub-Consultants, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and (e) insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services.
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ANNEXES TO CONTRACT

Annex A: Description of Services

[Note to MCA Entity: Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by the MCA Entity, etc. This Description of Services is to be based on the TOR issued with the RFP and incorporates changes agreed upon during negotiations. It must be noted that this Description of Services takes precedence over the Consultant's Proposal, so any changes recommended or requested by the Consultant do not alter the services the Consultant is required to perform unless agreed to during negotiations and incorporated into this Description of Services.]

This Annex A shall incorporate by reference: the proposal dated **[insert date of awarded Proposal]** submitted by **[insert name of Consultant awarded the Contract]** in connection with the procurement for this Contract (the "Proposal"). In the event of any inconsistency between this Description of Services and the Proposal, the priority of interpretation shall be given to this Description of Services.

Annex B: Additional Provisions

Capitalized terms that are used but not defined in this Annex shall have the meaning given to them in the GCC, the SCC, or in the Compact or related agreements.

The MCA Entity is responsible for the oversight and management of the implementation of the Compact on behalf of the Government, and intends to apply a portion of the proceeds of the Compact to eligible payments under this Contract, provided that (a) such payments will only be made at the request of and on behalf of the MCA Entity and as authorized by the Fiscal Agent, (b) MCC shall have no obligations to the Consultant under the Compact or this Contract, (c) such payments will be subject, in all respects, to the terms and conditions of the Compact, and (d) no party other than the Government and the MCA Entity shall derive any rights from the Compact or have any claim to MCC Funding.

A. MCC Status; Reserved Rights; Third-Party Beneficiary

1. MCC Status. MCC is a United States Government corporation acting on behalf of the United States Government in the implementation of the Compact. MCC has no liability under this Contract, and is immune from any action or proceeding arising under or relating to this Contract. In matters arising under or relating to this Contract, MCC is not subject to the jurisdiction of the courts or any other juridical or other body of any jurisdiction.
2. MCC Reserved Rights.
 - (a) Certain rights are expressly reserved to MCC under this Contract, the Compact and other related Compact documents, including the right to approve the terms and conditions of this Contract, as well as any amendments or modifications hereto, and the right to suspend or terminate this Contract.
 - (b) MCC, in reserving such rights under this Contract, the Compact or other related Compact documents, has acted solely as a funding entity to assure the proper use of United States Government funds, and any decision by MCC to exercise or refrain from exercising these rights shall be made as a funding entity in the course of funding the activity and shall not be construed as making MCC a Party to this Contract.
 - (c) MCC may, from time to time, exercise its rights, or discuss matters related to this Contract with the Parties or the Government, as appropriate, jointly or separately, without thereby incurring any responsibility or liability to any Party.
 - (d) Any approval (or failure to approve) or exercise of (or failure to exercise) any rights by MCC shall not bar the Government, the MCA Entity, MCC or any other person or entity from asserting any right against the Consultant, or relieve the Consultant of any liability which the Consultant might otherwise have to the Government, the MCA Entity, MCC, or any other person or entity. For the purposes of this clause (d), MCC shall be deemed to include any MCC officer, director, employee, affiliate, contractor, agent or representative.
3. Third-Party Beneficiary. MCC shall be deemed to be a third party beneficiary under this Contract.

B. Limitations on the Use or Treatment of MCC Funding

The use and treatment of MCC Funding in connection with this Contract does not, and shall not, violate any limitations or requirements specified in the Compact or any other relevant agreement or Implementation Letter or applicable laws or United States Government policy. No MCC Funding shall be used for military purposes, for any activity likely to cause a substantial loss of United States jobs or a substantial displacement of United States production, to support any activity likely to cause a significant environmental, health or safety hazard, or to fund abortions or involuntary sterilizations as a method of family planning. MCC Funding shall be free from the payment or imposition of all Taxes as set forth in the Compact.

C. Procurement

The Consultant shall ensure that all procurements of goods, works or services under, related to or in furtherance of this Contract shall be consistent with the general principles set forth in the Compact and in the MCC Program Procurement Guidelines from time to time in effect as posted on the MCC website at www.mcc.gov/ppg. The Consultant shall comply with the eligibility requirements related to prohibited source or restricted party provisions in accordance with U.S. laws, regulations and policy, applicable World Bank policies or guidelines and in accordance with other eligibility requirements as may be specified by MCC or the MCA Entity.

D. Reports and Information; Access; Audits; Reviews

1. Reports and Information. The Consultant shall maintain such books and records and provide such reports, documents, data or other information to the MCA Entity in the manner and to the extent required by the Compact or related documents, and as may be reasonably requested by the MCA Entity from time to time in order to comply with its reporting requirements arising under the Compact or related documents. MCC may freely use any information it receives in any report or document provided to it in any way that MCC sees fit. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.
2. Access, Audits and Reviews. Upon MCC's request, the Consultant shall permit authorized representatives of MCC, an authorized Inspector General of MCC, the United States Government Accountability Office, any auditor responsible for an audit contemplated by the Compact or conducted in furtherance of the Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review or evaluation of the Program, the opportunity to audit, review, evaluate or inspect activities funded by MCC Funding. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.

3. Application to Providers. The Consultant shall ensure the inclusion of the applicable audit, access and reporting requirements from the Compact in its contracts or agreements with other providers in connection with this Contract.

E. Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions

1. The Consultant shall ensure that no payments have been or will be made by the Consultant to any official of the Government, the MCA Entity, or any third party (including any other government official) in connection with this Contract in violation of the United States Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. 78a et seq.) (the “FCPA”) or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity subject to the FCPA, or similar statute applicable to this Contract, including any local laws. The Consultant affirms that no payments have been or will be received by any official, employee, agent or representative of the Consultant in connection with this Contract in violation of the FCPA or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity subject to the FCPA, or similar statute applicable to this Contract, including any local laws.
2. The Consultant shall not provide material support or resources directly or indirectly to, or knowingly permit MCC Funding to be transferred to, any individual, corporation or other entity that the Consultant knows, or has reason to know, commits, attempts to commit, advocates, facilitates, or participates in any terrorist activity, or has committed, attempted to commit, advocated, facilitated or participated in any terrorist activity, including, but not limited to, the individuals and entities (i) on the master list of Specially Designated Nationals and Blocked Persons maintained by the U.S. Department of Treasury’s Office of Foreign Assets Control, which list is available at www.treas.gov/offices/enforcement/ofac, (ii) on the consolidated list of individuals and entities maintained by the “1267 Committee” of the United Nations Security Council, (iii) on the list maintained on www.sam.gov or (iv) on such other list as the MCA Entity may request from time to time. For purposes of this provision, “material support and resources” includes currency, monetary instruments or other financial securities, financial services, lodging, training, expert advice or assistance, safe houses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel, transportation, and other physical assets, except medicine or religious materials.
3. The Consultant shall ensure that its activities under this Contract comply with all applicable U.S. laws, regulations, executive orders, and policies regarding money laundering, terrorist financing, trafficking in persons, U.S. sanctions laws, restrictive trade practices, boycotts, and all other economic sanctions promulgated from time to time by means of statute, executive order, regulation or as administered by the Office of Foreign Assets Control of the United States Treasury Department or any successor governmental authority, including, 18 U.S.C. § 1956, 18 U.S.C. § 1957, 18 U.S.C. § 2339A, 18 U.S.C. § 2339B, 18 U.S.C. § 2339C, 18 U.S.C. § 981, 18 U.S.C. § 982, Executive Order 13224, 15 C.F.R. Part 760, and those economic sanctions programs enumerated at 31 C.F.R. Parts 500 through 598 and shall ensure that its activities under this Contract comply with any policies and procedures for monitoring

operations to ensure compliance, as may be established from time to time by MCC, the MCA Entity, the Fiscal Agent, or the MCA Entity's permitted account bank, as may be applicable. The Consultant shall verify, or cause to be verified, appropriately any individual, corporation or other entity with access to or recipient of funds, which verification shall be conducted in accordance with the procedures set out in Part 10 of the MCC Program Procurement Guidelines (Eligibility Verification Procedures) that can be found on MCC's website at www.mcc.gov/ppg. The Consultant shall (A) conduct the monitoring referred to in this paragraph on at least a quarterly basis, or such other reasonable period as the MCA Entity or MCC may request from time to time and (B) deliver a report of such periodic monitoring to the MCA Entity with a copy to MCC.

4. Other restrictions on the Consultant shall apply as set forth in the Compact or related documents with respect to any activities in violation of other applicable U.S. laws, regulations, executive orders or policies, any misconduct injurious to MCC or the MCA Entity, any activity contrary to the national security interests of the United States or any other activity that materially and adversely affects the ability of the Government or any other party to effectively implement, or ensure the effective implementation of, the Program or any Project or to otherwise carry out its responsibilities or obligations under or in furtherance of the Compact or any related document or that materially and adversely affects the Program assets or any Permitted Account.

F. Publicity, Information and Marking

1. The Consultant shall cooperate with the MCA Entity and the Government to provide the appropriate publicity to the goods, works and services provided under this Contract, including identifying Program activity sites and marking Program assets as goods, works and services funded by the United States Government, acting through MCC, all in accordance with the MCC Standards for Global Marking available on the MCC website at www.mcc.gov; provided, however, that any press release or announcement regarding MCC or the fact that MCC is funding the Program or any other publicity materials referencing MCC, shall be subject to MCC's prior written approval and must be consistent with any instructions provided by MCC from time to time in relevant Implementation Letters.
2. Upon the termination or expiration of the Compact, the Consultant shall, upon MCC's request, cause the removal of any such markings and any references to MCC in any publicity materials.

G. Insurance

The Consultant shall obtain insurance, performance bonds, guarantees or other protections appropriate to cover against risks or liabilities associated with performance of this Contract. The Consultant shall be named as payee on any such insurance and the beneficiary of any such performance bonds and guarantees. The MCA Entity and, at MCC's request MCC, shall be named as additional insureds on any such insurance or other guarantee, to the extent permissible under applicable laws. The Consultant shall ensure that any proceeds from claims paid under such insurance or any other form of guarantee shall be used to replace or repair any loss or to

pursue the procurement of the covered goods, works and services; provided, however, that at MCC's election, such proceeds shall be deposited in an account as designated by the MCA Entity and acceptable to MCC or as otherwise directed by MCC.

H. Conflict of Interest

The Consultant shall ensure that no officer, director, employee, affiliate, contractor, Sub-Consultant, agent, advisor or representative of the Consultant participates in the selection, award, administration or oversight of a contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with this Contract, in which (i) the entity, the person, members of the person's immediate family or household or his or her business partners, or organizations controlled by or substantially involving such person or entity, has or have a financial or other interest or (ii) the person or entity is negotiating or has any arrangement concerning prospective employment, unless such person or entity has first disclosed in writing to the parties under this Contract and MCC the conflict of interest and, following such disclosure, the parties to this Contract agree in writing to proceed notwithstanding such conflict. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, Sub-Consultants, agents, advisors or representatives involved in the selection, award, administration, oversight or implementation of any contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with this Contract shall solicit or accept from or offer to a third party or seek or be promised (directly or indirectly) for itself or for another person or entity any gift, gratuity, favor or benefit, other than items of *de minimis* value and otherwise consistent with such guidance as MCC may provide from time to time. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, Sub-Consultants, agents, advisors or representatives engage in any activity which is, or gives the appearance of being, a conflict of interest in connection with this Contract. Without limiting the foregoing, the Consultant shall comply, and ensure compliance, with the applicable conflicts of interest and ethics policies of the MCA Entity as provided by the MCA Entity to the Consultant.

I. Inconsistencies

In the event of any conflict between this Contract and the Compact and/or the Program Implementation Agreement, Procurement Agreement, or Disbursement Agreement, as applicable, the term(s) of the Compact and/or the Program Implementation Agreement, Procurement Agreement, or Disbursement Agreement, as applicable, shall prevail.

J. Other Provisions

The Consultant shall abide by such other terms or conditions as may be specified by the MCA Entity or MCC in connection with this Contract.

K. Flow-Through Provisions

In any subcontract or sub-award entered into by the Consultant, as permitted by this Contract, the Consultant shall ensure the inclusion of all the provisions contained in paragraphs (A) through (J) above.

Annex C: Reporting Requirements

Following the signing of the Contract and issuance of the Notice to Proceed (“NTP”), the consultancy will be launched with a formal kick-off meeting in Cotonou (Benin). The Consultant shall be represented by the Head of the mission (Specialist hazardous material management in the power sector) and Key Personnel. The purpose of the kick-off meeting will be to address any questions about the Contract or scope of work and to clarify expectations regarding the services.

The following table summarizes the Deliverables and their Due Dates:

REPORTING REQUIREMENTS		
<u>Deliverable</u>	<u>Due Date of Draft Report</u>	<u>Due Date of Final Report</u>
1. Inception report (also including kick-off meeting)	Within 2 weeks of NTP	Within 2 weeks of receiving comments on draft Inception Report
2. Initial assessment of sites, regulatory framework, updated Work Plan and Detailed Site Sampling Plan	Within 6 weeks of NTP	Within 2 weeks of receipt of comments
3. Progress report including : i) summary of activities since Inception report, ii) details of all testing/sampling sites, iii) details of samples sent to laboratory, iv) outline of main results from the field observations / tests, v) field constraints and limitations, vi) H&S reporting, vii) summary of technology & knowledge transfer to SBEE	Within 15 weeks after NTP ¹	Within 2 weeks of receiving comments on progress report
4. Interim report for soil and water (PCB, hydrocarbons, metals, etc.): i) detailed field observations and measurements, ii) maps showing contaminated areas and sample sites; iii) laboratory results, iv) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards	Within 22 weeks after NTP	Within 2 weeks of receiving comments on Interim report for soil and water (PCB, hydrocarbons, metals, etc.)
5. Interim report for electrical equipment and oil (PCB and non PCB) : i) detailed field observations / measurements, ii) laboratory results , iii) analysis / interpretation of the extent and level of contamination in relation with Benin regulation and international standards	Within 22 weeks after NTP	Within 2 weeks of receiving comments on Interim report for electrical equipment and oil (PCB and non PCB)
6. Report of Risk Assessment (including	Within 22 weeks	Within 2 weeks of receiving

maps showing the location, extent and level of risks)	after NTP	comments on Risk Assessment report
7. Short-term remediation plan ³ for soil and water (PCB, hydrocarbons, metals, etc.): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on short term remediation plan for soil and water
8. Short-term remediation plan ³ for electrical equipment and oil (PCB and non PCB): i) summary of main findings regarding location, extent and level of contamination, ii) detailed short-term remediation measures , iii) costing	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on short term remediation plan for electrical equipment and oil
9. Long term management plan ⁴ (SBEE operations after completion of compact): i) summary of main findings regarding sources / causes of contamination, ii) detailed long-term remediation measures/facilities; iii) costing; one separate report should be prepared for each power plant and one for all the substations.	Within 29 weeks after NTP ²	Within 2 weeks of receiving comments on Long term management plan
10. Specifications & TORs for short term remediation work	Within 36 weeks after NTP	Within 2 weeks of receiving comments on specifications and TORs

It is the intention of MCA-Benin II to provide comments on all draft reports within two weeks of receipt of the drafts; the FM will then be required to issue the finalized report within two weeks thereafter, taking into consideration the comments provided.

Presentation of Deliverables

Consultant shall present deliverables according to the schedule presented above. All draft deliverables shall be submitted electronically in French and all final deliverables shall be submitted electronically and in 15 hard copies to be delivered to MCA-Benin II in Cotonou. All final reports shall be submitted simultaneously in both English and French.

Packaging and packing for all items delivered hereunder shall be in accordance with commercial practice and adequate to ensure acceptance by common carrier and safe arrival at destination. The contract number shall be placed on each package, report, or other deliverable.

In general, all electronic documentation will be accessible via: (1) MS Windows based MS Office 2003 (or later) products, including Word for text, Excel for spreadsheets and data tables, PowerPoint for presentations and Project for schedules; (2) AutoCAD 2002 (or later) and in PDF format for original drawing files; (3) JPG format for digital photos; and (4) Manifold (used by SBEE) and ArcGIS for GIS database. Any raw data not submitted through spreadsheets should be submitted in either Microsoft Access (*.accdb file), STATA (*.data file), or SPSS (*.sav file). Any other format(s) must be agreed upon by MCA-Benin II.

Annex D: Key Professional Personnel and Sub-Consultants

Note: List under:

- D-1 Titles **[and names, if already available]**, detailed job descriptions and minimum qualifications of foreign Key Professional Personnel to be assigned to work in **[Country]**, and estimated staff-months for each.
- D-2 Same as D-1 for foreign Key Professional Personnel to be assigned to work outside **Benin**.
- D-3 List of approved Sub-Consultants (if already available) and same information with respect to their Personnel as in D-1 or D-2.
- D-4 Same information as D-1 for local Key Professional Personnel.
- D-5 Working hours, holidays, sick leave and vacations, as provided for in GCC Clause 11 (if applicable)

Annex E: Breakdown of Contract Price in US Dollars

Note: List here the monthly rates for Personnel (Key Professional Personnel and other Personnel) (fully loaded, including direct and indirect expenses and profit), used to arrive at the breakdown of the price - US Dollars portion (from Form FIN-4).

This Annex will exclusively be used for determining remuneration for additional services.

Annex F: Breakdown of Contract Price in Local Currency

Note: List here the monthly rates for Personnel (Key Professional Personnel and other Personnel) (fully loaded, including direct and indirect expenses and profit), used to arrive at the breakdown of the price - Local Currency portion (from Form FIN-4).

This Annex will exclusively be used for determining remuneration for additional services.

Annex G: Services and Facilities to be Provided by the MCA Entity

• Support Provided by MCA-Benin II

MCA-Benin II will provide the Consultant the following information and support:

- (a) Access to all reports, data and other necessary documents related to the assignment that may already be available.
- (b) Letters of introduction to facilitate access to various stakeholders, ministries, governmental authorities and agencies whose activities and roles are essential to the mission of the Consultant.
- (c) Invitation letters as may be needed to support visa applications for entry and exit for the Consultant's expatriate staff.
- (d) Facilitation of issuance of any permit required for personnel of the Consultant to perform its tasks in Benin.
- (e) Facilitation of the import and export of equipment or sampling that may be required for the Consultant's performance of consulting services, and property belonging to the Consultant's expatriate staff.
- (f) Support with setting up meetings with the Ministry of Living Environment and sustainable development and/or the Agence Béninoise pour l'Environnement (ABE).

• Documents to be provided by MCA

The Consultant will be provided all necessary documentation of the Compact. These documents shall include, but not be limited to, the following:

- a. Compact Agreement signed on September 9, 2015; the Compact is also available on the website www.mcc.gov).
- b. IEAs as and when they become available.
- c. Relevant MCC Policies: MCC Environmental Guidelines, MCC Policy for Monitoring and Evaluation of Compact and Threshold Programs, MCC Guidance for Common Indicators, MCC Gender Policy and Gender Integration Guidelines (available on the website www.mcc.gov).
- d. [Relevant Benin laws, regulations, and official procedures, especially as it relates to the environmental permitting process and requirements.](#)
- e. Related reports used during the development of the Compact activities:
 - i. Inventories of SBEE's transformers
 - ii. SBEE PCB report
 - iii. Other relevant studies.
- f. Reports referred to herein prepared by other consultants.

- **Support to be provided by SBEE and DGE**

SBEE is a key stakeholder to be actively involved in this hazardous material assessment, for both concertation and technology transfer.

SBEE will provide access to the sites and equipment, including on-use transformers.

SBEE will take appropriate measures to insure health and safety for the team, notably approaching on-use transformers, as advised by the Consultant. However, the Consultant will be responsible to provide any Personal Protective Equipment (PPE) or other health & safety specific device for this assessment, including IPE for the SBEE and DGE officers who are accompanying the Consultant.

SBEE will provide available technical information regarding their sites and their hazardous material management. It will be crucial to obtain from SBEE accurate information on present and historical contaminations at all sites, as well as any other information which may be necessary to develop the sampling plan (e.g. location of any underground cables or pipes).

The DGE is also a key stakeholder to be actively involved in this hazardous material assessment, for both concertation and technology transfer.

The DGE will facilitate the identification and monitoring of indicators related to legislation and will provide information related to the legal framework.