

Original

14134



THE REPUBLIC OF UGANDA



**THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)**

**The National Environment Act, No. 5 of 2019**

**The Environment Impact Assessment Regulations, S.1. No. 153-1**

**Certificate of Approval of Environmental and Social Impact Assessment**

**Certificate No. NEMA/ESIA/ 14134**

*This is to certify that the Project Brief/Environmental and Social Impact Statement  
received from*

M/s: **TOTAL EAST AFRICA MIDSTREAM B.V.**

of **P.O. BOX 34867 KAMPALA**

submitted to the National Environment Management Authority (NEMA) in accordance with the National Environment Act, No. 5 of 2019 regarding:

**THE PROPOSED EAST AFRICAN CRUDE OIL PIPELINE (EACOP)  
PROJECT**

*(Title of Project)*

briefly described as **THE EAST AFRICAN CRUDE OIL PIPELINE (EACOP)  
PROJECT**

*(Nature, Purpose)*

Project Investment cost ~~XXXX~~ **USD \$750 MILLION**

located at **HOIMA, KIKUUBE, KAKUMIRO, KYANKWANZI, MUBENDE,  
GOMBA, LWENGO, SEMBABULE, RAKAI AND KYOTERA DISTRICTS**

*(District/Sub-county/City/Town/Ward)*

**has been reviewed and was found to:**

**\*\* have significant environmental impacts and the following appropriate mitigation measures  
and made a condition precedent for approval and implementation:**

*(The relevant conditions are attached in the subsequent pages)*

Dated at **KAMPALA** on **30 NOVEMBER 2020**

Signed

**EXECUTIVE DIRECTOR (NEMA)**





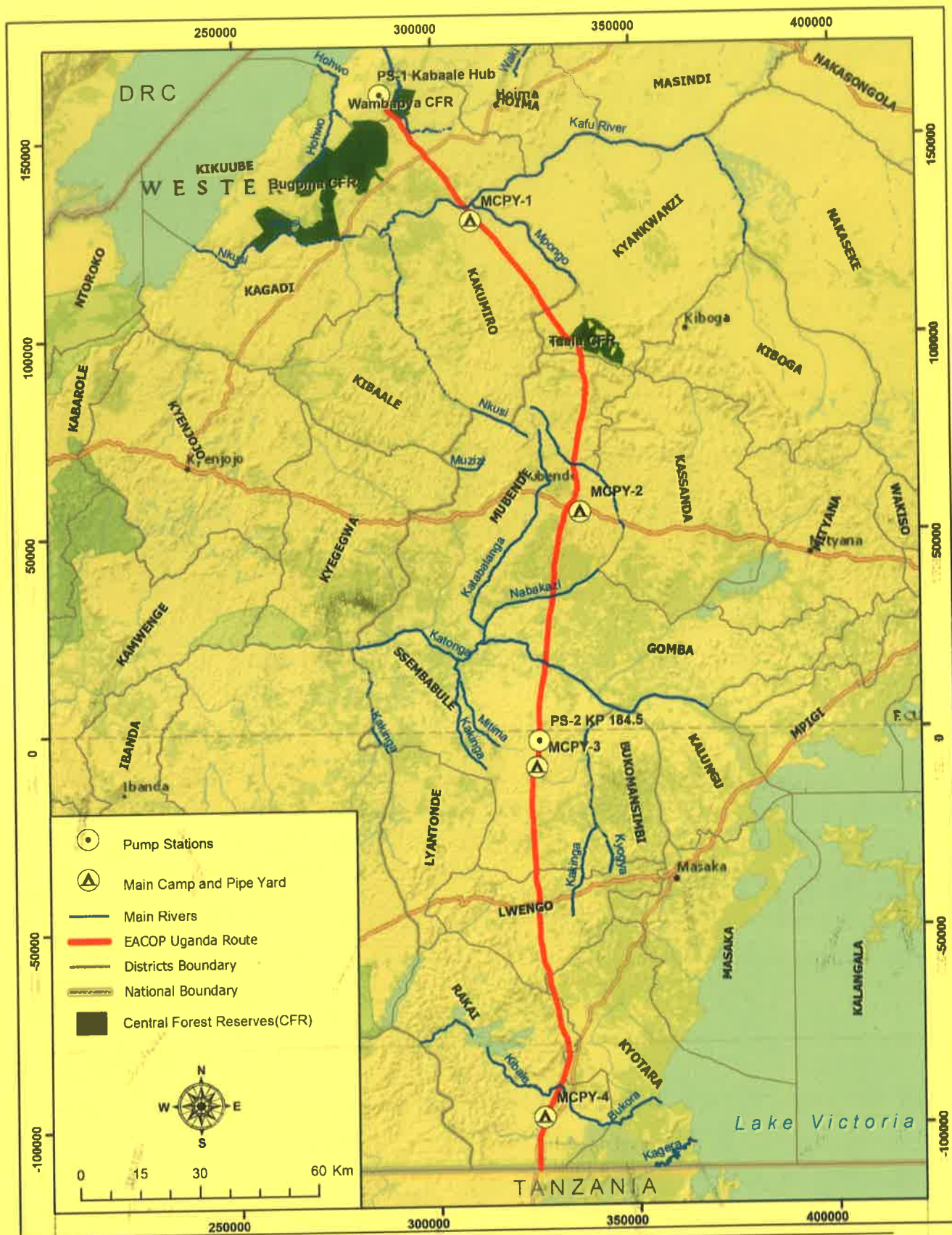
## NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

### CONDITIONS OF APPROVAL FOR THE ENVIRONMENTAL AND SOCIAL IMPACT STATEMENT(ESIS) FOR THE EAST AFRICAN CRUDE OIL PIPELINE (EACOP) PROJECT IN UGANDA - *(Within the areas defined by Figure 1 and Coordinates in Annex 1 & 2)*

#### 1.0 BASE CONDITIONS

- 1.1 This Certificate is issued to **M/s. TOTAL EAST AFRICA MIDSTREAM B.V.** (herein referred to as the **Developer**) in accordance with the National Environment Act, No. 5 of 2019 and based on the information contained in the revised Environmental and Social Impact Statement (ESIS) submitted on **7<sup>th</sup> August, 2020** for the development of the East African Crude Oil Pipeline (EACOP) Project and supporting infrastructure in the districts of **Hoima, Kikuube, Kakumiro, Kyankwanzi, Mubende, Gomba, Lwengo, Sembabule, Rakai, and Kyotera.**
- 1.2 This Certificate applies to the section of EACOP and associated facilities in Uganda only and includes the Main Camps and Pipe Yards (MCPY-1,2,3,4), Pumping Stations, Block valves, electric substations as described in the ESIS and as shown in **Figure 1** of this Certificate.
- 1.3 The Developer shall comply with these approval conditions in addition to implementing the mitigation measures and all commitments documented in the Environmental and Social Impact Statement (ESIS) and the Environmental and Social Management Plan (ESMP) therein; unless advised by the Authority.
- 1.4 The Developer shall implement the project in compliance with the following laws and regulations:
  - (a) The National Environment Act, No. 5 of 2019,
  - (b) The Petroleum (Refining, Conversion, Transmission and Midstream storage) Act, 2013,
  - (c) The Physical Planning Act, 2020,
  - (d) The Local Government Act, Cap. 256,
  - (e) The Water Act, Cap.152,
  - (f) Uganda Wildlife Act, 2019,
  - (g) The Occupational Safety and Health Act, 2006,
  - (h) Employment Act, 2006,
  - (i) The Public Health Act, Cap.281,
  - (j) The National Forestry and Tree Planting Act, 2003
  - (k) The National Environment (Environmental Impact Assessment) Regulations, S.I. 153-1,
  - (l) The Petroleum (Waste Management) Regulations, 2019,
  - (m) The National Environment (Waste Management) Regulations, 2020,
  - (n) The National Environment (Audit) Regulations, 2020,
  - (o) The National Environment (Wetlands, Riverbanks and Lakeshores Management) Regulations S.I 153-5; and
  - (p) Any other applicable laws and regulation.







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### 2.0 ADMINISTRATIVE CONDITIONS

- 2.1 The Developer shall be held responsible for any omissions and falsified information in the submitted ESIS.
- 2.2 This Certificate of Approval shall remain valid for **25 years** and subject to review every 5 years; but may be **revised upon request** or as the **Authority may deem necessary**.
- 2.3 The project **must commence within the first 24 months**, from the date of approval, failure of which this Certificate may be varied, cancelled or otherwise dealt with by the Authority.
- 2.4 The **Executive Director, NEMA shall be NOTIFIED** in writing, of any intention to transfer ownership, vary/alter the project design or components, or surrender of this Certificate of Approval.

### 3.0 SPECIFIC CONDITIONS

#### 3.1 Pipeline Right of Way

- (i) Restrict the vegetation clearance and pipeline construction to the Right of Way (RoW) of 30m unless otherwise permitted.
- (ii) Put in place measures to prevent access by unauthorized persons and ingress by animals during the construction or repair/maintenance of project installations.
- (iii) Put in place measures to minimize interference with the existing drainage patterns and the natural hydrological functioning of wetlands, streams, rivers, and/or ground water resources.
- (iv) Provide alternative access provisions/routes for the communities whenever project activities interfere with roads, footpaths, animal tracks, water collection points, and other amenities.
- (v) Bury the pipeline at a depth of at least **one metre** below ground surface and line the trench with impervious material prior to reinstatement of the overburden in line with the soil profile.
- (vi) Put in place measures to minimize erosion, prevent rockfalls and landslides in hilly areas in compliance with the Regulation 17 of the National Environment (Hilly and Mountainous Areas Management) Regulations, S.I 153-6.





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- (vii) Landscape the RoW with appropriate design, material and vegetation in a manner that blends with the natural surroundings.
- (viii) Put in place measures to prevent, detect, and control leakages from the pipeline and its associated EACOP system components.
- (ix) Continuously engage, share information and foster harmonious coexistence with organizations/institutions whose utility infrastructure corridor is shared with the EACOP project.

### 3.2 Above Ground Installations - AGIs (Pump Stations, Block Valves, Electric substations)

- (i) Seek and obtain guidance from the Uganda Civil Aviation Authority for the construction of the communication towers and helipads at the pump stations.
- (ii) Obtain approval for structural and physical plans for camps and office buildings from the respective Local Governments prior to construction.
- (iii) Seek guidance and approval from the Electricity Regulatory Authority (ERA) to site, establish and operate the 33/45kV power system, electric substations, and associated equipment.
- (iv) Put in place a proper drainage system to handle storm-water run-off and minimise damage to the receiving environment.
- (v) Undertake project activities and operations at the AGIs in a manner that fosters harmonious co-existence with the neighboring communities.
- (vi) Place legible safety signage at the AGIs in English and in language(s) understood by the host communities.
- (vii) Put in place measures to prevent access by unauthorized persons and ingress by animals.

### 3.3 Crossings

#### 3.3.1 Rivers, Streams, and Wetlands

- (i) Undertake comprehensive biodiversity, soil and water baseline studies for all rivers, streams, and wetlands at the locations to be crossed by the pipeline; and subsequently prepare site specific assessments in respect of the crossing technique to be used.
- (ii) Obtain permits [applications accompanied with requirements under 3.3.1(i)] from this Authority and other relevant Authorities with regard to activities in wetlands, rivers and



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streams in accordance with Regulations 12 and 23 of the National Environment (Wetlands, Riverbanks and Lakeshores Management) Regulations S.I 153-5; and other relevant laws.

- (iii) Schedule construction activities in critical ecosystems to a season when there is no significant interruption of the lifecycles of migratory birds and other species with similar patterns.
- (iv) All work areas requiring levelling and backfilling shall be established outside the river protection zone unless authorized in the applicable permit.

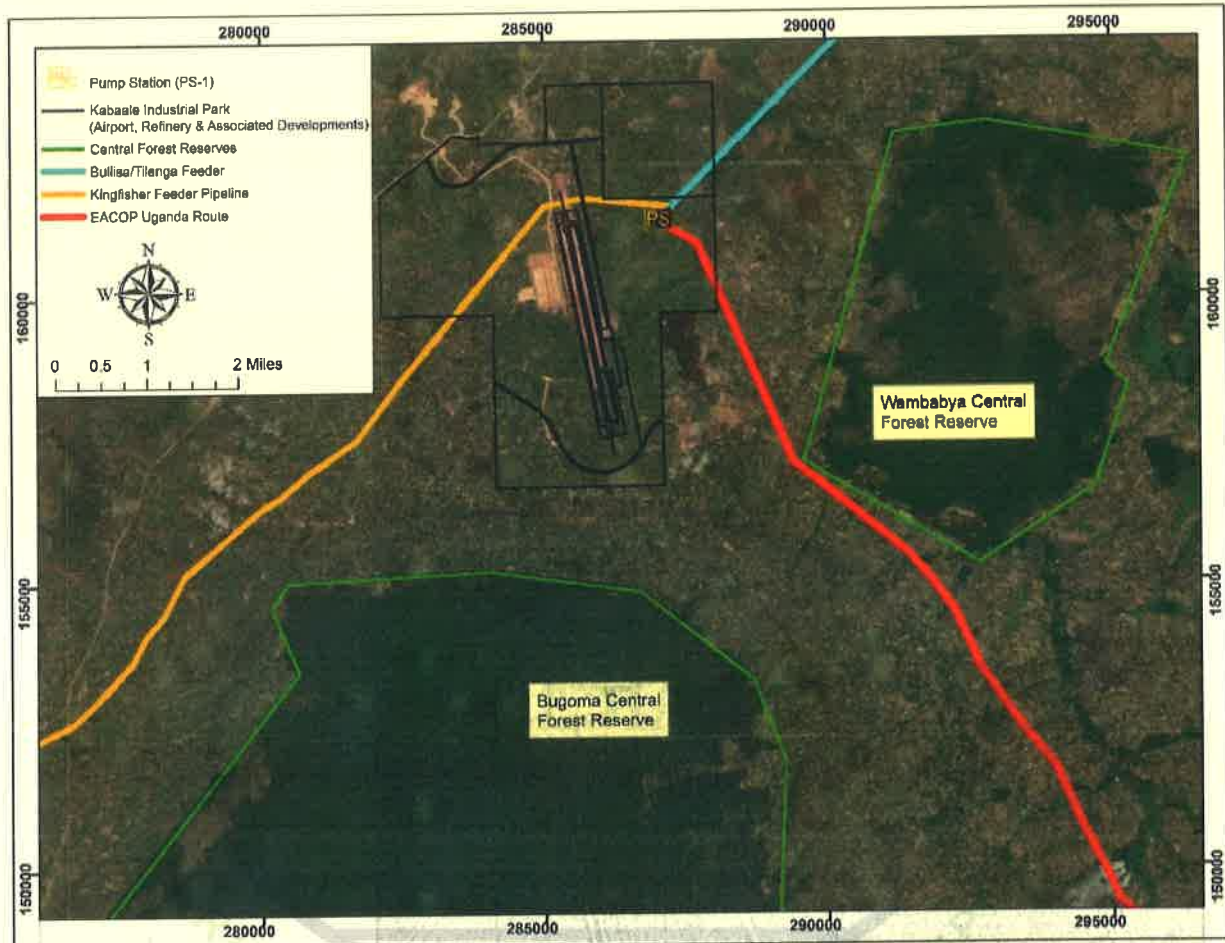
### 3.3.2 Forests

- (i) Seek approval and guidance from the National Forestry Authority (NFA) to undertake works in the Taala Central Forest Reserve (CFR) prior to commencement of construction works.
- (ii) Limit the RoW in Taala CFR to 20m and 6m during the construction and operation phases respectively.
- (iii) Liaise with the NFA to develop and implement programs to compensate for lost forest cover within the project corridor in Taala CFR.
- (iv) Undertake site rehabilitation immediately after pipeline installation in Taala CFR.
- (v) Liaise with the NFA to secure the opened-up areas and prevent illegal access within and around the pipeline corridor.
- (vi) Put in place measures to avoid interference with movement of wildlife between the Bugoma and Wambabya CFRs (**Fig. 2**).





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**Figure 2: The EACOP and other planned developments potentially affecting the Wambabya and Bugoma CFRs**

- (vii) Develop a comprehensive biodiversity management plan for primates and their habitats adjacent to the pipeline corridor between the Bugoma and Wambabya CFRs (**Fig.2**) in consultation with Uganda Wildlife Authority and the National Forestry Authority prior to implementation of project activities.
- (viii) Schedule construction activities in the corridor between Bugoma and Wambabya CFRs (**Fig.2**) to a season when activities do not disrupt migration of primates as will be guided by the biodiversity management plan under condition 3.3.2(vii).
- (ix) Liaise with the developers of the other projects whose impacts overlap with the EACOP project area of influence (**Fig.2**) to develop and implement initiatives aimed at maintaining the ecological integrity of the Bugoma and Wambabya CFRs; in consultation with the responsible Lead Agency, and this Authority.



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### 3.3.3 Public Utilities (Roads, Railway, Water & Electricity Installations, and Telecommunication lines)

- (i) Liaise with the respective authorities, local governments, and utility companies/enterprises to jointly manage the shared corridor; and foster the harmonious co-existence of the pipeline with other utility infrastructure throughout the project lifetime.
- (ii) Put in place signage at strategic locations to alert road users of the construction activities at road crossings; and erect appropriate barriers around work areas to prevent visual distraction of motorists.
- (iii) Use appropriate technology for crossing of established infrastructure which guarantees the integrity of the preexisting utilities/infrastructure.

### 3.4 Main Camps and Pipe Yards (MCPYs)

- (i) Restrict construction of the approved MCPYs (MCPY-1 in Kakumiro, MCPY-2 in Mubende, MCPY-3 in Sembabule, MCPY-4 in Rakai) to the areas defined by the Coordinates in **Annex-2** of this Certificate.
- (ii) Ensure that the MCPY boundaries in Kakumiro and Mubende are constructed at a distance of at least 20m away from the adjacent electricity transmission lines.
- (iii) Design the layout and construct facilities in the MCPYs in such a manner so as to conserve existing mature trees larger than 20cm in diameter at breast height and trees of conservation importance.
- (iv) Green and landscape the campsites with appropriate materials and vegetation that blends with the surrounding environment.
- (v) Put in place a proper drainage system including embankments in and around each MCPY, to handle storm-water run-off and prevent damage to the receiving environment.
- (vi) Liaise with the UNRA to construct entry/exit ramps of at least 100m length, off the highway for MCPY-1 and MCPY-2; and put in place additional road safety measures for traffic management along the highways.
- (vii) Make use of the available **renewable energy sources as a primary source** of energy for all MCPYs operations.
- (viii) Plan and construct facilities/installations at MCPY-2 in sync with the contours of elevation so that the natural hydrology of the landscape is maintained; including restriction of infrastructure away from the drainage channel/valley that is within the MCPY-2 area.





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- (ix) Comply with Regulations 17 of the National Environment (Wetlands, Riverbanks and Lakeshores Management) Regulations. S.I. No. 153-5 in regard to the responsibility to conserve the wetland close to MCPY-1 in Kakumiro District.
- (x) Institute spill containment measures to prevent environmental pollution in any sections of the MCPYs where there is potential of spillage of oil or chemicals.
- (xi) Cordon off the camp with appropriate material/fencing to minimize visual intrusion, restrict access to animals and unauthorized persons.
- (xii) Develop a comprehensive decommissioning plan for each MCPY in consultation with the respective district local government, and ensure to submit this plan to the Authority in accordance with condition 5.4.
- (xiii) Undertake separate assessments for all access roads in the project area as well as the quarries and borrow pits to be used by the project.

### 4.0 GENERAL CONDITIONS

#### 4.1 Project Management Obligations

- (i) Comply with all conditions of this certificate and the commitments in the ESIS.
- (ii) Omissions and violations occasioned by contractors and assignees shall remain the liability of the developer.
- (iii) Prepare and submit to the Authority comprehensive ESMPs which should also be a basis for the routine monitoring and reporting on the environmental status in the project area of influence.
- (iv) Put in place systems and mechanisms that minimize noise, vibrations, dust, offensive odors, and other nuisances arising from project activities.
- (v) Put in place systems for the continuous monitoring of air quality, emissions, noise and vibrations, effluents and other discharges resulting from the project activities.
- (vi) Liaise with the Directorate of Water Resources Management (DWRM) before project implementation to identify and assess potential water sources and quantity viability.
- (vii) Develop a comprehensive hydrotest management plan and submit to this Authority for consideration at least three months to hydrotesting.



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- (viii) Accord all employees including casual project workers, clear terms and conditions of employment, decent working conditions, and appropriate Personal Protective Equipment (PPE).
- (ix) Use only indigenous flora while rehabilitating project affected areas and greening the camp sites, AGIs and the RoW.
- (x) Introduction of alien and invasive plant species is prohibited in the entire project area.
- (xi) Liaise with Uganda Wildlife Authority (UWA) to rescue and protect any wildlife found within the project area during project activities.
- (xii) Develop site-specific restoration plans for submission to the Authority, before commencement of works in fragile ecosystems and ensure implementation **immediately after** conclusion of construction activities.
- (xiii) Develop site-specific management and monitoring programs to ensure proper restoration/recovery of degraded parts of wetlands and forests, and prevent access by opportunistic persons after construction.
- (xiv) Provide safe and healthy working conditions, including ensuring fair treatment, to all project workers in accordance with the Occupational safety and Health Act, 2006 and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016.
- (xv) Ensure that all equipment using cooling and air conditioning systems are those permitted under the National Environment (Management of Ozone Depleting Substances and Products) Regulations, S.I No.48/2020.
- (xvi) Put in place measures to ensure that both surface and ground water resources are protected against contamination and/or pollution from the project activities; in accordance with the Water Act, Cap.152 and the National Environment (Standards for Discharge of Effluent into Water and Land) Regulations, S.I. No. 153-3.
- (xvii) Establish and implement an Environment Management System (EMS) in accordance with Section 49 of the National Environment Act, No.5 of 2019.
- (xviii) Mitigate any other undesirable environmental impacts that may arise due to implementation of the project, but were not foreseen during the assessment and by the time of issuing this approval in accordance with Section 122 (2) of the National Environment Act, No. 5, 2019.





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- (xix) Undertake environmental compliance audits in accordance with Section 126 of the National Environment Act, No.5 of 2019 and the National Environment (Audit) Regulations, S.I. No 47/2020.
- (xx) Maintain records of the environmental management undertakings of the project in accordance with Section 176 of the National Environment Act, No. 5, 2019; and make the records available to this Authority, Environmental Inspectors, and any other authorized persons upon request.
- (xxi) Submit annual reports to this Authority, in accordance with Section 177 of the National Environment Act, No. 5, 2019.

### 4.2 Land Acquisition and Compensation

- (i) Ensure that land required by the project is legally acquired in accordance with the Land Act, Cap 277 and other relevant laws of Uganda.
- (ii) Prior to commencement of project activities, ensure that all Project Affected Persons (PAPs) are compensated for the loss occasioned by the project.

### 4.3 Permits, Licenses and other Authorizations

- (i) Obtain all the necessary permits, licenses and approvals from this Authority and the relevant Lead Agencies including among others; the Ministry of Energy and Mineral Development; the Ministry of Gender, Labour and Social Development; the Ministry of Agriculture, Animal Industry and Fisheries; the Petroleum Authority of Uganda; the Uganda Wildlife Authority; the National Forestry Authority; the Electricity Regulatory Authority; the Uganda Civil Aviation Authority; the Directorate of Water Resources Management; and the respective District Local Governments; before commencement of the proposed project activities.
- (ii) Comply with the terms and conditions of all permits, licenses and authorizations issued during project implementation.
- (iii) Obtain a temporary permit for noise generated in excess of the prescribed standards in accordance with Section 106 of the National Environment Act, No.5 of 2019.

### 4.4 Environment Standards

- (i) Ensure that all wastewater discharged to the environment from the various project components comply with the Water (Waste Discharge) Regulations, 1998; and the National Environment (Standards for Discharge of Effluent into Water and Land) Regulations, 1999.



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- (ii) Emissions and discharges resulting from project activities should not exceed the limits committed to in the ESIS Project Environmental Standards.
- (iii) Noise and vibrations generated during construction and/or operations of the project shall not exceed the thresholds stipulated in the National Environment (Noise Standards and Control) Regulations, S.I No. 30/2003.
- (iv) Ensure that the contribution of emissions from the EACOP project does not cause ambient air quality to exceed the limits prescribed in **Table 1**.

**Table 1: Ambient Air Quality Standards**

Pollutant	Averaging Period	Permissible Limits ( $\mu\text{g}/\text{m}^3$ )
Nitrogen dioxide, $\text{NO}_2$	Annual	40
	24hr	150
	8hr	120
	1hr	200
Sulphur dioxide, $\text{SO}_2$	Annual	50
	24hr	20
	10mins	500
Carbon monoxide, CO	8hr	10,000
	1hr	30,000
	30mins	60,000
	15mins	100,000
Particulate matter, $\text{PM}_{10}$	Annual	20
	24hr	50
	1hr	200
Particulate matter, $\text{PM}_{2.5}$	Annual	10
	24hr	25
Ozone, $\text{O}_3$	8hr	100
Total volatile Carbon (VOC)	24hr	6000





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### 4.5 Chemicals management

- (i) Comply with Section 70 of the National Environment Act, No.5 of 2019 regarding the use of chemicals during project implementation.
- (ii) Comply with the applicable national laws and the Globally Harmonized System (GHS) for classification and labelling of chemicals, in the transportation, storage, handling and disposal of chemicals.
- (iii) Maintain an up-to-date register of chemicals used, their Safety Data Sheets and Risk Assessment Report; and avail this information to the Authority upon request.
- (iv) All chemicals utilized during project activities should be handled in such a manner as to prevent harm to humans, pollution and contamination of the environment.

### 4.6 Waste management

- (i) Manage all Petroleum waste generated during project implementation in accordance with the Petroleum (Waste Management) Regulations, S.I No.3 of 2019.
- (ii) Ensure that any other waste (hazardous and non-hazardous) generated during project implementation is handled in accordance with the National Environment (Waste Management) Regulations, S.I. No.49 of 2020.

### 4.7 Design and construction

- (i) Ensure that the project infrastructural developments are synchronized with the physical development plans of the relevant Authorities and/or host District Local Governments.
- (ii) Obtain approval of structural plans for all buildings/structures to be established at the camps and pump stations from the respective District Local Governments or Authorities prior to construction, and comply with building codes in accordance with the Building Control Act, 2013 and the Physical Planning Act, 2020.
- (iii) Put in place adequate soil stabilization and erosion control measures where appropriate, during project implementation.
- (iv) Ensure that all the project installations and equipment are designed in a manner that blends with the natural environment.
- (v) Put in place measures to prevent un-authorized access to project sites during construction of project installations and during their subsequent operation.



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- (vi) Ensure that lighting at project installations is operated in a manner that minimizes glare and light pollution to the surrounding environment.

### 4.8 Emergence Preparedness and Responses

- (i) Put in place measures to detect process or structural failures in the EACOP system and prevent the occurrence of avoidable emergency situations.
- (ii) Put in place an Emergency Preparedness and Response Plan in accordance with the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 and the Regulations thereunder.
- (iii) Develop, maintain and regularly update an Oil Spill Contingency Plan in accordance with the National Environment Act No.5 of 2019, the Regulations thereunder and the National Oil Spill Contingency Plan.
- (iv) Undertake regular drills and exercises to evaluate the effectiveness of the Oil Spill Contingency Plan, and other emergency preparedness and response plans taking into consideration the potential scenarios and participation of relevant stakeholders.
- (v) Put in place a comprehensive system to detect, control and manage leakages as well as fire incidents at all project facilities.
- (vi) Have in place the necessary support infrastructure and equipment for prompt remedial action in the event of an oil spill incident or other incidents and emergencies that could occur during project operations.

### 4.9 Occupational Health Safety and Public Health

- (i) Ensure that all operations are undertaken in compliance with the Occupational Safety and Health Act, 2006; and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016.
- (ii) Provide safe drinking water for the site workers in accordance with the Public Health Act, Cap.281.
- (iii) Put in place appropriate and adequate sanitary facilities separate for the respective sex of project workers at work sites in accordance with the Public Health Act, Cap.281.
- (iv) Smoking in public places, workplaces and public means of transport is prohibited in accordance with the Tobacco Control Act, 2015.





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- (v) Any welding and processes that are a potential source of ignition should be outside the electricity powerline corridor and safety precautions undertaken.
- (vi) Establish and implement robust housekeeping protocols at all project sites and sensitize the project workforce on sound environmental management practices.

### 4.10 Social and Community Aspects

- (i) Undertake continuous community engagements in the project area to share information on project activities as appropriate; including among others, the potential impacts of the project on the communities, safety issues, acceptable RoW usage, and the available opportunities - in understandable languages.
- (ii) Put in place a robust grievance handling mechanism in liaison with the respective District Local Governments and any relevant Lead Agency to amicably resolve any grievances that may arise during project implementation.
- (iii) Put in place mechanisms to ensure that project implementation does not prevent the use of existing public utilities by communities within the project area.
- (iv) Abide by the applicable traffic rules and regulations in all project undertakings; and manage fleet movement to minimize traffic related accidents, nuisances and disruptions to the host communities.
- (v) Put in place measures to protect workers, including those of subcontractors, and vulnerable groups against sexual harassment, discrimination and exploitation.
- (vi) Operationalize policies and rules, applicable to all project personnel including contractors and sub-contractors, to minimize fraternization that could lead to social disruptions.
- (vii) Ensure that project staff recruitment is undertaken in compliance with the Employment Act, 2006; and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) (National Content) Regulations, 2016.
- (viii) Develop and implement affirmative action policies/initiatives that facilitate access to project employment opportunities by the disadvantaged; and prioritize candidates from the host communities for project labour (skilled and unskilled) recruitment opportunities.
- (ix) Develop awareness/sensitization and prevention programs for both workers and the neighboring community on the dangers of HIV/AIDS, Hepatitis-B and other Sexually Transmitted Diseases (STDs).



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- (x) Put in place mechanisms, in accordance with the guidelines and Standard Operating Procedures (SOPs) issued by the Ministry of Health, to prevent and control the spread of Covid-19.
- (xi) Ensure preservation of the cultural heritage within the project area of influence in accordance with the Institution of Traditional/leaders Act, 2000 and the Historical Monuments Act, 1968.
- (xii) Put in place a **Chance Find Management Plan** in liaison with the Ministry of Tourism, Wildlife and Antiquities (MTWA) and the Museums and Monuments Department.

### 5.0 NOTIFICATIONS

- 5.1 Notifications to the Authority and relevant Lead Agencies shall be formal and on record.
- 5.2 Emergency notifications, including malfunction of any system/ project component shall be done within twelve hours and the corrective measures taken, in accordance with the applicable laws.
- 5.3 Notify the Authority and relevant Lead Agencies of the commencement of project activities at least thirty days in advance, including the schedule of work to be done.
- 5.4 Notify the Authority at least six months in advance, of the intention to decommission any project component and the associated site restoration.

### 6.0 DECOMMISSIONING

- 6.1 Undertake an Environmental and Social Impact Assessment for the decommissioning of major project components as may be determined following notification under Condition 5.4.
- 6.2 Submit to this Authority, a detailed decommissioning and site restoration plan for each project component to be decommissioned, for approval prior to commencement of decommissioning.



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### 7.0 SUSPENSION / WITHDRAWAL / CANCELLATION CONDITIONS

- 7.1 The Authority may suspend project operations and/or activities for any project component, where there is non-compliance with any of the Conditions set out in this Certificate.
- 7.2 The Authority may withdraw or cancel this certificate where;
- There is unauthorized modification of the project implementation or implementation of project activities that were not evaluated as part of the Environmental and Social Impact Assessment leading to the issuance of this Certificate.
  - Substantive undesirable effects emerge during project implementation, which were not contemplated during the issuance of this Certificate.
  - The developer persistently fails to address non-compliances to environmental regulatory requirements or negative environmental and social impacts occasioned by the project.
  - Any other reasons the Authority may consider relevant.

DATED AT KAMPALA ON 30<sup>th</sup> November, 2020

Signed:

EXECUTIVE DIRECTOR (NEMA)

**C.C:** The Permanent Secretary,  
Ministry of Water and Environment,  
**KAMPALA.**

**C.C:** The Permanent Secretary,  
Ministry of Energy and Mineral Development,  
**KAMPALA.**





## NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

- C.C:** The Permanent Secretary,  
Ministry of Works and Transport,  
**KAMPALA.**
- C.C:** The Permanent Secretary,  
Ministry of Lands, Housing & Urban Development,  
**KAMPALA.**
- C.C:** The Permanent Secretary,  
Ministry of Gender, Labour & Social Development,  
**KAMPALA.**
- C.C:** The Executive Director,  
Petroleum Authority of Uganda,  
**ENTEBBE.**
- C.C:** The Executive Director,  
Uganda Wildlife Authority,  
**KAMPALA.**
- C.C:** The Executive Director,  
National Forestry Authority,  
**KAMPALA.**
- C.C:** The Executive Director,  
Uganda National Roads Authority,  
**KAMPALA.**
- C.C:** The Executive Director,  
Electricity Regulatory Authority,  
**KAMPALA.**
- C.C:** The Director General,  
Uganda Civil Aviation Authority,  
**ENTEBBE.**
- C.C:** The Director,  
Directorate of Water Resources Management,  
**KAMPALA.**



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- C.C:** The Chief Administrative Officer,  
Hoima District Local Government,  
**HOIMA.**
- C.C:** The Chief Administrative Officer,  
Kikuube District Local Government,  
**KIKUUBE.**
- C.C:** The Chief Administrative Officer,  
Kakumiro District Local Government,  
**KAKUMIRO.**
- C.C:** The Chief Administrative Officer,  
Kyankwanzi District Local Government,  
**KYANKWANZI.**
- C.C:** The Chief Administrative Officer,  
Mubende District Local Government,  
**MUBENDE.**
- C.C:** The Chief Administrative Officer,  
Gomba District Local Government,  
**GOMBA.**
- C.C:** The Chief Administrative Officer,  
Sembabule District Local Government,  
**SEMBABULE**
- C.C:** The Chief Administrative Officer,  
Lwengo District Local Government,  
**LWENGO.**
- C.C:** The Chief Administrative Officer,  
Kyotera District Local Government,  
**KYOTERA.**
- C.C:** The Chief Administrative Officer,  
Rakai District Local Government,  
**RAKAI.**

# ANNEX – 1: COORDINATES DEFINING THE EACOP ALIGNMENT IN UGANDA

Coordinates for Pipeline RoW									
District	Point	Zone	Easting	Northing	District	Point	Zone	Easting	Northing
HOIMA	0	36N	287234.69	161230.05	KAKUMIRO	41	36N	317972.9	121721.7
	1	36N	287234.73	161190.12		42	36N	318410.23	121140.85
	2	36N	287711.83	160915.96		43	36N	318736	120732.65
	3	36N	288242.21	159733.75		44	36N	321116.72	117806.44
	4	36N	289090.28	157808.08		45	36N	322851.89	115657.63
	5	36N	289409.34	157074.08		46	36N	323386.18	114990.91
	6	36N	289832.59	156752.85		47	36N	325389.05	112389.56
KIKUUBE	7	36N	291384.83	155505.13		48	36N	326584.65	110171.99
	8	36N	291785.55	155061.6		49	36N	327786.27	107977.79
	9	36N	292208.25	154489.22	KYANKWANZI	50	36N	330788.68	103393.62
	10	36N	292551.62	153763.06		51	36N	331894.35	101937.83
	11	36N	292644.65	153514.79		52	36N	332207.8	101449.11
	12	36N	293453.55	152361.26		53	36N	332632.55	100715.92
	13	36N	293650.75	152145.03		54	36N	333091.7	100067.42
	14	36N	293979.9	151726.31		55	36N	335658.58	97925.1
	15	36N	294487.11	150608.39		56	36N	336641.03	97188.52
	16	36N	294909.97	149810.27	MUBENDE	57	36N	337398.31	94495.77
	17	36N	295084.94	149402.33		58	36N	337399.13	93505.71
	18	36N	296180.42	148411.09		59	36N	337332.22	92906.14
	19	36N	296992.86	147764.92		60	36N	337490.6	91995.85
	20	36N	297640.92	147194.25		61	36N	337215.66	91189.38
	21	36N	298211.68	146058.68		62	36N	337610.29	90604.21
	22	36N	298547.05	145535.11		63	36N	337938.62	89331.68
	23	36N	300236.96	143877.28		64	36N	338201.06	88605.68
	24	36N	300659.29	143480.41		65	36N	338219.16	88099.26
	25	36N	300995.5	142955.52		66	36N	338207.04	87593.97
	26	36N	301929.7	141981.74		67	36N	338340.67	87280.78
	27	36N	303148.84	140603.75		68	36N	338349.56	87040.51
	28	36N	303455.89	140033.39		69	36N	337995.02	86211.93
	29	36N	304784.62	137797.37		70	36N	338026.98	86013.15
	30	36N	305682.77	136366.86		71	36N	338281.66	85492.68
	31	36N	306768.22	134499.16		72	36N	338249.78	85132.16
	32	36N	307928.41	133207.48		73	36N	338113.56	84854.65
	33	36N	308270.66	132870.19		74	36N	337907.94	84197.6
	KAKUMIRO	34	36N	309769.41		131124.13	75	36N	338045.46
35		36N	310628.65	130189.72		76	36N	337823.73	82056.98
36		36N	311267.01	129366.15		77	36N	337736.83	81366.89
37		36N	312979.5	127549.15		78	36N	337495.25	80244.87
38		36N	313547.41	126907.8		79	36N	337389.97	79628.1
39		36N	314318.46	126268.43		80	36N	337320.61	79319.72
40		36N	316090.01	124301.4		81	36N	337272.75	79046.92



# ANNEX – 1: COORDINATES DEFINING THE EACOP ALIGNMENT IN UGANDA

Coordinates for Pipeline RoW									
District	Point	Zone	Easting	Northing	District	Point	Zone	Easting	Northing
MUBENDE	82	36N	337162.8	78631.8	MUBENDE	123	36N	330525.27	45317.39
	83	36N	336816.1	77976.62		124	36N	329774.26	41031.65
	84	36N	336563.5	76616.48		125	36N	329771	40694
	85	36N	336475.3	75764.3		126	36N	329908.56	39886.32
	86	36N	336021.6	73641.64		127	36N	329681.29	37624.09
	87	36N	335856.3	72147.11	GOMBA	128	36N	329342.78	32826.46
	88	36N	335660.4	71025.33		129	36N	329059.76	31280.58
	89	36N	335311.3	69416.96		130	36N	328602.52	29484.36
	90	36N	335234.8	68781.96		131	36N	328418.91	28519.93
	91	36N	335032.6	68271.06	SSEMBABULE	132	36N	327076.77	14305.68
	92	36N	334945.5	67591.53		133	36N	326442	11559.8
	93	36N	335021	66473.37		134	36N	325687.02	6897.66
	94	36N	335086.4	66041.8		135	36N	325613.65	3448.46
	95	36N	335241.7	65636.93		136	36N	325727.74	1394.4
	96	36N	335397.3	65380.37		137	36N	325727.74	995.03
	97	36N	335466.1	65207.06		138	36M	325591.48	9997207.8
	98	36N	335624	63597.66		139	36M	325338.24	9994711.9
	99	36N	335827.4	62864.29		140	36M	325499.25	9992895.7
	100	36N	335773.6	62420.05		141	36M	324361.06	9989402.8
	101	36N	335925.3	61093.43		142	36M	323872.37	9988216.5
	102	36N	335488.7	60150.68		143	36M	323798.15	9987899.6
	103	36N	335133.3	58576		144	36M	323808.03	9987398.6
	104	36N	334488.3	57813.44		145	36M	323856.59	9986017.4
	105	36N	334201.9	57358.2		146	36M	323654.09	9984482.1
	106	36N	333874.8	57191.03		147	36M	323676.23	9983446.7
	107	36N	333345.8	56535.93		148	36M	323534.13	9981505.8
	108	36N	332634.2	54964.8		149	36M	323662.44	9978850
	109	36N	332494.4	54606.2		150	36M	323794.96	9977840.3
	110	36N	332402	54086.07		151	36M	323849.46	9976126.4
	111	36N	332311.6	53180.12		152	36M	323936.49	9975542.4
	112	36N	332223.1	52829.01		153	36M	323981.98	9974371.7
	113	36N	331781.2	52073.99		154	36M	323988.78	9973731.8
	114	36N	331480.3	50997.65		155	36M	324166.98	9970424.9
	115	36N	331367.5	50408.9		156	36M	324164.05	9969980.8
	116	36N	331208.6	49762.79		157	36M	324195.75	9969568.4
	117	36N	331084	48839.77		158	36M	324455.12	9965430.1
	118	36N	331057.1	48663.62	LWENGO	159	36M	324378.95	9962358.6
	119	36N	330982	47983.28		160	36M	324416.43	9962201
	120	36N	330971.5	47773.8		161	36M	324610.93	9961606.3
	121	36N	330805.4	46709.47		162	36M	325031.82	9959873.6
	122	36N	330633	45805.73		156	36M	324164.05	9969980.8

# ANNEX – 1: COORDINATES DEFINING THE EACOP ALIGNMENT IN UGANDA

Coordinates for Pipeline RoW									
District	Point	Zone	Easting	Northing	District	Point	Zone	Easting	Northing
LWENGO	157	36M	324195.75	9969568.4	RAKAI	194	36M	329576.67	9930016.6
	158	36M	324455.12	9965430.1		195	36M	329732.72	9929029.3
	159	36M	324378.95	9962358.6		196	36M	329878.13	9927649.7
	160	36M	324416.43	9962201		197	36M	330002.37	9927269.8
	161	36M	324610.93	9961606.3		198	36M	330261.25	9925663
	162	36M	325031.82	9959873.6		199	36M	330408.84	9924961.4
	163	36M	325204.76	9958956.8		201	36M	331041.52	9923409.9
	164	36M	325221.78	9957310.3		202	36M	331719.3	9922261.5
	165	36M	324896.27	9956201.5		203	36M	331799.04	9921715.8
	166	36M	325121.76	9955300		204	36M	331956.45	9921049.1
	167	36M	325175.81	9954840.2		205	36M	332101.26	9920152.9
	168	36M	325119.2	9954123.4		206	36M	332164.41	9919305.9
	169	36M	325115.11	9953795.3	KYOTERA	207	36M	332393.58	9917630.2
	170	36M	325399.82	9949641.9		208	36M	332181.23	9917027.5
	171	36M	325361.88	9948029.4	RAKAI	209	36M	331619.95	9915147.1
	172	36M	325448.03	9947157.6		210	36M	330622.78	9911816.4
	173	36M	325447.85	9946563.2		211	36M	328655.23	9907562.1
	174	36M	325760.42	9945671.9		212	36M	328409.56	9907115.9
	175	36M	325853.48	9944960.7		213	36M	328236.56	9906819.5
	176	36M	325860.86	9944622.9		214	36M	328187.56	9906470
	177	36M	326026.19	9943851		215	36M	328026.59	9906105.4
	178	36M	326089.35	9943392.7		216	36M	327928.79	9905903.7
	179	36M	326191.36	9942172.1		217	36M	327674.39	9905652.5
	180	36M	326416.94	9941246.4		218	36M	327161.26	9904422.2
	181	36M	327008.11	9940236.8		219	36M	327017.58	9903760.7
	182	36M	327254.33	9939741.8		220	36M	326838.59	9903273.3
	183	36M	327370.49	9939255.8		221	36M	326506.56	9902242.2
KYOTERA	184	36M	327535.94	9938376.7		222	36M	326167.9	9901114
	185	36M	327658.84	9938003.9		223	36M	325988.81	9900403
	186	36M	327739.27	9937653.5		224	36M	325657.1	9899786
	187	36M	327738.88	9936556.8		225	36M	325349.31	9898877.7
	188	36M	327996.5	9935549.6		226	36M	325034.03	9898150.9
	189	36M	328206.22	9935001.1		227	36M	324939.31	9897914.4
	190	36M	328351	9934710.2		228	36M	324780.57	9897724.5
	191	36M	328416.68	9934311.2		229	36M	324641.05	9896845.1
	192	36M	328445.12	9934205.3		230	36M	324747.94	9896727
	193	36M	328784.49	9932870.7					



## ANNEX – 2: COORDINATES OF THE EACOP ABOVE-GROUND INSTALLATIONS

**Pumping Station One (PS-1)**

Vertex Point	zone	Easting	Northing
1	36 N	287311.00	161516.00
2	36 N	287311.00	161207.00
3	36 N	286942.00	161516.00
4	36 N	286942.00	161206.00

**Pumping Station Two (PS-2)**

Vertex Point	zone	Easting	Northing
1	36 M	325521.00	9997631.00
2	36 M	325920.00	9997617.00
3	36 M	325909.00	9997308.00
4	36 M	325510.00	9997323.00

**Main Camp & Pipe Yard - 1 (MCPY-1)**

Vertex Point	zone	Easting	Northing
1	36 N	310091.00	129221.00
2	36 N	309951.00	128902.00
3	36 N	309494.00	129104.00
4	36 N	309635.00	129423.00

**Main Camp & Pipe Yard - 2 (MCPY-2)**

Vertex Point	zone	Easting	Northing
1	36 N	336534.00	54975.00
2	36 N	336808.00	55191.00
3	36 N	336225.00	55366.00
4	36 N	336499.00	55582.00

**Main Camp & Pipe Yard - 3 (MCPY-3)**

Vertex Point	zone	Easting	Northing
1	36 M	325392.00	9990828.00
2	36 M	325045.00	9990470.00
3	36 M	325141.00	9991071.00
4	36 M	324827.00	9990747.00
5	36 M	324811.00	9990697.00

**Main Camp & Pipe Yard - 4 (MCPY-4)**

Vertex Point	zone	Easting	Northing
1	36 M	326348.00	9902449.00
2	36 M	326350.00	9902102.00
3	36 M	325850.00	9902448.00
4	36 M	325851.00	9902100.00