Environmental Monitoring Report

Semestral Report for January – June 2016

UZB: Takhiatash Power Plant Efficiency Improvement Project

Prepared by State Joint Stock Company UzbekEnergo for the Republic of Uzbekistan and the Asian Development Bank.

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Bi-Annual Environmental Monitoring Report

Project No.: 3141-UZB Reporting period: January - June 2016

Republic of Uzbekistan:

Project "Construction of two CCGT units with the capacity of 230-280 MW each at Takhiatash TPP"

(Funded by: The Asian Development Bank)

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For: Executing Agency "Uzbekenergo"

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November 2016

Abbreviations

| ADB | Asian Development Bank |
|---|--|
| DREP | Division of Resettlement and Environmental Protection. |
| EA | Executing Agency |
| EARF | Environmental Assessment and Review Framework |
| EHS | Environmental Health & Safety |
| EIA | Environmental Impact Assessment |
| EIP | Environmental Impact Permit |
| EMP/SSEMP | Environmental Management Plan/ Site-Specific Environmental |
| | Management Plan |
| ES/ SES | Environmental Specialist/ Senior Environmental Specialist |
| GRC | Grievance Redress Committee |
| GRM | Grievance Redress Mechanism |
| IA | Implementing Agency |
| IEE | Initial Environmental Examination |
| SC | Supervision Consultant |
| DAIIIP | Department of attraction of investments and implementation of investment |
| | projects - renamed PMU |
| EMP/SSEMP ES/ SES GRC GRM IA IEE SC | Environmental Management Plan/ Site-Specific Environmental Management Plan Environmental Specialist/ Senior Environmental Specialist Grievance Redress Committee Grievance Redress Mechanism Implementing Agency Initial Environmental Examination Supervision Consultant Department of attraction of investments and implementation of investment |

Table of Contents

| PART I – INTRODUCTION | 5 |
|--|----|
| 1.1. Construction activities and project progress during the previous 6 months | 5 |
| A. General information on the project | 5 |
| B. Construction activities and project progress during the previous 6 months | 7 |
| 1.2 Changes in Project Organization and Environmental Management Team | 9 |
| PART II – ENVIRONMENTAL MONITORING | 11 |
| PART III – ENVIRONMENTAL MANAGEMENT | 11 |
| Attachments: | 14 |
| Attachment 1: CAP with indication status of implementation | 14 |
| Attachment 2: Certificate of examination of fuel oil storage place | 21 |
| Attachment 3: Results of measurement | 22 |
| Attachment 4: Resolution on creating Environmental Management Team | 23 |

PART I – INTRODUCTION

1.1. Construction activities and project progress during the previous 6 months

A. General information on the project

1. The project "Construction of two CCGT units with the capacity of 230-280 MW each at Takhiatash TPP" is implemented in accordance with the Resolution of the Cabinet of Ministers No. 293 dated 22.10.2014 "On high priority measures to implement the investment project "Construction of two combined cycle gas turbine units with the capacity of 230-280 MW each at Takhiatash TPP". Memorandum of Understanding was signed on May 31,2013 between the Asian Development Bank (ADB) and the Republic of Uzbekistan. The feasibility study of the project was approved by the Decree of the President of the Republic of Uzbekistan under No. PP-2355 on June 18, 2015.

2. According to the feasibility study approved on 18.06.2015 under No. PP-2355 (Decree of the President of the Republic of Uzbekistan) the total project cost is \$678.2 million. The Government of Uzbekistan has requested a loan of \$300.0 million from ADB to finance the purchase of materials. The Uzbekistan Fund for Reconstruction and Development will take part in financing of the project in the amount of \$230.7 million. JSC "Uzbekenergo" will finance purchase of local materials, installation, supply and other construction works in the amount of \$27.3million from its own funds. In addition, the government will allocate \$120.2million (in equivalent) in the form of the granted relief for the payment of taxes and charges.

3. This project is consistent with ADB strategy until 2021 year and it is a key component of the energy policy. The project supports directly Uzbekistan in achieving of the target energy security values being specified as priority ones within the framework of ADB's Country Partnership Strategy 2012–2016 for Uzbekistan.

4. The project "Construction of two combined cycle gas turbine units with the capacity of 230-280 MW each at Takhiatash TPP" is intended to increase power production and to reduce greenhouse gases emissions in Uzbekistan. Takhiatash TPP is located in the city of Takhiatash, 3 km to the south-west of the city centre, on the left bank of Amudarya river. It occupies the central part of the Republic of Karakalpakstan (Khodjeyliy region), located in north-western Uzbekistan.



Figure 1. Location of Takhiatash TPP

5. The existing plant consists of four power generation units (III-IV-V-VI) with a total installed capacity of 730 MW. It also comprises heating water converter plant to supply not only the TPP's own hot water requirements but also Takhiatash city. In 2011 the TPP generated 3,27 million kWh of electricity and 3,240 GCal of heat.

6. Old units I and II were dismantled in 1980. The building, foundations and the 65 m stack are still there. Building are used as occasional workshop and warehouse facilities. A map of location existing TPP facilities and area where new units and related infrastructure will be constructed is presented on Picture 2.



Picture 2: Existing territory of TPP is indicated in blue line and extending area is in red

- 7. The project has three main outputs:
 - (i) Energy efficient and clean energy. The project will construct two units of CCGT with a designed capacity within the range of 230 MW to 280 MW each with at least 52% thermal efficiency at the existing Takhiatash TPP. Three existing units (No.1–3) will be decommissioned, and two existing units (No.7–8) will be maintained as backup power generation units, while underutilized structures (blocks 1 and 2) will be demolished and the land will be remediated. These physical components will be undertaken by a single turnkey contractor.
 - (ii) Capacity development. The project will develop Uzbekenergo's capacity to become a commercially bankable utility. Tariff methodology study and training will develop the skills required to improve the tariff determination model and ensure cost-recovery tariff setting. Corporate performance management capacity will be measured and managed by developing key performance indicators.
 - (iii) **Social development.** The project will build a community social service center adjacent to Takhiatash TPP. The community social service center will create employment opportunities and facilities including laundry services, contributing to improving the community's welfare and ensuring gender equality.

8. The project is classified as Category A. EIA was conducted and Corrective Action Plan (CAP) was developed as part of PPTA. According to plan, Takhiatash TPP has to start implementation of CAP before construction activities will start and during construction stage. This Environmental Monitoring Report provides information about actions undertaken as per CAP.

9. The present Bi-annual Environmental Monitoring Report covers the period from January till June of 2016 year.

B. Construction activities and project progress during the previous 6 months

10. During the past 6 months no construction activities were implemented within the current project. At the EMR preparation stage, the evaluation of the presented financial proposals was conducted as part of the first stage of the tender process for selection of the Contractor.

11. In accordance with CAP all necessary environmental requirements for contractor were included in tender documents. Detail information on included requirements with indication relevant sections in tender documents is presented in attached to this report CAP (Attachment 1).

12. Moreover, examination of the fuel oil storage place recommended for disposal asbestos wastes in EIA was conducted by a commission consisted of representatives of Central Sanitarian Service of Karakalpakstan, Karakalpakstan

Nature Protection Committee, State Inspection "Sanoatehnazorat"¹, specialist on asbestos management of Division of Attracting Investments and Implementation of the Investment Project (DAIIIP). Location of the storage place is presented on the picture 3 and its view from satellite is presented on Picture 4. The commission confirmed that the proposed fuel oil storage place is suitable for disposal and storage of asbestos wastes which will be generated during demolishing phase. The certificate about examination with conclusion is presented in Attachment 2.



Picture 3: Location of mazut storage place



Picture 4: View of mazut storage from satellite

¹ Sanoattehnazorat is state agency supervising compliance of using subsoil by legal entity with legislation and technical regulations

13. In addition, per national legislation, measurements of radiation level were conducted by Central Sanitarian Service at the boilers 1-6, tanks 1-4, external and internal points of pipeline. Results of measurements showed compliance with national standards and measurements certificate is presented in Attachment 3.

14. Place for storage of non-hazardous wastes were identified and approval on their disposal were received from relevant agency – Karakalpak Committee of Nature Protection, Takhiatash City hokimiyat (Picture 5).

15. PIU's Environmental Specialist works on conclusion agreement with the closest meteo station (located in 3 km to the north-east from Takhiatash TPP) on submission results of monitoring of the main air pollutants: SO_2 , NO_2 , NO, TSP, PM_{10} , $PM_{2.5}$, CO.

16. At the time of the report preparation 50% percent of the activities, indicated in the CAP has already been performed.

1.2 Changes in Project Organization and Environmental Management Team

(Organizational structure)

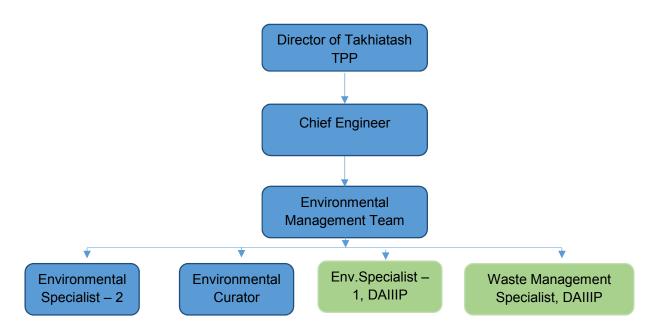
17. The project initiator is JSC "Uzbekenergo", which is the executing agency. During the reporting period, changes has been made in the composition of the JSC "Takhiatash TPP" management and department name. The department has been renamed from the Project Implementation Unit to the Division of Attracting Investments and Implementation of the Investment Project (DAIIIP). Environmental, Health and Work Safety Group was established at Takhiatash TPP in April 2015 (Attachment 1). It consists of– Environmental Specialist, Abdullaev K. – Environmental Supervisor and Yusupov K. – Engineer of decossioning of Unit 3 and 4 and Asbestos Disposal Specialist. Copy of Takhiatash TPP resolution on creating EMT is presented in Attachment 4.

18. The EMT consists of Environmental Specialist - 1 (Ayimbetov M.), Environmental curator (Abdullaev K.), Environmental Specialist – 2 (Ahamadov Sh.), Waste Management Specialist (Yusupov K.). The institution structure of EMT within Takhiatash TPP is presented in Picture 2.

19. DAIIIP's Environmental Specialists will be assisted by Supervision Consulting Company which includes International and National Environmental Specialists. During the reporting period, the contract has been signed with the Supervision Consultant Company «Gas Natural Fenosa Ingeniria D Desarrollo De Generacion S.L." (Spain). The management of the consulting firm will monitor and control execution of the project, including the construction and installation works and development of the institutional capacity of JSC "Uzbekenergo" and other parties concerned.

20. The environmental specialists of the Consultant are Amaya Yoldi (international) and Madina Khalmirzaeva (national). The international or national environmental specialists of the Contractor will be employed after the selection (tender) is done. Consultant's environmental specialists will start work after

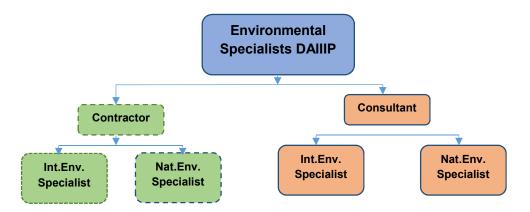
commencements of civil works. The Institutional structure of environmental performance within current project is presented at the Picture 5.



Picture 5: Institutional structure of Environmental Management Team

21. The environmental protection specialist of DAIIIP and experts of the Consultant will render assistance in the following:

- (i) To propose monitoring plans in order to eliminate the identified environmental impact;
- to provide that the costs on implementation of the mitigation measures based on the specific environmental management and monitoring plans as well as measures on stabilization will be included in the tender documents;
- (iii) to carry out monitoring over the safety provision and implementation of EMP in order to certify that the abovementioned has been performed accordingly;
- to provide compliance with the environmental protection standards during construction of the new CCGT power unit and demolition of the old units;
- to prepare the updated EIA report and semi-annual environmental monitoring reports with account of the standards that are acceptable for the Government and ADB; and
- (vi) to facilitate JSC "Uzbekenergo" in capacity building for provision of the environmental safety.
- (vii) To conduct final environmental audit and prepare of Final Environmental Audit Report



Picture 6: Institution Structure of Environmental team in the project

22. The team has permanent communication with the Supervision Consultant. The Contractor has not been determined yet.

23. TPP Environmental Specialist participated at the regional workshop on Regional Exchange on Good Practice of Environmental Safeguards Management in Issiq Kul, Kyrgyzstan in 2015, organized within RETA 7546 "RETA 7548: Improving the Implementation of Environmental Safeguards in Central and West Asia". Moreover, the Specialist participated at the training organized within the same RETA "Environmental Safeguards Training course" in March, 2016.

24. In addition to this training, TPP Environmental Specialist participated at the one-day training conducted by ADB Consultant hired within RETA 8338 in February 2016.

PART II – ENVIRONMENTAL MONITORING

25. At the current stage environmental monitoring of air quality as baseline data are being implemented by Takhiatash department of Uzhydromet. DAIIIP is negotiating with the department on submission results of regular analyses undertaken by this department and will be used as baseline data for further the project implementation.

26. According to the EIA (environmental impact assessment), the baseline data in relation to water, air, soil, flora and fauna are available, but since the construction works have not been started yet, the monitoring is not conducted.

27. Continuous environmental monitoring of water, air, soil, flora and fauna will be conducted by the General Contractor for detailed measurement and analysis before commencement of construction activities.

28. The continuous environmental monitoring will start immediately after the commencement of construction works.

3.1 Environmental Management System - Site-Specific Environmental Management Plan (SSEMP) and action plans

29. SSEMP for the project "Construction of two combined cycle gas turbine units with the capacity of 230-280 MW each at Takhiatash TPP" will be prepared by the construction company before the commencement of the construction works.

3.2 Inspections and audits

30. It is not applicable yet.

3.3 Non-compliance notices

31. It is not applicable yet.

3.4 Corrective action plans

32. The overall management of environmental issues, health and safety and monitoring program is applicable.

33. The activities under the corrective actions plan is listed in the report on the implementation of measures to mitigate the impact on the environment and monitoring in Attachment 1.

3.5 Actions taken to represent results of ADB mission and PIU staff

34. In May 2016 ADB Consultant Keti Dgebuadze met with Manager and Environmental Specialist of Takhiatash PIU and discussed status of CAP implementation and EMR preparation issues.

35. After this visiting the following steps were agreed:

1) More information was included in EMR on CAP implementation;

2) Collection baseline environmental monitoring data were initiated through communication with local monitoring station of Uzhydromet.

36. The PIU staff has also visited the site on the following dates and purposes:

1) On 17 January 2016 the pre-bid conference was arranged at Takhiatash TPP to visit the site and to discuss the requirements of Bidding Documents with the international bidders. PIU staff Mr. Alisher Yunusov, the director of perspective development and investments, and Mr. Saidkhon Amilkhanov, procurement specialist, have attended the conference.

2) On 8 August 2016 another site visit was arranged at Takhiatash TPP. International bidders have studied the site in more details to incorporate the findings in their technical bids. PIU staff Mr. Alisher Yunusov, the director of

perspective development and investments, and Mr. Murod Valiev, Finance manager, have attended the conference.

3.6 Consultations and Complaints (*Public Awareness Campaign*)

37. The box to receive complaints and suggestions on environmental issues has been installed in the project office. It suppose, that received complaints and suggestions will be registered in the log and the answers given to submitted complains. The project office is located on the territory of the medicine service of Takhiatash TPP which is outside of plant, therefore access to complaints box is free.

38. Records on all received complaints will be kept in the DAIIIP (Department of attraction of investments and implementation of investment projects - renamed PMU) office, including contact details, date of addressing, nature of the complaints, agreed corrective actions and the date, when it has been implemented, as well as the final result of the complaints, in the special log. This log is kept in the DAIIIP office and on the construction site. As for the current EMR preparation date no complaints were received.

28. The public awareness campaign on environmental activities is conducted jointly with the activities on social and gender issues. During the first half of the year, two meetings in the course of trainings for preparation of trainers from among the mahalla activists and college students located in the project area have been held. Public Hearings of the basic results of the environmental impact assessment conducted for the project "Construction of two combined cycle gas turbine units with the capacity of 230-280 MW each at Takhiatash TPP" have been carried out. The first round of hearings has been carried out in April of 2013, the second - in May of 2013 and third – in August 2013.

PART IV - ACTION PLAN FOR THE NEXT PERIOD

- 33. Action plan for the next period
 - Planning of conduction of post-qualification of the bidders (before January 1, 2017 year);
 - Conducting of background measurements by the Contractor. The background measurement were already conducted, but it would be more appropriate if the Contractor carries out additional background measurement to obtain more information for improvement the quality of work.

Attachments:

Attachment 1: CAP with indication status of implementation

I confirm

Director AO «Tahiyatosh IES» ______B.T. Madreimov

Environmental corrective actions plan

| N⁰ | Name of actions | Performance period | Responsi | bility | Status as for June 2016 |
|----|---|-----------------------|--|---|---|
| | | · | Realization | Supervision | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Ge | neral management of environmental issues, h | ealth protection an | d safety measures | | <u> </u> |
| 1 | Create a team on ecology, health and safety (EHS) | 16.04.2015 | Group of implementation of the project of JSC Takhiatash Thermal Power Plant | Director JSC Takhiatash Thermal Power Plant | Done |
| 2 | Provide trainings on SEMP included in the report on an ecological assessment. By results of trainings, reconsider a line-up on national EIA and recomplete it if necessary. | 01.07.2015 | Expert of PIU ESE | Head of PIU | Postponed. Will be conducted at the end of 2016 |
| 3 | To provide a complex control system on ecology, health protection and safety (CCSEHPS) | 01.09.2015 | EHS and Consultants of the Project | Head of PIU | Work is being implemented |

| 4 | Gradually implementation of CCSHEPHS | 10.2015-12.2017 | EHS, Chief Engineer of Takhiatash TPP | Director JSC Takhiatash TPP | Work is being implemented |
|----|---|-----------------------------------|--|---|---|
| Мо | nitoring program | | L | | I |
| 5 | Review compliance of parameters which is being monitored at TPP with International standards (published ISO) | Before Contractor mobilization | EHS and Consultants of the Project | Head of PIU | Not started yet |
| 6 | Include in the tender documentation creation of eco-analytical laboratory completed with the equipment for carrying out continuous monitoring of emissions SO2, NO, NO2, CO, O2, CO2, the soil, drains, underground waters (all residual chlorine, metals Cr, Cu, Zn, Pb, CD, Hg, As, Co, Ni), temperatures, atmospheric pressure and water vapor, oil and fuel); | 15.06.2015 | PIU, EHS and Consultants of the Project | Head of PIU | Done |
| 7 | Make the annual contract with "Uzhydromet" service for receiving meteorological data (speed and the direction of a wind, relative humidity, temperature, atmospheric pressure) | 01.06.2015 | Engineer of ESE | Head of PIU | Negotiation on providing services are in the process |
| 8 | Include in tender documentation the installation of devices in necessary places for noise measurement; vibrations. | 15.06.2015 | PIU, EHS and Consultants of the Project | Head of PIU | Done |
| 9 | To provide scheduling of calibration for automated and manual systems of measurement for carrying out an environmental monitoring | Before Contractor mobilization | PIU, EHS and Consultants of the Project | Head of PIU Chief metrologist JSC Takhiatash Thermal Power Plant | Not started yet |
| 10 | Conduction of calibration for automated and manual systems of measurement for carrying | On an annual basis, taking into | PIU, EHS and Consultants of the Project | Head of PIU Chief metrologist | Will be started during |

| | out an environmental monitoring | account specifications of the equipment | | JSC Takhiatash Thermal Power Plant | construction activities |
|-----|---|--|--|---------------------------------------|---|
| 11 | To provide with necessary devices or other means for creation of the monitoring system of quality of sampling and the analysis including plan of works and system of electronic record. | In time construction | PIU, EHS and Consultants of the Project | Head of PIU | Will be started during construction activities |
| Rej | ports | | | | |
| 11 | Develop a format of the annual report on EHS, covering each demanded parameters | 31.12.2015 | EHS and Consultants of the Project | Head of PIU | Not started yet |
| Air | quality and air missions | | , i i i i i i i i i i i i i i i i i i i | | |
| 10 | Reduction of emissions of the polluting substances by replacement of the old equipment (3 and 4 turns) and an operation start of new Steam-gas installation. | According to the plan of implementation of the loan agreement | General contractor | Engineer of ESE of station | Not started yet |
| 14 | | Immediately after Consultant mobilization | Personnel of EHS department Consultant | Head of PIU | Not started yet |
| 15 | Quantitate estimation and monitoring of calculation of green gases discharges during TPP operation | Immediately after Consultant mobilization | Personnel of EHS department Consultant | Head of PIU | Not started yet |
| 16 | | Before new CCGT commissioning | Personnel of EHS department Consultant | Head of PIU | Will be started during construction activities |
| 11 | Include in tender documentation installation of electronic measuring device of each Steam-gas installation block for definition of emissions polluting substances in the atmosphere | Before commissioning of new Steam-gas installations | General contractor | Consultants of the project | Not started yet |

| Sev | vage and quality of water of environment | | | | |
|-----|--|--|---|--|---|
| 12 | Provide transformation of the system opened coolings in temperature of the cooling water closed for reduction. The project of replacement of old equipment III-IV of turn on new Steam-gas installation from the closed cooling water system. | Commissioning of new Steam-gas installation | PIU, Consultants of the project | Head of PIU | Not started yet |
| 13 | To define an origin of an oil slick. In this regard confirmation is required on presence greasy sewage on the channel. | Commissioning new building a kondensate cleaner | Eco-analytical laboratories | Chief chemical shop JSC Takhiatash Thermal Power Plant ESE engineer | Done |
| 13 | Improve a condition of receivers of sewage – sludge collectors by additional concreting of a surface of settlers for the prevention of infiltration of production drains to the soil. | To make the plan schedule for elimination of the remark on sludge collectors | JSC Takhiatash Thermal Power Plant | Director of JSC Takhiatash Thermal Power Plant | Not started yet |
| 20 | Review water quality in intake and discharge points. Analysis for water quality every 15 days, which includes WB standards for sewage water. | Starting from construction period | Personnel of EHS department Chemical department of Takhiatash TPP | Cheif Engineer of Takhiatash TPP | Will be started during construction activities |
| 14 | To develop the asbestos management plan for gradual removal and replacement of asbestos in the existing units. | 01.07.2015г. | Engineer of operation stop of the III-IV turn and utilization of asbestos | Head of PIU | Will be prepared by Construction Contractor |
| 15 | Storage place of asbestos has to be repaired on purpose to provide tightness and chemical firmness of walls of storage, the volume of the tank has to make 110% of substance which will be stored there. | As soon as the asbestos management plan is accepted and approved | Engineer of operation stop of the III-IV turn and utilization of asbestos | Head of PIU | Not started yet |
| 16 | Include in tender documentation ensuring signs of safety of the dangerous materials seen on places of storage. Correctly mark signs of safety of dangerous materials. | 15.06.2015 | General contractor | Head of PIU | Done |

| 17 | For prevention of flood, support a good shape and safety of settlers, storages and containers for fuel, oil and other chemicals. | Constantly | Chiefs of shops | ESE engineer | Not started yet |
|-----|---|--|--|--|---|
| Wa | ste management | | I. | | |
| 18 | Include new system of recycling which has to be carried out in tender documentation to adapt its procedures for the international recommendations and appropriate practices. | Before commissioning of new Steam-gas installations | Consultants of the project, JSC Takhiatash Thermal Power Plant, ESE PIU group | Chief engineer of JSC Takhiatash Thermal Power Plant | Will be started during construction activities |
| 19 | To make the contract for destruction of the fulfilled luminescent lamps. | 01.09.2015r. | Engineer of ESE of station, Electric shop. | Head of PIU | Done |
| Noi | Se | | 1 | 1 | L |
| 20 | Include in tender documentation replacement of old and noisy units by new and more effective technologies with low noise level. | 15.06.2015 | PIU, Consultants of the project | Head of PIU | Done |
| 21 | Annual monitoring of noise has to be carried out for the purpose of an assessment of compliance to standards on level of noise. | Before commissioning of new Steam-gas installations | PIU, Consultants of the project | Head of PIU | Will be started during construction activities |
| The | e polluted soil and ground waters | | I | | L |
| 22 | It is necessary to expand an observation network of wells in the following points: • In the territory of storage of dangerous materials | In time construction | General contractor | Head of PIU Engineer- inspector of GPPR | Will be started during construction activities |

| | In the territory of an evaporator pond | | | | |
|-----------------|---|---|--|--------------|---|
| 23 | Preparation of Emergency Response Plan and development of measures for elimination of oil spills during construction. | Actions at emergencies according to the instruction. | All shops | ESE engineer | Will be prepared by Construction Contractor |
| Sec | curity system of work and health | | | | |
| 24 | and Safety Plan for ensuring implementation of the guidelines of the World Bank. Definition of structure and duties of Management of incidents. | After mobilization of the consultant | Consultants of the project, EHS group | Head of PIU | Done |
| | ining | | | 1 | |
| 25 So | Include in the program for training of the personnel of thermal power plant point on ecology, behavior of the personnel improvement: ecological requirements of the personnel, especially procedures of waste management (dangerous and harmless a segregation, use of containers, etc.), and also air emissions, quality of air, meteorology, noise issues and sewage have to be also included in the program of a course. | 01.11.2015 | Head of shops Personnel training engineer | Head of PIU | Done |
| 26 | Create the following conditions for submission of the complaint: A) complaint book B) a box for reception of complaints C) organization of public consultations | 31.05.2015 | Expert of EHS PIU | Head of PIU | Done. Non complaints received for the reporting period |

| 27 | Inform local communities on ecological indicators of thermal power plant. Local communities have to be informed on results of implementation of the Management plan by environment by means of access to annual ecological reports | Constantly | Expert of EHS PIU | Head of PIU | Three sets of PCs were conducted in 2013 within EIA. New PC will be conducted before construction works will start |
|----|--|-------------|--|-------------|--|
| 28 | Inform local communities on the plan for emergency situations on thermal power plant. Inform local population about the emergency plan of thermal power plant. Neighborhoods that has to be informed (1 Crew, collective farm of "Hamza", Hodzheyli area). | Once a year | Engineer of OOS of station, II department of thermal power plant | Head of PIU | Three sets of PCs were conducted in 2013 within EIA. New PC will be conducted before construction works will start |

| Curator on environmental protection of station | Abdullaev K. |
|---|-----------------|
| Engineer on environmental protection of station | Ayimbetov M. |
| Senior engineer of PIU | Kutlimuratov P. |
| Specialist in environmental protection of PIU | Akhmadov Sh. |

AΚΤ

г. Нукус

30, 03 2016E.

Мы, нижеполнисавшиеся члены комиссии в составе: начальник отдела труда ЦГЭСН Республики Каракалнакетан - Умарова Д.А., специалист первой категории Государственный инспектор Госкомприроды РК - Жадигеров Т.К., главный специалист Государственной инспектор Госкомприроды РК - Айтанов Д.С. и специалист государственной инспектов «Саноатгеотехназорат» РК - Айтанов Д.С. и специалист по асбесту отдела по привлечению инвестиций и реализации инвестиционных проектов АО «Тахнатациская ТЭС» - Юсупов К.К. произвели осмотр места для утл.итзации и захоронения асбеста и асбестосодержащих неметаллических материалов из цемонтпрованных 3-4 оверстей, в резервуарах № 6 и №7 Мазутохранилица АО Тахнатациская ТЭС, находящиеся в районе 21 км автограесы Нукус - Гашкент,

1. Соглаено требованиям CaнHuH Py3 №0158-04 «санитарные правила и нормы сбора, транспортировки и захороления асбестосодержащих отходов в условиях Узбекистана» и СанНиН РУ3 0300-11 «Санитарные правила и нормы организации сбора, инвентаризации, классификации, обезвреживания, хранения и утплизации промышленных отходов в условиях Узбекистана» санитарные санитарные запити не челы асбестсе тержа или промышленных отходов в условиях Узбекистана» санитарные правила и нормы организации сбора, инвентаризации, классификации, обезвреживания, хранения и утплизации промышленных отходов в условиях Узбекистана» санитарно запити не челы асбестсе тержа или промышленных отходов от населенных пулктов должна быть не менее 3000 метров, соответственно существующие резервуары «Мазутохранилице Тахиатациской ТЭС» соответствуют по отношению санитарно защитной зоне от населенного пункта.

 При сборе транспортировке и захоронения асбестосодержащих отходов (утилизации) строго соблюдать требования выше указанные СанПиП РУз №0158-04 и СанПиН №0300-11.

 По результатам проведенного дояметрического измерения (Котзы 1-6, БАК1-5, трубопроводы внутревний и паружный) и протокода №41 от 29.03.2016г (кония прогокода при кагастея) монаность экспозиционной дозы не превышают порм СанПиП №0193-06.

4. Мазутохранилище АО Гахнанашская ГЭС находится на расстоянии 35 км от города Тахнатань. Общая площадь герритории мазутохранилища составляет - 37.7 га, общее количество резервуаров 20 сдиниц. Польездные железнолорожные пути расположены на расстоянии в 150 метрах от резервуаров №6 и №7. Размеры резервуаров №6 -59.5х41.9х4.45 м. объемом 10835м³, №7 -59.5х42х4.45 м. объемом 10901м², толицина внутренных боковых железобстонных стен 80 см. железобстонного пола 70-80см. После полного заполнения резервуаров асбестосодержащими материалами и упилизации составляется акт захоровения.

По результатам осмотра принято решение:

 мазутохранилища Гахиаташской ТЭС почностью соответствует для утилизация и захоронения асбеста и асбестосодержащих неметаллических материалов.
 О чем и подписываемся.

Julan-

-Пачальник огдела труда ЦГЭСН Республики Каракалнакстан -

 Специалист первой категории Государственный инспектор Госкомприроды РК -

- Главный специалиет

1 осударственной писиекции «Сановитеотехназорат» РК -

- Специалист по асбесту

отдела но привлеченню инвестиций и реплизации инвестиционных проектов АО «Тахнатанская ТЭС» -

Умарова Д.А.

Жадигеров Т.К.

ATTAHOB /LC

Юсунов К.К.

Attachment 3: Results of measurement

I

| у отликий саклай возибляная У отликий саклай возибляная | 1.948 1-й» Зр 1. | 10 AV 40000 (1990) |
|--|--|--|
| Му ассасанинг помн РесНИСЭН РК | Твобни хужя Уз РССВ (| от формаен-524-ак у н інд 26 июн 287 сонда |
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| Протон | <оли (Басн) № 41 | |
| | март 2016 г | |
| () | | |
| Буюр́тмачининг номи: – <u>АО «Tahiyata</u> | osh IES» р. Ходжели с | <u>. Taxuamaw</u> |
| <u>21, Тахиаташская б/н</u> | • • | |
| | | |
| Услуб идентификацияси: <u>дозиметрия</u> | <u>u</u> | |
| lамуна номи ва идентификацияси: | <u>4</u> | |
| | ч Количество | Мошность |
| Чамуна номи ва идентификацияси: № Наименование изделия | | 1 |
| Чамуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 | | 1 |
| Чамуна номи ва идентификацияси: № Наименование изделия | Количество | жепозиционной доз |
| Чамуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 | Количество 1 шт | экспозиционной доз 0,1-0,12мкЗв/час 0,1-0,12мкЗв/час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №3 4 Котел №4 | Количество 1 шт 1 шт | экспозиционной доз 0,1-0,12мк3в.час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №3 | Количество 1 шт 1 шт 1 шт 1 шт | экспознационной доз <u>0,1-0,12мк3в час</u> <u>0,1-0,12мк3в час</u> <u>0,1-0,12мк3в час</u> <u>0,1-0,12мк3в час</u> |
| Намуна номи ва идентификацияси: № Наименование изделия ! Котел №1 2 Котел №2 3 Котел №2 4 Котел №3 4 Котел №4 5 Котел №5 6 Котел №6 | Количество 1 шт 1 шт 1 шт 1 шт | экспозиционной доз. 0,1-0,12мк3в час 0,1-0,12мк3в час 0,1-0,12мк3в час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №2 4 Котел №3 4 Котел №4 5 Котел №5 6 Котел №6 7 БАК - 1 | Количество <u>1 шт</u> 1 шт 1 шт <u>1 шт</u> <u>1 шт</u> <u>1 шт</u> | экспознационной доз. 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |
| Намуна номи ва идентификацияси: № Наименование изделия ! Котел №1 2 Котел №2 3 Котел №2 4 Котел №3 4 Котел №4 5 Котел №5 6 Котел №6 | Количество <u>1 шт</u> 1 шт 1 шт 1 шт 1 шт 1 шт 1 шт. 1 шт. | экспозиционной доз 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №2 4 Котел №3 4 Котел №4 5 Котел №5 6 Котел №6 7 БАК - 1 | Количество <u>1 ит</u> 1 ит 1 ит 1 ит 1 ит 1 ит 1 ит 1 ит 1 ит | экспозиционной доз 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №3 4 Котел №3 5 Котел №5 6 Котел №6 7 БАК - 1 8 БАК - 2 | Количество 1 шт 1 шт | экспозиционной доз 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №2 4 Котел №4 5 Котел №5 6 Котел №6 7 БАК - 1 8 БАК - 2 9 БАК - 3 | Количество 1 шт 1 шт | экспозиционной доз 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |
| Намуна номи ва идентификацияси: № Наименование изделия 1 Котел №1 2 Котел №2 3 Котел №2 4 Котел №4 5 Котел №5 6 Котел №6 7 БАК - 1 8 БАК - 2 9 БАК - 4 | Количество — 1 шт — 1 шт | экспозиционной доз 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час 0,1-0,12мк3в/час |

Улчов ва текцирув утказилган сана – <u>28. 03.2016</u>е

Санитар-гигненик текцирув далолатномаси санаси

18 A

Улнов курсатични ва текширув натижаси (Меъёр 0.3 мкЗв/соат) <u>Проведены замеры</u> <u>уровня конизирующе/о и случения в 25 точках. Мощность экспозицонной дозы в</u> пределах <u>0.1-0.12мкЗв/час. Измерения проводились радиом</u>етром <u>ДКС-4</u>ТП21 №43230. Сертидикат поверки № 1074/05 от 13.07.2015е.

Лаборатория булими мудир:

Санитария врачи хулосаси –

— не сейцару жера). <u>Соот</u>астети — Уляов утказган санитар врая — шаунфи — Алгамургий

ORATI AKKREDITA #4 <u>тустимого гровня</u> AVO 'USE VUTENIS3

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АО «Тахиаташская ТЭС»

Приказ 1-79

16.04.2015 год

ŝ

г. Тахиаташ

О создании группы по охране окружающей среды, об упорядочении и распределении должностей ГРП

В соответствии с Постановлением Президента Республики Узбекистан №ПП-2264 от 17.11.2014г. «Об Инвестиционной программе Республики Узбекистан на 2015 год» и Постановлением Кабинета Министров Республики Узбекистан №293 от 22.10.2014г «О первоочередных мерах по реализации инвестиционного проекта «Строительство двух парогазовых установок мощностью по 230-280 МВт на Тахиаташской ТЭС»» реализуется инвестиционный проект «Строительство двух парогазовых установок мощностью по 230-280 МВт на Тахиаташской ТЭС» с участием Азиатского Банка Развития (АБР).

О создании группы по охране окружающей среды, упорядочении и распределении должностей ГРП в ходе реализации инвестиционного проекта ПРИКАЗЫВАЮ:

Директор

٤.

АО «Тахиаташская ТЭС»

. 1. С 13.04.2015 года создать группу по охране окружающей среды на станции в составе:

1.1.Айымбетов М. – Перевести на должность инженер по охране окружающей среды с сохранением прежной должность.

1.2. Абдуллаев.К - куратор по охране окружающей среды станции с надбавкой 30%.

1.3. Ахмадов Ш. - Специалист по охране окружающей среды ГРП.

1.4 Юсупов К. – Перевести на должность инженера по выводу из эксплуатации 3-4 очереди и утилизации асбеста.

2. Упорядочить и распределить должности ГРП в следующем составе:

2.1. Кутлымуратов П — инженер ГРП, назначается старшим инженером ГРП с надбавкой 30%.

2.2. Жапакова Г- перевести на должность специалиста по социальным и гендерным вопросам

2.3. Мадреимов Ю- командировать в отдел капитального строительства на время реализации проекта с надбавкой 30%.

Рассылка: Канц., Зам. гл. инж. по эксп., Зам. директора по экономике ПТО, ПЭО, Бух., ГРП, ОКС, ЮК.

Мадреимов Б.

ΠΤΟ