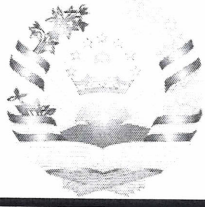


【添付資料－10】環境承認通知書



COMMITTEE FOR ENVIRONMENTAL PROTECTION UNDER
THE GOVERNMENT OF THE REPUBLIC OF TAJIKISTAN

STATE ENVIRONMENTAL APPRAISAL

734034, st.Shamsi 5/1,
Dushanbe, Republic of Tajikistan
Tel.: (+992) 37 2359583, (+992) 37 2359577
Fax: (+992) 37 2361353

No. 1383-15

November 27, 2018

«APPROVE»

Head of State Ecological Appraisal

_____ **Kh.R. Mahmaddulloev**

RESOLUTION

of

the State Ecological Appraisal

General information:

1. *Project name:* Project for Rehabilitation of Kizilkala – Kurgonteppa section of the Dushanbe – Bokhtar road.
2. *Project location:* Khuroson district – the city of Bokhtar.
3. *Presented documents:* Request for ecological appraisal, Materials indicating project's environmental impact.
4. *Requester:* SUE 'Design Institute for Transport Infrastructure' of the Ministry of Transport of the Republic of Tajikistan.
5. *Date of receipt:* November 26, 2018.

State ecological appraisal of the Committee for Environmental Protection under the Government of the Republic of Tajikistan has reviewed the Initial Environmental Examination Report prepared and submitted by the SUE 'Design Institute for Transport Infrastructure' of the Ministry of Transport of the Republic of Tajikistan under the Project for Rehabilitation of Kizilkala – Kurgonteppa section of the Dushanbe – Kurgonteppa road.

According to the submitted materials, it is planned to carry out reconstruction and rehabilitation of the existing road under the Project for Rehabilitation of Dushanbe – Kurgonteppa road starting from the village of Kizilkala to the city of Kurgontappa. As reported, the length of road section to be repaired makes 9.2 km. Indeed, it is projected to remove the upper concrete layer of road and lay a new asphalt coating. The width of road to one side varies from two to four lanes. In addition, under this project it is planned to rehabilitate two bridges, eight irrigation canals and six drains.

In connection with Project implementation, the State Unitary Enterprise ‘Design Institute for Transport Infrastructure’ of the Ministry of Transport of the Republic of Tajikistan has prepared a report on initial environmental examination and submitted it to the State ecological appraisal. The report consists of eight chapters and expands on the following: description of environmental conditions in the project site, project description, impacts on environmental components, impacts mitigation plan, monitoring of impacts on environmental components, and types of impacts.

The Project doesn’t show the sources of inert materials and asphalt, along with the allocation of construction wastes at the dump sites. However, in the report it is written that the Contractor shall develop a special environmental management plan prior to construction works and submit this plan for the approval. Concerning the production and everyday need in water, it is proposed to use the existing sources of water.

Geologically, the soil in the surveyed section consists of loam with thickness varying from 18mm (at the beginning of the project) to 20mm (at the end).

The Project shows the sources of impacts on environmental components and provides the qualitative characteristics of these impacts. During the reparation and rehabilitation of road, it is expected that different types of environmental components will be affected. The following can be referred to probable environmental impacts:

- physical presence of machinery and people;
- emission of atmospheric air pollutants and dust;
- formation of industrial, domestic and water wastes;
- physical factor effects (noise, light, din and vibration).

On a territorial scale the above-listed impacts refer to point-type.

During the construction works the main sources of atmospheric emissions are as follows:

- atmospheric air pollutants, emitting from the operation of machinery and vehicles;

- dust occurring during the transportation and storage of construction materials;
- dust occurring during the allocation of machinery;
- dust emerging during the construction works.

The background concentration at the project site is shown below:

- | | |
|----------------------|-------------------------|
| - dust | - 1.2 mg/m ³ |
| - nitrogen oxides | - 0.1 mg/m ³ |
| - sulphate anhydride | - 0.1 mg/m ³ |
| - carbon oxide | - 1.5 mg/m ³ |

As it comes from the report, the main sources of atmospheric air pollution during works execution are the following ones: atmospheric air pollutants, emitting from the operation of machinery and vehicles, dust occurring during the transportation and storage of construction and welding materials, dust occurring during the allocation of machinery.

During the operation of construction machinery, as well as execution of construction works and welding, the following contaminants are emitted into atmosphere: dust, nitrogen dioxide (NO₂), nitric oxide (NO), benzpyrene, fumes, sulphur dioxide (SO₂), aldehydes, carbohydrates C12 – C19, carbon monoxide (CO).

Moreover, when the construction machinery leave the construction site they disperse dust along their way to destination. Therefore, it is required to wash the machinery to avoid dusting of the public roads and splash water over these roads to prevent further spreading of dust.

Meanwhile, in case of accumulation of construction wastes / debris it is expected that its volume shall depend on the scope of construction works. These wastes are composed of surplus of asphaltic concrete, scrap metal, depreciated pipes, worn cables, insulating wastes and other similar trash.

All the construction waste should be distinguished by types and disposed from the construction site with the concurrence of local authorized body in charge of environmental protection.

The dumping of soil excavated at the construction site should be performed after routing, by agreement with local authorities and through the mobilization of freight transportation.

The sanitary wastes accumulate as the result of activity of workers, canteen and in the issue of construction site cleaning. It is expected the volume of these wastes shall depend on total number of people in the construction site, on amount of food and the area of cleaned site. The chemical composition of these wastes includes nitrogen (0.8-1.5%), phosphorus (0.4-0.6%), carbon (23-40%), potassium (0.3-0.6%) and sweepings. While their physical properties are characterized by solidity,

combustibility and solubility. In terms of infectiousness these wastes refer to the fourth group of hazardous waste. The sanitary wastes should be collected in special boxes and can be disposed by an organization providing communal services on contract bases or by the Contractor itself by permission of the local responsible authority for environmental protection to the determined dumps.

In the pre-construction period, execution of the following activities is designated in the report:

- development of a construction site;
- cutting and uprooting of trees and shrubs;
- removal of operated man-made structures;
- unearthing and reconstruction of utility;
- removal of fertile layer of ground;
- removal of existing asphaltic concrete pavement;
- mounting of signs and temporary surrounding of the construction site.

In addition to all the above-mentioned impacts the generation of noise and vibration is expected during the execution of construction works as well. And this may break the silence for some time. So, in order not to trouble people it is recommended to set up a special operating schedule and to use modern machinery/equipments.

As it is stated above, the project proposes cutting and uprooting of trees, which stay as an obstacle in the way of construction process. Therefore, cutting and uprooting of trees, as well as planting of seedling should be carried out on basis of certificate, with the concurrence of local responsible authority for environmental protection and observation of safety rules.

Planting of greenery in the improvement road section is one of the purposes of architectural planning of the territory and this arrangement shall contribute to environmental refinement. Prior to development activities the list of trees, shrubs and other plants selected for the arrangement of green spaces should be confirmed, along with their ability to adapt to the local environmental conditions and their endurance to unfavourable urban conditions.

Several activities are planned at the biological stage, such as: planting, manuring, dissemination of seeds and agrochemical minerals. All these measures shall favour blossoming of trees, shrubs, seedlings and grass.

Ecologically, the reparation and reconstruction of the project road shall contribute to the reduction of man's impact on environment (especially on atmospheric air).

The below mandatory instructions are given for the purpose of environmental protection and maintenance:

- During project implementation it is required to adhere to acting rules and standards for road construction, as well as environmental standards and other laws of the Republic of Tajikistan related to the field of environmental protection;
- A responsible person from the Contractor's team should be assigned to carry out sectoral control;
- The Contractor should develop an action plan on environmental protection and submit it for the endorsement to the local body in charge of environmental protection;
- The construction area should be periodically watered in order to protect atmospheric air and to prevent dusting;
- During the construction works execution the protective line of the river should be observed according to requirements, and at the same time all necessary measures for the protection of water resources should be taken;
- Those trees which hinder the construction process can be removed only in agreement with local body in scope of environmental protection;
- The planting and transplanting of seedlings should be performed following the design documents and agrotechnical rules;
- The engineering part of construction works should be executed adhering to the environmental standards and keeping the lowest level of environmental impact;
- In accordance with established procedure, a management control should be organized over the adherence to the requirements of arrangements made in the field of environmental protection;
- All domestic waste should be disposed in official dumps in accordance with established procedure;
- As the construction works are completed all the construction waste should be separated by types and disposed in official dumps in agreement with local body in scope of environmental protection;
- In order to prevent dispersion of dust along the way of construction machinery to destination when they leave the construction site, it is required to wash the machinery and provide for their cleanness;
- All the technological works should be performed under the compliance with environmental impact standards;
- The environmental management plan, particularly the location of dumps for the construction waste and their further usage, in line with emission of inert materials and allocation of asphalt processing plant should be

developed and submitted for the approval of State Environmental Appraisal prior to the commencement of construction works;

- Environmental protection action plan should be developed and agreed in accordance with established procedure;

Current resolution has legal effect on condition that all the above-listed recommendations are fulfilled.

The control over the observance of the acting laws of the Republic of Tajikistan related to the field of environmental protection and maintenance is imposed on the Public administration for environmental protection in the Khatlon region and on the local body in scope of environmental protection of the project area.

After the review of the Initial Environmental Examination Report prepared and submitted by the SUE 'Design Institute for Transport Infrastructure' of the Ministry of Transport of the Republic of Tajikistan under the Project for Reparation and Rehabilitation of Kizilkala – Kurgonteppa section of the Dushanbe – Kurgonteppa road, the State ecological appraisal of the Committee for Environmental Protection under the Government of the Republic of Tajikistan approves it subject to the adherence to acting legislation related to the field of environmental protection and the above-listed conditions.

Expert

J.Khalilov

【添付資料－11】 住民説明会参加者リスト

Consultations with spokesmen of local executive authority of Bokhtar city

| | |
|----------------------|---|
| Mr. A. A. Ismoilzoda | Chairman of the local executive authority |
| Mr. U. Gurezzoda | Senior vice-chairman of the local executive authority |
| Mr. Saifiddini I. | Vice-chairman of the local executive authority |
| Mr. V. Yatimzoda | Chief architect |
| Mr. B. Yusufzoda | Land manager |
| Mr. Kh. Madaliev | Leading specialist to the architecture department |
| Mr. N. Nematzoda | Head of ecology department |
| Mr. Kh. Manonov | SIRM in the city of Bokhtar, Chief Engineer |
| Mr. Kh. Ishmurodov | Head of department of local community council |
| Mr. S. Kamolov | LBTI |

| Date | Hukumat/ Local executive body | Jamoat | Name of atendant | Position | Phone No. | Subject | Signature |
|-----------------|--|--------|---------------------|----------|-----------|---------|-----------|
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |
| May 16, 2018 | Bokhtar city | | | | | | |

**Consultation with local communities
of local executive authority of Kushoniyon district**

Mr.Sharif Safarzoda Vice-chairman of the local executive authority of
Kushoniyon district

Mr.Jamshed Ashurov Vice-chairman of the local executive authority in the
jamoat of Oriyono

Mr.Y.Qalandarov Vice-chairman of the local executive authority in the
jamoat of Oriyono

Mr.B.Yodgorov Secretary to the jamoat of Oriyono

Mr.A.Qurbonov Chairman of the local executive authority in the
jamoat of Bokhtariyon

Mr.A.Yorov Vice-chairman of the local executive authority in the
jamoat of Bokhtariyon

Mr.N.Ismoilov Vice-chairman of the local executive authority in the
jamoat of Bokhtariyon

| | Date | Hukumat/ Local executive body | Jamoat | Name of atendant | Position | Phone No. | Subject | Signature |
|----|-----------------|--|--------------------|---------------------|----------|--------------|---------|-----------|
| 1 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 2 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 3 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 4 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 5 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 6 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 7 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 8 | May 25, 2018 | Kushoniyon | city of Bokhtar | | | | | |
| 9 | May 25, 2018 | Kushoniyon | Dushanbe | | | | | |
| 10 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 11 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 12 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 13 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 14 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 15 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 16 | May 25, 2018 | Kushoniyon | | | | | | |
| 17 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 18 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |

| | | | | | | | | |
|----|--------------|------------|-------------|--|--|--|--|--|
| 19 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 20 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 21 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 22 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 23 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 24 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 25 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 26 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 27 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 28 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 29 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 30 | May 25, 2018 | Kushoniyon | Oriyono | | | | | |
| 31 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 32 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 33 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 34 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 35 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 36 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 37 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| 38 | May 25, 2018 | Kushoniyon | Bokhtariyon | | | | | |

Consultation with local communities of local executive authority of Bokhtar city

Mr. U. Gurezzoda Senior vice-chairman of the local executive authority
 Mr. Saifiddini I. Vice-chairman of the local executive authority
 Mr. V. Yatimzoda Chief architect
 Mr. B. Yusufzoda Land manager
 Mr. Kh. Madaliev Leading specialist to the architecture department
 Mr. N. Nematzoda Head of ecology department
 Mr. Kh. Manonov SIRM in the city of Bokhtar, Chief Enigneer
 Mr. Kh. Ishmurodov Head of department of local community council
 Mr. S. Kamolov LBTI

| | Name of attendant | Phone No. | City | Mahal |
|-----------------|-------------------|-----------|---------|------------|
| May 28, 2018 | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Vahdat |
| | | | Bokhtar | Vahdat |
| | | | Bokhtar | Vahdat |
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| | | | Bokhtar | Hayoti nav |
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| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |
| | | | Bokhtar | Hayoti nav |

Consultations with the communities of Local government of Bokhtar city

Mr Sayfiddini I.

Deputy Chairman of the Hukumat Bokhtar

Mr. Yatimzoda Valijon

Chief architect of the Bokhtar city

Mr.Nematzoda Naim

Chief ecologist of Bokhtar city

| | Date | Hukumat/ Local executive body | Jamoat | Name of atendant | Position | Phone No. | Subject | Signature |
|----|--------------------|--|------------------|---------------------|----------|--------------|---------|-----------|
| 1 | August 16, 2018 | Bokhtar | st.Zebuniso | | | | | |
| 2 | August 16, 2018 | Bokhtar | Vahdat | | | | | |
| 3 | August 16, 2018 | Bokhtar | Umari Khaiyom | | | | | |
| 4 | August 16, 2018 | Bokhtar | | | | | | |
| 5 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 6 | August 16, 2018 | Bokhtar | | | | | | |
| 7 | August 16, 2018 | Bokhtar | | | | | | |
| 8 | August 16, 2018 | Bokhtar | | | | | | |
| 9 | August 16, 2018 | Bokhtar | Kaihonavardon | | | | | |
| 10 | August 16, 2018 | Bokhtar | Vahdat | | | | | |
| 11 | August 16, 2018 | Bokhtar | Vahdat | | | | | |
| 12 | August 16, 2018 | Bokhtar | | | | | | |
| 13 | August 16, 2018 | Bokhtar | Umari Khaiyom | | | | | |
| 14 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 15 | August 16, 2018 | Bokhtar | city of Bokhtar | | | | | |
| 16 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 17 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 18 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 19 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 20 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 21 | August 16, 2018 | Bokhtar | Hayoti nav | | | | | |
| 22 | August 16, 2018 | Bokhtar | city of Bokhtar | | | | | |
| 23 | August 16, 2018 | Bokhtar | city of Bokhtar | | | | | |
| 24 | August 16, 2018 | Bokhtar | city of Bokhtar | | | | | |
| 25 | August 16, 2018 | Bokhtar | | | | | | |
| 26 | | | | | | | | |
| 27 | | | | | | | | |

Consultations with communities Hukumat of Kushonyon district

Mr. Sharif Safarzoda Deputy Chairman of Local government of the District
 Mr. Jamshed Ashurov Deputy Chairman of the Jamoat Oriyon
 Mr.B.Yodgorov Secretary of the Jamoat Oriyon
 Mr.A.Qurbonov Chairman of the local executive authority in the
 jamoat of Bokhtariyon
 Mr.N.Ismoilov Deputy Chairman of the Jamoat Bokhtariyon

| Date | Hukumat/ Local executive body | Jamoat | Name of atendant | Position | Phone No. | Subject | Signature |
|-----------------|--|-------------|---------------------|----------|-----------|---------|-----------|
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Zahmatobod | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Bokhtariyon | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | Kushoniyon | Oriyono | | | | | |
| August 17, 2018 | | | | | | | |
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