

Dear Colleagues,

These are my comments to the last webinar:

**1. The main issue is dust (dusting) and its health impact. The situation looks a bit confusing as we have not clearly identified three main problems of Zakamensk that exist today. We have discussed those issues with Alexander Lbov, Deputy Minister of the Ministry for Natural Resources, the project creator and Mr. Plyusnin.**

- 1. Dust impact from the tailings Barun-Naryn**
- 2. Suitability of houses for living on the environmental disaster area**
- 3. Cause and effect links and health damage caused by the DTMM wastes**

Those are different problems which should be addressed differently, each in its own way. The first two issues could be addressed by conducting a snow survey (analysis) in March this year. The snow samples should be collected from the roofs of houses and sedimentation (dust) should be analyzed for size and composition.

To tackle the third problem, we do not need to study dust because it is not a biomarker. Apart from those three main problems, there are risks of dusting caused by current transportation/moving of the wastes (which can be contaminated with mercury?) and planned demolishing of the mill facilities in spring.

To protect people from dust we need counters (dust detectors) to detect micro-dust and analyze the data on-line. People could use those data to appeal to the Prosecutor's Office and prove that their rights for favourable living have been violated. Such people's monitoring could serve as a preventive measure for violations with dusting.

I have suggested that Mr. Lbov organized snow analysis in March, and he agreed.

## **2. A new project**

Paul has mentioned that a new partnership grant competition has been announced for 2015. Although candidates previously supported by the program are not eligible to apply, so we need to find another partner who could be **BCPЦ ФУР** (Moscow).

Vladimir Belogolovov

## **Appendixes**

### **App.1**

02/02/15

Analyzing risks of the project "Second Phase of environmental damage liquidation operations at the DTMM"

According to the project implementation data of 2011-2014 and taking into consideration other related projects we find it possible to specify the following main risks:

1. The project is risking to be cancelled because of inability to meet the project operations effectiveness criteria.

1.1 The preliminary results of the project 2011-2014 do not correspond to the criteria of effectiveness (Federal Program "Lake Baikal protection and Baikal Natural Territory"), namely the criterion of reduction/decreasing of the area occupied by the wastes.

The area reduction occupied by the DTMM wastes is implemented by transporting the wastes onto a new territory which results in the creation of a new tailings site – Zun-Naryn at the mill of ZAO "Zakamensk" – of a larger size.

1.2. The preliminary results of the project 2013-2014 do not correspond to the criteria of effectiveness (Federal Program "Accumulated Environmental Damage Liquidation in Russia"), namely the criterion of reducing the number of people who live on the area of negative tailings impact.

The environmental disaster area in Zakamensk has not decreased although some parts of it have been reclaimed (Lbov), and what is more, it will continue to increase if the Barun-Naryn tailings are not protected from winds or moved to a different site which is not going to affect Zakamensk.

2. Financial risks which imply non-purposeful/inadequate use of budget funds.

The main construction works (purification facilities at the rivers of Inkur, Gudzhirka and Myrgensheno) are created as social assets which will require long-term budget funds which are not guaranteed by the agent who will maintain them in the future. Such guarantees are hardly possible to obtain in the time of economic crisis in Russia and Buryatia, so the assets will not function properly, and costs aimed at their creation will be unjustified which will violate rights and interests of residents and the state.

3. Social risks – low quality project operations resulted in people's protests (dust storms accompanied tailings moving in 2011). This could recur when mill facilities of the DTMM are demolished in 2015 (by any method of demolition).

There are project funds available for resettling people from damaged houses, although legal provisions for doing this have not been created. These houses are not suitable for selling, so the residents are destined to live in the environmental disaster area with no hope for a better future.

This results in lowering their self-esteem and health. Statistically significant increase of morbidity among children and aboriginal population was established 10 years ago and there are no grounds to expect that the disease rate will decrease after the environmental damage liquidation project is completed.

#### Conclusions

1. The above listed risks are urgent because of the global climate changes and need to be addressed including the recommendations listed below.

2. One of the reasons for above listed risks could be explained by the fact that the project did not undergo either the state expertise or environmental expertise, while the process of taking decisions related to the project operations was not clearly determined and transparent, and its results were not clearly presented to the public and other stakeholders.

3. It is important to create legal provisions for compensating Zakamensk residents on health damages and giving them a possibility to leave the environmental and social disaster area.

#### Recommendations

1. The project creator should consider the question of protecting the Barun-Naryn tailings from the wind erosion, or its relocating at a different site outside the impact area. A group of experts should be created to address the issue.

The main provision for constructing purification facilities at the Dzhida River should be guaranteed by the maintenance agency that they will be able to maintain the facilities, or a project aimed to neutralize toxic heavy metals should be worked out instead.

2. The sanitary hygienic monitoring project creator should also consider sub-micron dust analysis in order to develop a geochemical criterion that could be used in assessing suitability of houses for living in the environmental disaster area and provide for legal provisions for resettling people from the houses unsuitable for living.

3. The Public Council and human rights ombudsman should consider the aforementioned recommendations to be made part of public monitoring operations for 2015.

App. 2

020215

Risks of Sanitary Hygienic Monitoring (SHM) 2015 (based on the draft project of the experts from Perm, 2014)

1. There is a risk that the SHM will not be completed. It lacks funding on all stages of the planned research. This will prevent the SHM from making a clear conclusion, finishing research and obtaining evidence.
2. There is a risk of making damage assessment being based on the obtained evidence which ignores other risk factors and thus could not be 100% adequate to the real situation.
3. There is a risk of diminishing the damage assessment data. That results from the research of biomarkers in biomedica with no regard to the terms of physiological response (2-4 weeks are needed before the priority factor becomes explicit).

Conclusions

Those risks can become real if the SHM budget is set up artificially (without considering a real situation) and terminology of the project is not properly explained (representatives of the Ministry for Natural Resources who have ordered the project hardly understand all the terms used by the project creators).

Recommendations have been given earlier and more than once, but the response was scarce, so the questions remain unanswered.

App.3

130215

**My questions to the authors of the SHM which I would like to be addressed at the webinar on 19/02/15 \***

1. **If significant variations in the morbidity levels in the study and control groups are identified, while the exposure markers will not be higher the comparison levels, will that mean that the SHM will be stopped?**

**Will that also mean that there is a different factor that affects health which has remained understudied or which cannot be used as a marker in the study? Will the research be**

continued or the SHM will be stopped and the funds will not fully used or used to some (what?) percent?

2. If exposure markers and response markers are insignificantly higher for some (small) part of the target groups (10% and less) will be research continued?

3. If yes, what health damage compensation (in its monetary value) will be people assigned for - 100-1,000-1,000,000 rubles? How long will that expertise take after a positive decision taken by court? And who will pay for the expertise?

4. How successful will people be when they go to court relying on the evidence obtained in the SHM? How expensive will that be for each person who will go to court for compensation? (People in Zakamensk are currently engaged in building new houses in the environmental disaster area as they are planning to get compensated on the health damage).

What is the cost of the whole SHM project if the potential compensation for health damage is going to be less than 4 mln rubles?

5. If the allocated sums of money (compensation package) are not enough for people to leave the environmental disaster area and start a new living in a new place, and people's health continues to deteriorate, will you consider your mission implemented?

**\*Belogolovov's comments**

"It is clear that FBUN research algorithm is based on markers (heavy metals in their soluble form) that are found in biomedica. I am sure this algorithm will fail and there are three things to prove this:

1. According to the Buryat Research Center data the sum of 4 soluble forms of heavy metals in the DTMM tailings is estimated at about 10% total.

2. Heavy metals of this form are not transported by dust (in the melting snow there are no anomalies connected with heavy metals).

3. We have analyzed samples of those biomedica and only 10% of them exceeded the norm/standards (so, judging by this research the damage will be tiny/insignificant) "