

Mines and Mine Reclamation

Introduction

Mines have become an important part of the human civilization. Along with mining wells, they are one of the most common ways of obtaining various underground resources such as coal and metals. However, the mining process is associated with considerable negative effect towards the surrounding environment. It is evident that mines pollute the ecology within their vicinity involving air, land and water pollution. Moreover, the degree of this pollution may be increased in case the mines stop their functions. One of the major reasons for it is that the stop of their service leads to the rise of flooding underground waters, which activate the processes of corrosion. Moreover, flooding underground waters spread contamination spoiling soil and underground freshwater pools. That is why management of the problem of closed mines and their further reclamation is the consideration of a series of environmental organizations. These problems should be addressed in order to assure the safety of mines and their non-intrusion in natural processes by means of pollution. Therefore, this paper analyzes the materials present at Trout Unlimited, which discuss the impact of abandoned mines and the procedures regarding the management of the issue. This analysis would consider the details of the plan along with its feasibility. In its turn, it allows revealing strong and weak points of the initiative as well as estimating the overall effect, which is created by the program.

The Analysis of the Plan

The analyzed plan involves a discussion of the environmental initiatives designed for the management of mine pollution in the Appalachian region. It is estimated that there are over 10,000 miles of streams polluted from abandoned mines in Pennsylvania and West Virginia alone. Moreover, the abandoned mines have a significant contribution to the pollution of natural resources, which is characterized by the impact on plants, animals and

fish. Likewise, they present a physical hazard, which is relevant for their occasional visitors, which may injure or die because of suffocation or physical injuries. Trout United has a long history of managing the issue working with its partners to manage the negative ecological footprint from the abandoned coal mines. Moreover, the developers of the program claim that the achievement of the desired goals may take decades of years. Therefore, it is important to educate youth and other stakeholders about the need for the persistent management of the ecological situation in the region. Consequently, the general aim of the program is “advancing the restoration of streams polluted from abandoned coal mines”. Along with education, such activities involve the initiation of the associated ecological researches and advocating the policies, which assist in managing the stated problem. Additionally, the plan gives the example of successfully achieved goals. Among them, one can name the provision of technical assistance to more than fifty groups of more than a hundred of abandoned mine drainage projects. Therefore, the program is gradually achieving its general aim.

Furthermore, the discussed plan consists of a series of concrete initiatives such as gas monitoring program, restoration of national forests or the Potomac headwaters and other. The reports on these programs include the discussion of goals, tactics and victories, which allows indicating their detailed character. For instance, Eastern Shale Gas Monitoring Program aims at “protecting coldwater resources from the potential impacts of shale gas development.” It is suggested that the staff of the initiating organization would train volunteers in reporting the cases of pollution and the associated events. Furthermore, the program reports the effects of the initiative, which is training of 640 volunteers and monitor of 331 sites on 278 streams throughout Pennsylvania, West Virginia and Virginia. The demonstration of the effects of every initiative of the plan shows that it is feasible. The reason for this is that people actively participate in the designed initiatives and assist in reaching the defined goals. The analysis shows that the program considerably changes the environment cleaning thousands of quarter

miles of soil and hundreds of miles of rivers and streams. The only problem of the program has a natural character, and it is the time, which is needed for managing the issue. At the same time, the reports by the US Environmental Protection Agency indicate that the plan would be more feasible in case it uses modern mine drainage technologies. Likewise, experts argue that the problem of abandoned mines require support by the legal initiatives assuring free access to abandoned mines for their cleaning. Therefore, the plan provided by Trout Unlimited is a comprehensive program, which allows managing the issue of abandoned mines. At the same time, its efficacy might be multiplied in case it is supported by the relevant legal acts and modern technological assistance.

Conclusion

Summarizing the presented information, the paper concludes that the plan provided by Trout Unlimited is designed for the effective management of the problem of abandoned mines. Its efficacy is approved by the statistics of the cleared soil and freshwater sources as is indicated in their reports. From a student perspective, the analysis of the discussed plan allowed to realize the scales of the problem as well as its impacts. For instance, it became clear that the abandoned mines not only pollute the environment but remain dangerous places visiting which may result in injuries or death. Moreover, there are lots of volunteers, who actively participate in the initiatives, which lead to the restoration of natural resources and mine reclamation. Additionally, it became clear that the efficacy of the analyzed plan may be increased in case it gains wide informational support. The result of it would be the awareness of the problem in a wide scope of populations as well as different organizations. Similarly, it would allow attracting sponsors and volunteers to reach every goal set in the program. Therefore, the initiatives of Trout Unlimited should have a wider support of the society as well as governmental and non-governmental organizations.