

THE USE OF TRUST (FIDUCIA) IN THE DEPOLLUTION OF INDUSTRIAL SITES

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Abstract

Pollution is nowadays a phenomenon that has taken alarming dimensions of planetary proportions that endangers human life and health and the industry is the main source of pollution. Industry constitutes a necessary and useful economic activity and not least a profitable activity for the companies working in the field. Unfortunately, economic agents do not use a responsible management does not invest enough in environmental protection measures and most importantly are not interested in remediation of sites used in their activities. This is mainly due the fact that remediation measures are often extremely expensive, and after completing the exploitation the companies are no longer interested in the fate of already exploited sites and direct their funds to open new operating points or stop their activity. How we still can provide the funds necessary for depollution of industrial sites with income obtained from polluting activities without the risk of insolvency of the economic beneficiary of the exploitation? A solution could be to the use of a legal institution – fiducia or trust, either by obliging the economic beneficiary through legal provisions in order to establish a trust for depollution of industrial site or by using this institution as a result of responsible management of the entity. This paper aims to show how this institution can be used in remediation of industrial sites and the advantages of using it.

Key words: pollution, law, remediation, legal institutions, industrial activity

INTRODUCTION

Pollution can be definite is the introduction of contaminants into a natural environment that causes instability, disorder, harm or discomfort to the ecosystem, physical systems or living organisms. Pollution can take the form of chemical substances or energy, such as noise, heat, or light. Pollutants, the elements of pollution, can be foreign substances or energies, or naturally occurring; when naturally occurring, they are considered contaminants when they exceed natural levels sources of pollution are: industrial waste - 36%, manure dispersal 23 -%, road traffic - 16%, 14% muds, others -9% (Blacksmith Institute, 2007). The main source of pollution is industrial activity, and within these, extractive industry is the most potentially polluting by imbalances which it produces in sites subject to exploitation and through the use and dispersion of polluting factors. There are nowadays methods to reduce pollution both during the progress of industrial activity as well as measures that can be taken for the remediation of contaminated sites at industrial activity completion (Lazaroiu, 2006). Depollution of land but requires a huge budget, from hundreds of thousands to millions of euro depending on the used methods: bio-remediation or

physico-chemical methods that generate high costs of implementation but have the advantage of solving the pollution problem in a short time (Department of Sustainable Development Environmental Protection Service, 2002). Economic agents operating in industry, with particular reference to the mining industry, develop their activities following their main objective, namely the local communities and public administrations must support the profit, leaving the sites highly polluted, and enormous costs for the remediation (Thornton, 1999). This raises the need for implementing of legislation that would hold liability of the economic agent and obligation to expenditures of necessary funds to clean up damaged sites as a result of their activity (Khan, 2004). Developed countries have created such legislation and ordered prosecution measures for economic an agent who develops polluting industrial activity, measures which may consist of fines or order to pay damages to local communities to suffer until close of business entity that does not comply with environmental legislation (Tam, 2002). However, despite the fact that there is a well-defined legislation on environmental protection and active measures are taken against businesses that violate applicable law or field there are often cases in which at the end of activity the economic agent become insolvent, remediation costs remain thus throughout the charge of the public budgets or local communities (Le conseil de la federation Canada, 2007). To ensure the funds needed for remediation from just the budget of economic agent engaged in an activity with high pollutant potential, avoiding the risk of insolvency, can be used the legal institution of fiducia. Throughout this paper we will present the fiduciary institution, its constitution and functioning mechanisms to understand how this legal institution can be successfully used in environmental projects. To understand why so important the remediation of industrial is sites, in the beginning of the paper will make a brief presentation to the notion of pollution, the main pollutants and their effects on human life and health. Finally we present how can be obtained the necessary funds for the remediation of industrial sites using the legal institution of fiducia, especially considering its operating mode and the main advantage that it provides: insurance against the insolvency risk of the economic agent responsible for the industrial site remediation

MATERIAL AND METHOD

Air pollution comes from both natural and man-made sources. Though globally man made pollutants from combustion, construction, mining, agriculture and warfare are increasingly significant in the air pollution equation (National Library of Medicine, 2006).

The global health impacts from toxic pollutants such as heavy metals, pesticides and radionuclides, are greater than previously thought (Novick

1999). Today, more than 100 million people are estimated to be at risk from toxic pollution at levels above international health standards. This is a public health issue as salient as tuberculosis, malaria, and HIV/AIDS, and one that should receive considerable attention and resources (Lorenz, 2007).

Toxic pollution causes immense harm to humans, especially children. Health impacts include physical and mental disabilities, reduced IQ, organ dysfunction, neurological disorders, cancers, reduced life expectancy, and in some cases, death. These pollutants exacerbate other health concerns by weakening the body's immune system, rendering it more susceptible to disease (Tanner, 2009). An initial exposure to toxic pollution can be the undocumented cause of later illnesses, including respiratory infections, tuberculosis, gastrointestinal disorders, and maternal health problems. In addition, while most toxic pollution is localized, some pollutants, such as mercury and persistent organic pollutants (POPs), are trans boundary and end up in food chains in oceans and distant countries. The Blacksmith Institute has made a report of the top six toxic threats based on people at risk from known sites contaminated by each pollutant and by estimated global impact (Blacksmith Institute 2010).

1. Lead

Lead is a naturally occurring heavy metal and a powerful neurotoxin. Lead is often released during metal smelting and mining, and is a key component in car batteries. Lead can exist in air, water, soil, and food and can enter the human body through inhalation, ingestion or dermal contact. The health effects of lead exposure can include neurological damage, reduced IQ, anemia, nerve disorders, and a number of other health problems. The effects of lead are most severe in children, and at high concentrations, lead poisoning can cause death (Beychok, 1967).

2. Mercury

Metallic mercury, the elemental or pure form, is a silver-white metal that is liquid at room temperature and commonly seen in thermometers. Mercury is often used in the production of chlorine gas, caustic soda, batteries, and electrical switches, and is also used to extract gold from ore. A person can be exposed to mercury through air, water, food, or dermal contact. Mercury is a powerful neurotoxin and can cause severe damage to the brain and kidneys. Inhalation of mercury can also cause lung, stomach, and intestinal damage, and even death due to respiratory failure.

3. Chromium

Chromium is a naturally occurring heavy metal that is commonly used in industrial processes. Although it can be released through natural forces, the majority of the environmental releases of chromium are from industrial sources. The industries with the largest contribution to chromium levels include: leather tanning operations, metal processing, stainless steel

welding, chromate production, and chrome pigment production. Chromium can exist in air, water, soil, and food, and common exposure pathways include ingestion, inhalation, and dermal contact. The primary health impacts from chromium are damage to the gastrointestinal, respiratory, and immunological systems, as well as reproductive and developmental problems. Chromium is a known human carcinogen.

4. Arsenic

Arsenic is a naturally occurring element that is frequently characterized as a metal, despite having properties of both a metal and a nonmetal. Arsenic is often found in rocks that contain other valuable metals, such as copper and lead. When smelters heat these to retrieve the other metals, the arsenic can be released into the air. Arsenic can exist in air, water, soil, or food, and all of these present potential pathways for human exposure. Arsenic has long been recognized as a poison, and large oral doses can cause death. Lower doses of arsenic can cause decreased production of red and white blood cells, and arsenic poisoning is often characterized by visible changes in the skin. Arsenic contamination of ground water is a significant problem in South Asia.

5. Pesticides

Pesticides are those substances, often chemical in nature, that are used with the intent to repel or eliminate species that have an adverse effect on agricultural or horticultural production. Pesticides are also used to fight tropical diseases like malaria. A “pesticide” can be classified as an insecticide, herbicide, fungicide, nematocide, and molluscicide. A significant volume of the pesticides used each year is washed away by rainfall into nearby surface and ground water, and water is a common exposure pathway. Studies on chronic health effects of pesticide exposure indicate the potential for these chemicals to have neurological, reproductive, and dermatological impacts (Khaitan 1999).

6. Radionuclides

Radionuclides occur naturally in soil and rocks as a consequence of radioactive decay. While they can be released through natural cycles, most environmental releases are the consequence of industrial processes. Common sources of radionuclide exposure include uranium mining and mine waste dumps, nuclear weapons production and testing, processes related to nuclear energy production, and the production of radiological products for medical use. When radiation strikes a living organism’s cells, it can damage those cells. If radiation affects a significant number of cells, the organism may eventually develop cancer, and at high doses, radiation can cause death (Valls, 2006).

So what is the legal institution of fiduciei and how it can be successfully used in depollution projects and environmental protection

projects? Fiducia is a legal institution based on the Anglo Saxon mainframe systems however is a novelty in European legal systems being recently introduced in the legislation of several countries including the new Romanian Civil Code. Fiducia is defined by the new Civil Code as *"the legal operation whereby one or more settlors transfer real rights, rights of claims, guarantees or other similar rights or an ensemble of such rights, present or future, to one or more fiduciary which manage to a specific purpose, for the benefit of one or more beneficiaries. These rights form an autonomous patrimonial mass, distinct from other rights and obligations from fiduciary patrimonies."* Fiduciary receives therefore an asset property on a temporary basis and in a specific purpose. This temporary transfer can follow multiple finalities. Traditionally are distinguished two main varieties used simultaneously of fiducia: a fiducia with a warranty purpose and a fiducia with management purpose (Paris Europlace, 2009). First of the arrangements, warranty –fiducia is explained by settlor desire to give a sufficient guarantee through the transfer of ownership as a security of the payment of which is obliged to the fiduciary. Regarding management fiducia, it is justified by the concern of the settlor to provide means of efficient administration in the interest of a third party or himself. In the regard of fiduciary patrimonial mass, a patrimony of affection is formed through assets and liabilities transferred under this legal operation. All these provisions lead to the conclusion that the patrimonial mass will be affected only to the specific purpose of fiducia and emoluments will be used and transferred only in favor of the beneficiary / beneficiaries appointed the fiduciary having the obligation to manage assets and income that are subject of fiducia only in this purpose (Smith, 2008). Legal provisions in matter of fiducia require that the fiducia may be established by law or by contract concluded in authentic form, there is the possibility of introduction to some mandatory provisions in legislation requiring economic agents that perform activities with high pollutant potential to constitute a fiducia in order to ensure the necessary remediation costs. In the absence of a legal provision in this regard remain the possibility of local public administrations directly affected by potentially polluting activities, to the granting of permits and approvals of business processes to the establishment of a fiducia with insurer character. In our working hypothesis, which envisages the establishment of a fiducia in order to ensure the necessary funds for clean up and remove the negative effects due to polluting industrial activity, the quality of settlor would revert to the economic agent involved in a high potentially polluting industrial activity, the quality of fiduciary can only return, under our regulations, to credit institutions, investment and investment management firms, insurance and reinsurance companies, lawyers and public notaries and the beneficiary of the fiducia will be the

local public administrations that owns the property or the management or site where the polluting industrial activities were performed and where remediation measures are necessary. Through the contract of fiducia the economic agent may provide that a percentage of his annual profit or income obtained from its economic activity to be passed on to fiduciary in order to constitute the fiduciary patrimony. The value of the profit percentage that will be transferred can be decided in any specific case depending on the provided profitability of the activity and of estimated costs necessary for the site remediation. The settlor can also decide the transfer of other rights or own goods in the trust mass.

Determined purpose of the contract will be that of the insurance of necessary funds for decontamination, depollution and remediation of the negative effects arising from the settlor activity. The fiduciary will be required to manage the assets provided solely for the purpose of the fiduciary contract, but this right should not be understood in a restrictive manner, the fiduciary would have the right to take any necessary measures for the proper exploitation of the fiduciary patrimony. The management obligation should not be therefore understood as a passive obligation to preserve the patrimony entrusted by settlor but as an active business activity through which the fiduciary envisages measures to increase the patrimony entrusted. Both the settlor and the recipient have the right to control the trustee activity. The major advantage this institution brings is the possibility of sharing of assets within the same patrimony, without having to create separate legal entities to benefit from limited liability. Through division of assets or by creating more patrimonial masses, are created specialized lenders are who follow certain weights assigned from property mass. It is this sharing that provides the security of allocation of necessary funds for remediation activities. By transferring the trust assets, they leave the property of the settlor, and no longer can be traced by its creditors, except creditors existing at the time of establishment of fiducia. Through bankruptcy or dissolution of the economic agent, the local public authorities or even individuals directly affected by the work with negative impact on the environment, will no longer have to achieve or to recover funds that would be necessary for depollution activities, this funds finally being obtained from local budgets or in their absence, no depollution activity will be made. The setting of fiducia provides these funds regardless the settlor insolvency; its creditors will be unable to pursue trust assets, which will be used in the purpose determined in the fiduciary contract.

RESULTS AND DISSCUSIONS

Measures to reduce the pollution from industrial activity and active measures for environmental protection and removal of pollution effects are

closely related to economic factors (Versluijs, 2007). The economic agents would prefer almost in any situation to maximize profits in front of environmental protection measures and for all environmental activities starting with public awareness on the effects of pollution and ending with real measures that can be taken in removing the its effects are necessary funds enormous that few countries have or are willing to allocate (Stevens 1980). That is why a real environmental protection can only be made through the establishment of legal norms in this field to support these measures by imposing the necessary expenses directly from economic agents responsible, (Negulescu M 1981) a legal institution which can be successfully used in this area can be the Fiducia or Trust institution.

CONCLUSIONS

Environmental protection can be done primarily through empowering people to the danger posed by pollution to human health and life but also on the effect this has on future generations, through sometimes irreversible destruction of the environment in which they live. Given that economic interests prevail most of the times in front of environmental responsibility only through appropriate legislation can be impose real environmental protection. These measures should not look only for sanctioning economic agents which can avoid the payment of such fines, but must find solutions to ensure the necessary funds by ensuring their coverage for clean-up process before the beginning of the activity with pollution potential.

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