

## **Afforestation Project employing the Revegetation by wood chip back at the 2nd Sand Retention Basin of Kintamine Torrent**

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### **1. Foreword**

Mt. Tarumae is located in the south central part of Hokkaido and the landmark of the Shikotsu-Tohya National Park which is famous for its rich natural environment. The 2nd sandpocket of Kintamine river is located approximately 5 kms. from the estuary. The state-run Erosion Control Project in the area of Tarumae Volcano has been launched in an attempt to achieve a hazardless environment making use mostly the natural vegetation resources. Hence, the afforestation project.



Location

### **2. Need for the Revegetation by wood chip back**

Seed spraying is quite a popular method to protect slopes either natural or man-made. Seeds mixed with fertilized soil are used in case the soil on the slopes is not so fertile. From the environmental point of view, since it is not so advantageous to use seeds of immigrant plants, the project has been using samplings grown out from seeds collected from indigenous trees. However, it takes long time to put all the target slopes with vegetation cover. Furthermore, the soil of the project area is composed of pyroclastic deposits of which fertility is rather low.

Mighty typhoon no.16 in 2004 levelled to the ground a number of trees on the reserved forest in this region. The forest in the area of the 2nd sandpocket of Kintamine river is not an exception. Damaged trees knocked down would soon be decayed and surely result in massive plague of harmful insects. Hence, entire forest will be blighted. The damaged trees should therefore be removed immediately.

Trunks of damaged trees which are still useful can be generally sold in the market. However, the roots and branches are already labeled as industrial wastes. The cost for waste disposal therefore must be dramatically reduced if the wastes could serve many uses and the slope protection must be enhanced. The chip-back method was developed

precisely, aiming at killing two birds with one stone, i.e., to lower the cost of waste disposal and at the same time, protect the slopes.



State of "Revegetation by wood chip back"

### 3. Outline of the Revegetation by wood chip back

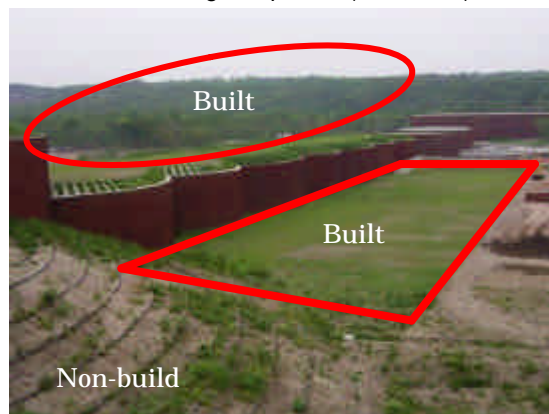
The Revegetation by wood chip back is featured by recycling the materials available in an area of public works projects in which massive wastes such as stumps, dead branches and scraped earth are generated. The method is already proven to be effective for vegetation cover for both denuded slopes and on sterile soil.



After building completion (Nov. 2004)

### 4. Results of the project

As a result of the project implemented employing the Revegetation by wood chip back, the area is now successfully covered with dense colonies of tansy and dayflower. Further development of technology for much more efficient vegetation cover is expected.



The vegetation is sparse in the part which isn't implementing "Revegetation by wood chip back" (Jun. 2005)