

## Biodiversity

### Biodiversity

We at the Nippon Kayaku Group recognize that biodiversity is an essential foundation for achieving a sustainable society. Environmental pollution and deforestation are major factors in the loss of biodiversity. Thus, the Nippon Kayaku Group is working based on its Responsible Care Policy to prevent water pollution and is striving to promote plant operations in a manner that is in harmony with the natural environment.

### Preventing Water Pollution

➤ [For details, please see \[Important Issues\] Reduction of Wastewater and Industrial Waste](#)

### Initiatives

#### Takasaki Plant Plant Operations in Harmony with the Natural Environment

The Takasaki Plant was formerly an army gunpowder manufacturing plant for the Tokyo Second Army Arsenal in Iwahana. The plant was purchased in April 1946 and used to manufacture black-colored gunpowder. It later switched to manufacturing pharmaceuticals in August 1971. The plant has been aiming to be in “harmony with nature” from the time it began operations, and was certified under ISO 14001 in January 2001.

Surrounded by a rich natural environment that includes the Gunma-no-Mori forest and Karasu river, the plant operates under the slogan of “Takasaki Plant continues to protect life and the environment.” Under this banner, the plant’s environmental policy states that each and every person shall act with full awareness of the fact that they are working in an industry that is vital to human life, promote environmental protection activities and strive to operate the plant in a way that is in harmony with its rich natural environment.

The factory is located on an expansive site that extends over an area of 560,000 m<sup>2</sup>. Of this, 110,000 m<sup>2</sup> that is registered as a green zone under the Factory Location Act was formerly used for gunpowder storage. But as it has not been used since the factory switched to making pharmaceuticals, the area has been left in a virtually natural state. Believed to have reverted to its earlier ecosystem, it now serves as one of the Takasaki city district’s most valuable natural habitats. The site is surrounded by Class A rivers on three sides: to the east, south and north. They are the Karasu river (a Class A river that is part of the Tone river system), the Ino river (a Class A river that branches off from the Karasu river) and the Kasu river (a Class A river that branches off from the Hirose river, which is also part the Tone river system). The northern side of the site adjoins the Gunma-no-Mori prefectural city park.

We will continue to protect this valuable naturally forested area that is home to various wildlife including raccoon dogs and kingfishers.

As an environmental facility, we have both the green zone and a “creek” within the plant site. This creek is a part of a facility that was used for hydraulic power generation during the time when the plant was used to manufacture gunpowder. Relics from the foreign-made hydraulic power generator that was used during the war are also being carefully preserved and managed.

The creek exists in a naturally forested area that is removed from the nearby residential districts. Close to the rivers and a safe place for animals, it serves as an oasis for migrating birds that stop by every year to gain nourishment from the surrounding forests and rivers. The annual arrival and northerly departure of these migrating birds is a seasonal event that is greatly looked forward to by our employees.

To protect the environment at the Takasaki Plant, in addition to our efforts toward achieving carbon neutrality we are also implementing measures to protect the surrounding area by managing emissions of our treated industrial wastewater. These emissions are being managed in the following manner.

The creek that flows through has a dam built on it that divides it into two sections. The first section temporarily pools industrial wastewater that has been detoxified by the activated sludge process. In the second section, the water quality is measured on a daily basis, and the dam is opened to release the water from the creek into the river after it has been confirmed by means of actual measurements that there are no abnormalities. In this way, we are taking every precaution to prevent environmental pollution.



### Transition to forest-certified Products

All of the paper used at the Head Office for photocopy machines is certified by the forest certification systems. We also use forest-certified paper for materials distributed throughout the Company, such as our in-house newsletters, company brochures, and pamphlets on sustainable management. We are also working on replacing our packaging materials with products that are forest-certified. We start our environmental efforts with those that our employees feel are pertinent to themselves, and take every possible step to reduce the impact that our business activities have on the environment.