



Jul 1, 2015

### **DIC Strengthens its Position as the Global Leader for Natural Blue Food Coloring**

*—Newly completed state-of-the-art plant in U.S. delivers wholly integrated production and extraction of Spirulina, ensuring world-class safety, quality and peace of mind—*

**Tokyo, Japan**—DIC Corporation today announced the on-schedule completion in August 2015 of a new extraction plant for *Linablue*<sup>®</sup>, Spirulina-derived natural blue food coloring. Construction of the plant, which is located on the site of subsidiary Earthrise Nutritionals, LLC, the DIC Group's U.S. Spirulina\* production base, began in May 2014. After commissioning, commercial production is expected to begin in September. A state-of-the-art facility, the new plant also complies with the state of California's safety, quality, and environmental regulations said to be the strictest in existence, enabling the DIC Group to guarantee the world's largest and most stable supply of the highest-grade Spirulina natural blue food coloring.

*Linablue*<sup>®</sup>, manufactured by the DIC Group, is a vivid blue food coloring made from phycocyanin, a blue colorant extracted from Spirulina. In 2013, the U.S. Food and Drug Administration approved the use of phycocyanin as a natural colorant in food and beverage products. Since then, demand has risen dramatically, particularly in the Americas and Europe, which have seen a rapid shift in consumer demand for natural food colorings. Robust shipments of *Linablue*<sup>®</sup>, which is favored for coloring frozen sweets, gum, candy-coated chocolate and other confections, have kept the extraction plant at the Group's Spirulina farm on Hainan Island, in the People's Republic of China, operating at full capacity. The global shift toward natural blue food coloring underscored the urgency of building a second extraction plant, in the United States, thereby enabling the Group to establish a two-pronged global production configuration.

DIC estimates that the global market for natural blue food coloring will double between now and 2018, by which time it also expects the DIC Group's share of this market to expand to 50%, from 20% at present. The DIC Group's share of the global market for Spirulina-derived natural blue food coloring is currently 90%-plus, and with this particular market set to expand between seven and 10 times its present size by 2018, DIC is eyeing a number of moves to secure its supremacy.

In addition to positioning the DIC Group to respond effectively to soaring demand, the new extraction plant—investment in which is estimated at approximately \$10 million—will enable the Group to guarantee a stable supply of *Linablue*<sup>®</sup>. This state-of-the-art facility not only boasts a production capacity several times that of the Hainan Island farm's extraction plant, but also complies with stringent environmental regulations.

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# Press Release



**DIC Corporation**

The DIC Group's integrated production capabilities—encompassing everything from the cultivation of high-grade Spirulina through to refining and the manufacture of finished products—ensure the safety and quality of its products and provide peace of mind for its customers, most importantly by securing traceability. DIC Group Spirulina products are certified Halal and Kosher. The Group is also in the process of obtaining Food Safety System Certification (FSSC) 22000<sup>†</sup>.

DIC's decision to build a new extraction plant was prompted by a rapid global shift toward using natural, rather than synthetic, coloring in food. DIC is confident that the new plant will strengthen its global leadership position, enabling it to capture expanding demand, as well as enhance its ability to guarantee a sufficient, stable supply of *Linablue*<sup>®</sup>, thereby solidifying its global market dominance.

\* Rich in more than 50 vitamins and minerals, including calcium and iron, Spirulina is a nutrient-rich blue-green algae that grows naturally in lakes in Africa and Central and South America. DIC was the first company to succeed in cultivating Spirulina.

† Food Safety System Certification is a Global Food Safety Initiative (GFSI) benchmarked scheme that incorporates the requirements of ISO 22000, the International Organization for Standardization's standard for food safety management systems, and the ISO/TS 22002-1 (or ISO/TS-22002-4) prerequisite program on food safety.

## **Earthrise Nutritionals, LLC**

A wholly owned subsidiary of DIC, Earthrise Nutritionals, based in Irvine, California, is a Spirulina production and sales company with an annual yield of approximately 500 tons. The company's outdoor algae cultivation facility, which covers a total area of 180,000 square meters, is the world's largest. Earthrise is the only company in the continental United States to succeed in the mass cultivation of algae outdoors.



New plant



Outdoor raceway ponds at Earthrise

For more information, please contact the Health Care Food Division of DIC Corporation  
[http://www.dic-global.com/us/en/products/health\\_foods/](http://www.dic-global.com/us/en/products/health_foods/)

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