HONG KONG — With its stock near a high and its latest iPhone expected to be introduced on Tuesday, Apple is facing new accusations of violations of labor rights and workplace safety at a supplier in China.

The allegations involve employees at a factory in the eastern China city of Suqian that is owned by Catcher Technology, a Taiwan company, and that makes metal casings for Apple iPads and for other consumer electronics companies.

The employees are made to work excessive overtime and handle toxic chemicals without proper protective clothing, according to a report released Thursday by Green America, an environmental nonprofit group, and China Labor Watch, a workers’ rights group based in New York.

Apple, like Samsung and several other multinational companies, has previously faced scrutiny over the working conditions at the factories in China where its products are made. But the allegations in the latest report suggest that the company might need to increase its vigilance further over the 200 major global suppliers that account for 97 percent of Apple’s component costs.

In a statement on Thursday, Apple said its most recent annual audit of the Suqian plant, in May, had “found some concrete areas for improvement in Catcher’s operations, and we worked with Catcher to develop a corrective action plan.”

An undercover investigation by China Labor Watch at the Suqian plant last month found that fire exits were locked and that flammable aluminum-magnesium alloy dust and shavings filled the air and littered the floors of some workshops. Investigators also found that employees were forced to work as many as 100 hours of overtime a month and failed to receive the social insurance payments required under Chinese law, according to the report. It said the plant made aluminum covers for a coming iPad and parts for the iPhone 5.

Workers at the plant, about 300 miles northwest of Shanghai, in Jiangsu Province, were also required by Catcher to sign forms saying they had completed safety training, even though they had received none, according to the report.

China Labor Watch privately raised concerns about conditions at the Suqian plant with Apple in April 2013, after an earlier undercover investigation. According to the group, Apple responded at the time by conducting its own inspection, after which it said that Catcher would make changes, especially those related to occupational safety.

“‘The health and safety violations found in this factory two years in a row are startling,’” said Elizabeth O’Connell, campaigns director at Green America.

Apple’s audits showed that the plant’s aluminum-polishing systems exceeded international safety standards, Mr. Gaither of Apple wrote, while a fire safety inspection last week corrected some of the problems identified in the report, like unblocking corridors and fire exits. He said that the plant made cases for the iPad and MacBook but did not mention iPhone parts.

Regarding the allegation of excessive overtime, Mr. Gaither said Catcher had averaged 95 percent compliance, as of the end of August, with the maximum 60-hour workweek that Apple enforces.

“We are deeply concerned about the claims made by China Labor Watch, and we take the report very seriously,” Catcher Technology, based in Tainan, Taiwan, said in a statement on Thursday. “We are committed to following Apple’s supplier code of conduct and will investigate thoroughly.”

In response to previous allegations of poor working conditions at suppliers’ factories, Apple, based in Cupertino, Calif., has placed a greater focus in recent years on auditing its sprawling global network of suppliers. The company said that last year it conducted 451 audits of suppliers, up from 298 in 2012, and that 173 of those had been first-time audits. Apple said that last month it took steps to ban the use of the harmful chemicals benzene and n-hexane at its 22 final assembly factories.
China remains Apple’s biggest single source of suppliers, and it is also where most of the company’s products are assembled.

In a report on Monday, analysts at Bank of America’s Merrill Lynch unit in Hong Kong estimated that the expected release next week of the iPhone 6 could add around 1 percent a month to China’s export growth rate for the rest of this year. The analysts arrived at that figure after deducting the $10 billion or so in new iPhones that they expect will be sold locally in China this year.