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Grease residue from grease trap wastewater treatment system at Canteen in Valaya Alongkorn Rajabhat University Under the Royal Patronage. The results showed that the physical properties of stored grease for more than 2 weeks were gray, high viscosity and foul odor. For new grease, is yellow light, soft texture, and odorless. This study uses a new fat density of 1.002 g/mL, the moisture content 58.04%, and the heating value was 8148.63 kcal / kg. The physical properties of the candles are produced at an appropriate ratio of 3: 1 (paraffin: grease residue). In comparison with conventional candles, the candles last for 2 hours and 10 minutes, but the candles are 3: 1 for 2 hours and 8 minutes, and 15 minutes with smoke.

G0029 Presentation 5 (14:00~14:15)

Air Pollution and Control of Cargo Handling Equipments in Ports
Zhu Li , Chen Jun Feng, and Duan Jun Ya
China Waterborne Transport Research Institute

Abstract—In order to reduce and control air pollution caused by cargo handling equipments in ports, China's transportation authority has proposed the goal of accelerating the elimination of old high-emission cargo handling equipments. This paper studies and constructs a dynamic method based on the level of cargo handling equipments activity to estimate the emissions of atmospheric pollutants. The results show that in 2017, if the engines of cargo handling equipment are upgraded and comply with Chinese standard Tier III, the air pollution will be significantly reduced. We show the ranking of the emission of air pollution of different type of equipment in ports. The government will make a good decision on air pollution and control with our research results.

G0031 Presentation 6 (14:15~14:30)

Water Security in Green Campus Assessment Standard
Mia Wimala, Bob Zirads, and Rindu Evelina
Universitas Katolik Parahyangan

Abstract—The importance of fresh water in human life entails people to be conscious of conserving the resources that only one percent of the total fresh water on the earth is easily accessible. Green campus is a concept implemented by the campus where the policies are supposed leading to ecological points of view. This research aims to update the UI GreenMetric standard, focusing on Water (WA) category as a recommendation for Universitas Indonesia as the initiator. Referrals from other related standards, i.e. STARS® and Greenship were done on developing the category with its contents. Furthermore, the re-weighting and re-scoring system of the newly developed category were carried out using Analytical Hierarchy Process method, adjusted to the existing laws/regulations in Indonesia. For verification purpose, a study on campus performance at Universitas Katolik Parahyangan, was conducted using the newly developed category. The proposed strategies were then set to improve the campus performance in the future.

K0005-a Presentation 7 (14:30~14:45)

Effects of plant growth promoting bacteria on KDML105 (Oryza sativa L.) growth and yield
Lalita Thanwisai, Wilailak Siripornadulsil and Surasak Siripornadulsil