Independent Study Title Modification of Laboratory Information Management System

Program (STARLIMS®) for Cosmetic Manufacturing

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ABSTRACT

StarLIMS[®] is software program designed as a laboratory information management system to increase the accuracy and speed of the manufacturing process. After reviewing the survey and relevant literature, as well as directly inquiring from the software owner, it has been established that there are currently no cosmetic manufacturers in Thailand that use StarLIMS[®] to manage and control quality in their processes. The objectives of this study were to modify the StarLIMS[®] Software Program as the primary operating system for the management and quality control of a laboratory in the cosmetics manufacturing industry as a means of standardizing the production process and quality levels to meet ASEAN's Good Manufacturing Practice (GMP) Guidelines as they relate to the production of cosmetics. In addition, the primary source of information in this study was the system user. Qualitative data was gathered through open-ended questions in one-on-one interviews that searched for both advantages and disadvantages in the system in terms of the management of production and quality control. Supporting data was researched from existing literature on the subject, from the company which owns the operating system, and from various other sources. The results of the study showed that modified StarLIMS[®]

Program for cosmetic manufacturing was supported, business operation, increased effectiveness and prevented the loss during the manufacturing process by improving the management of ingredients, inventory, accounting, personnel and budgeting. We have gain from a successful implementation of the system. By eliminating every possibility of human error within the manufacturing process, both time and money are saved for the manufacturer. Moreover, the customer benefits from having products of a guaranteed safe and consistently high standard as the system meets ASEAN's GMP Guidelines. The successful application of modified StarLIMS® program will be one of crucial steps in eventually developing high standard cosmetic products to the world market.

Keyword: Laboratory Information Management / System StarLims® Program / ASEAN's Good Manufacturing Practice Guidelines