

Green Label Product Laundry Services and Dry Cleaning Services(TGL-17-R1-13)

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Thailand Environment Institute (TEI)
16/151 Muang Thong Thani, Bond Street, Bangpood,
Pakkred, Nonthaburi 11120 Thailand
Phone: 0-2503-3333 ext. 303, 306, 315, 316, 329

Fax: 0-2504-4826-8

Website: http://www.tei.or.th/greenlabel/

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TGL-17-R1-13 Laundry Services and Dry Cleaning Services

1. Background

A large amount of water is used for laundry hence becomes waste water. In this case, overabundant chemicals accumulated from non-decomposed laundry agents could pollute the environment. Furthermore, another process called dry cleaning which is the process of removing stains from fabrics by non-water solvents such as perchloroethylene and hydrocarbon also pollute the environment as these solvents contaminate soil, surface and ground water. Not only that, aquatic organisms are also affected by these contaminants. In addition, hydrocarbon solvents form the lowest ozone layer (Troposphere). Is also harmful to human health and agricultural products. Likewise, Perchloroethylene is carcinogenic and harmful to human health of the user, if an appropriate application is not implemented. With this in mind, cloth delivery service also uses plastic bags and hangers which should be considered as unnecessary use of natural resource as well as increasing waste disposal challenges.

Therefore, Green Label has developed the criteria for laundry and dry-cleaning services focusing on limiting the use of water, waste water reduction, and high quality products. Hence, dry cleaning service should be a close system and use less solvent which will limit the release of solvent into the environment and conserve resources. So that the amount of solvent used and released is reduced and encourage resource conservation.

2. Scope

These criteria shall apply only to laundry services and dry cleaning services with registered trade, factory, service in hotels and hospitals.

3. Definitions

- 3.1 **Laundry service** refers to the service that offers to clean customers' clothes using water and laundry agents to remove stains or dirt.
- 3.2 **Dry cleaning service** refers to the service that offers to clean customers' clothes using water free solvents (or least amount of water as possible) to remove stains or dirt.
- 3.3 **Dry cleaning solvent** refers to liquid organic solvent used as an intermediary in dry cleaning that has the ability to dissolve insoluble impurities.
- 3.4 **Dry cleaning with close system** refers to dry cleaning process that involves washing and drying in the same machine without discharge solvent out of the system to the atmosphere.

- 3.5 **Certificate** refers to the certified document issued by recognized certification body which is accredited by national accreditation body under IAF (International Accreditation Forum)
- 3.6 **Letter for declaration of compliance** refers to the certified document issued by applicant or manufacturer verifying the compliance of relevant service required by Green Label's environmental criteria.
- 3.7 **Authorized personnel** refers to the person with the authority to sign according to the Civil and Commercial Code.

4. General requirements

4.1 Services, transportation of clothing, and waste disposal shall comply with the government laws and regulations for instance Public Health Act, Factory Act Ministry of Industry.

Verification Method

The applicant shall submit the documents or evident indicating that services, transportation of clothing, and waste disposal are complied with the government laws and regulations.

5. Environmental requirements

- 5.1 Laundry service
 - 5.1.1 The applicant shall load clothes at least 80% of the machine's washing capacity per one wash.

Verification Method

The applicant shall submit the documents and evidences as following:

- 1. Specification of washing machine
- 2. Record of the weight of clothes loaded into the washing machine for 7 days and the calculation of the average weight of clothes washed.
 - 5.1.2 The laundry products used in laundry service should be certified to Green Label or passed the tests according to Green Label criteria for Laundry Detergent Products (TGL-10) No. 4.1 and No.5.

Verification Method

The applicant shall submit the Green Label's certification of Green Label for relevant Laundry Detergent Products or test results according to Green Label criteria for Laundry Detergent Products (TGL-10) No.4.1 and 5.

5.2 Dry cleaning service

5.2.1 Dry cleaning shall be a close system and shall have the appropriate ventilation in workplace.

Verification Method

The applicant shall submit the evidences confirming the characteristics of the drycleaning machine used to indicate that it is a close system and the plant layout showing appropriate ventilation system. The evidences shall be signed by authorized personnel of the applicant.

5.2.2 Solvents

- 5.2.2.1 In case of dry cleaning with perchloroethylene solvents:
 - 1) The proportion of solvent used (kilograms) per weight of dry clothes (kilograms) shall not be more than 1 per 40.
 - 2) The average concentrating time of the perchloroethylene in the dry cleaning area shall not be more than 100 parts per million (100 ppm)¹.
- 5.2.2.2 In case of dry cleaning with hydrocarbon solvents:

 The proportion of solvent used (kilograms) per weight of washed dry clothes (kilograms) shall not be more than 1 per 15.

Verification Method

The applicant shall submit the documents and evidences as following:

- 1. Report on the consumption of perchloroethylene solvents or hydrocarbon solvents to a weight of dry clothing of 1,000 kg and signed by the authorized personnel of the applicant. The report should be submitted to the Green Label Program every 6 months.
- 2. The test results for perchloroethylene concentration in the dry cleaning area should be submitted to the Green Label Program every 6 months.
 - 5.2.3 In the case of coolant use in the washing system, coolant recirculation system shall be used.

Verification Method

The applicant shall submit a declaration letter indicating that coolant recirculation system is available together with pipe system layout. The documents shall be signed by authorized personnel of the applicant.

¹ Notification of the Ministry of Interior, issued under the Announcement of the Revolutionary Party, No. 103, dated may 30, B.E. 2520 (1977), publisher in the Royal Government Gazette, vol.94, Part 64, data July 12, B.E. 2520 (1977)

5.3 The applicant shall demonstrate energy saving measures by displaying the present results and future plans.

Verification Method

The applicant shall submit results of operations indicating that the business has the energy saving measures both in present and future plans.

5.4 The applicant shall encourage to customers to bring the hanger back to service.

Verification Method

The applicant shall submit method or plan to encourage to customers to bring the hanger back to next service.

5.5 The applicant shall have proper, accurate, and safe management of chemicals used in accordance with the handbook for the Preservation of Chemicals and Hazardous Substances of Ministry of Industry.

Verification Method

The applicant shall have proper, accurate, and safe storage of chemicals.

5.6 Bags used to cloth packing shall be washable and reusable. In case of plastic bags, shall be symbolized according to Thai Industrial Standard, TIS 1310 for recycling plastics or be marked according to plastic symbols and abbreviated terms given in ISO 1043 or ISO 11469.

Verification Method

The applicant shall submit a declaration letter indicating that the packaging follows to environmental criteria No. 5.6 and submit a photo or sample of packaging (or plastic packaging) for inspection.

6. Testing and certification

- 6.1 Testing
 - 6.1.1 The laboratory shall be operated by the government or under governmental control as defined by clause 5 of the Industrial Standard Act B.E. 2511 (and its addenda) or certified by TIS 17025² or ISO 17025³.
 - 6.1.2 Test results
 - 6.1.2.1 Test results shall comply with testing methods defined in this document.
 - 6.1.2.2 If "comparable test methods" are submitted, the following documents shall be submitted with the test results:
 - (1) Declaration letter from the laboratory verifying that the test methods are comparable to the methods defined in this document.

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²TIS 17025 General Requirements for the Competence of Testing and Calibration Laboratories.

³ ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories.

- (2) Method validation documents which enable unequivocal scientific verification that the testing methods and requirements defined in this document have been met.
- 6.1.2.3 Test results shall have been issued no more than 1 year following the application date.
- 6.2 Declaration letter to verify compliance with Green Label requirements
 - 6.2.1 Shall have been issued no more than 1 year following the application date.
 - 6.2.2 Shall be signed by the authorized directors and have the company seal affixed (if relevant).