

Quality Assurance testing under WAC 314-55-102

RJ Lee Group, Inc.

Development of the Program

► Requirements for GLP Checklist

- Align with WAC 314-55-102
- Ensure consistent and valid results
 - Quality management/quality system
 - Premises & buildings
 - Equipment (PPE)
 - Personnel & materials
 - Productions and process control
- Testing based upon *American Herbal Pharmacopoeia: Standards of Identity, Analysis, and Quality Control, Revision 2014*

American Herbal Pharmacopoeia®

Cannabis Inflorescence
Cannabis spp.

STANDARDS OF IDENTITY, ANALYSIS, AND
QUALITY CONTROL

Revision 2014

Editors and Technical Advisors

Ray Upson BH
American Herbal Pharmacopoeia®
Scotts Valley, CA

Lyle Craker PhD
University of Massachusetts
Amherst, MA

Mahmoud ElSikily PhD
University of Mississippi
University, MS

Ariana Rosin MD CPM
American Herbal Pharmacopoeia®
Lynn, MA

Ethan Russo MD
GW Pharmaceuticals
Salisbury, UK

Michelle Scamm ND BS
Americans for Safe Access
Washington, DC
The Center for the Study of Cannabis
and Social Policy
Seattle, WA

Research Associates

Ethan Marcus PhD
Green Standard Diagnostics
Henderson, NV

Diana Swisher MA
American Herbal Pharmacopoeia®
Scotts Valley, CA



Certification Process



*Average time from application submission to granting of provisional status is 96 days. Average time from provisional to audit is 81 days.

Requirements for each Field of Testing

- ▶ Standard Operating Procedure
- ▶ Validation Data/Demonstration of Capability
- ▶ Proficiency Testing (if applicable)

Fields of Testing

▶ Required

- ▶ Moisture
- ▶ Potency
- ▶ Foreign matter inspection
- ▶ Microbiological testing
- ▶ Mycotoxin
- ▶ Water Activity
- ▶ Residual solvents

▶ Optional

- ▶ Terpenes
- ▶ Heavy Metals
- ▶ Pesticides

Audit Program overview as of September 2017

- ▶ 1st year: Initial Application review and on-site assessment
- ▶ 2nd year: On-site audit
- ▶ 3rd year: On-site audit
- ▶ 4th year: Documentation review only (on-site audit not required)
- ▶ 5th year: On-site audit
- ▶ 6th year: Documentation review only (on-site audit not required)
- ▶ Major Checklist updates for 2017:
 - ▶ Estimation of Uncertainty requirements added
 - ▶ Additional Training requirements added
 - ▶ Equipment calibration requirements updated
 - ▶ Subcontracting requirements added
 - ▶ Additional requirements added for Record control
 - ▶ Test Report requirements added
 - ▶ Additional QC requirements added
 - ▶ Internal audit requirement added

Common Quality Program Deficiencies

- ▶ Security procedures not included in SOP's
- ▶ Instructions on Law enforcement interaction and federal laws not included in SOP's
- ▶ Lack of proper safety equipment including spill kits and safety showers
- ▶ No documentation of Software validation/verification
- ▶ Logbook documentation not completed and reviews not documented
- ▶ No process for Approval of suppliers
- ▶ Certificates of traceability not available
- ▶ Lack of use of secondary containers
- ▶ Lack of traceability to NIST standards
- ▶ Lack of Procedure for Management reviews

Costs for Certification

- ▶ Initial Application: \$2,856.88
 - ▶ 1st year: Two day on-site auditing plus travel and per diem: \$6,439.68
- Total initial licensing effort is \$9,296.56 (+ travel & per diem)
- ▶ 2nd year: Two day on-site auditing plus travel and per diem: \$6,439.68
 - ▶ 3rd year: Two day on-site auditing plus travel and per diem: \$6,439.68
 - ▶ 4th year: Application renewal-paper work review only, (no on-site audit anticipated) \$1,733.68

**If additional follow-up required for any audit or review the charge will be \$156.00 per hour*