



FOCUS

Foundation of
Cannabis Unified Standards

focusstandards.org

The Cannabis Health & Safety Organization

CANNABIS MANUFACTURING STANDARD INDEX

FS-2001-1:2016

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OVERVIEW

FOCUS Standards form the foundation for a rigorous, comprehensive quality and safety system that provides cannabis business owners, consumers, regulators and the public with a single, concise, accepted standard that protects public health and consumer safety, and safeguards the environment.

FOCUS Standards are developed according to internationally accepted voluntary consensus processes to ensure robust, impartial standards. Volunteer members of FOCUS Standards development committees include professionals from the cannabis industry, regulatory agencies, quality assurance, occupational safety, medical services, law enforcement, education, science and research, consumers, patients and the public.

SCOPE

This FOCUS Standard provides direction for cannabis extraction operations and cannabis-infused products manufacturers to meet safety and quality requirements.

This document uses the word *operation* to indicate a cannabis company, business, facility, laboratory or individual location that is applying the FOCUS Standard.

The terms *must* and *shall* are used interchangeably to indicate requirements; the terms *should*, *could*, *may* and *can* are used to indicate flexibility or to provide examples.

The standards identify job titles for specific responsibilities to add clarity. The organization's job descriptions, work assignments and training will define each worker's actual title and responsibilities. Depending on an operation's size and structure, one worker may cover several roles (or job titles) to meet a requirement.

FS-2001-0100 QUALITY MANAGEMENT SYSTEM

- 1) QUALITY MANAGEMENT SYSTEM
- 2) DOCUMENT CONTROL
- 3) WORKER POLICIES
- 4) PROCEDURES AND TRAINING

FS-2001-0200 GENERAL OPERATIONS

- 1) MANAGEMENT CAPABILITY
- 2) ORGANIZATIONAL STRUCTURE
- 3) REGULATORY COMPLIANCE
- 4) BUSINESS ASSESSMENTS
- 5) OPERATIONAL CONTROLS
- 6) ACCOUNTING STANDARDS
- 7) LICENSES AND PERMITS
- 8) BUSINESS INSURANCE
- 9) BUSINESS CERTIFICATIONS
- 10) ADVERTISING METHODS
- 11) ADA COMPLIANCE
- 12) CRISIS MANAGEMENT PLAN
- 13) CRISIS PLAN TRAINING AND TESTING

FS-2001-0300 EMPLOYMENT

- 1) GOAL SETTING
- 2) FAIR LABOR STANDARDS
- 3) WORKPLACE DISCRIMINATION
- 4) WORK CONTRACTS
- 5) WORKERS' COMPENSATION
- 6) WORKER DATA
- 7) BACKGROUND CHECKS

FS-2001-0400 TRAINING

- 1) TRAINING MANAGER
- 2) WORKER TRAINING PROGRAM
- 3) COMPREHENSIVE TRAINING MATERIALS
- 4) QUALITY CONTROL TRAINING
- 5) REGULATORY AND LAW ENFORCEMENT INTERACTION
- 6) SECURITY TRAINING
- 7) HYGIENE TRAINING
- 8) FOOD SAFETY TRAINING
- 9) PRODUCTION TRAINING

FS-2001-0500 RECORDKEEPING

- 1) RECORDS MANAGEMENT
- 2) RECORDS INVENTORY LIST
- 3) SECURITY OF RECORDS
- 4) PRODUCTION RECORDS

FS-2001-0600 FACILITY MANAGEMENT

- 1) FACILITY MAINTENANCE PLAN
- 2) ENVIRONMENTAL CONTROLS
- 3) GROUNDS MAINTENANCE
- 4) VENTILATION AND EXHAUST FANS
- 5) HAZARDOUS MATERIALS
- 6) CLEANABILITY
- 7) CONSERVATION PLAN

FS-2001-0700 SIGNAGE

- 1) SIGNAGE
- 2) SAFETY SIGNAGE

FS-2001-0800 SECURITY

- 1) SECURITY
- 2) CPTED APPROACH
- 3) SECURITY PROGRAM
- 4) SECURITY RISK ASSESSMENT
- 5) SECURITY QUALIFICATIONS
- 6) SECURITY INCIDENT REPORTING
- 7) PHYSICAL BARRIERS
- 8) GROUNDS AND EXTERNAL AREAS
- 9) DOOR LOCKS
- 10) FACILITY ACCESS CONTROLS
- 11) RESTRICTED AREA ACCESS CONTROLS
- 12) VISITOR ACCESS CONTROLS
- 13) PRODUCT CONTROL
- 14) THEFT/PRODUCT LOSS PLAN
- 15) CASH MANAGEMENT

FS-2001-0900 SURVEILLANCE SYSTEM

- 1) VIDEO MONITORING
- 2) VIDEO RECORDING SECURITY
- 3) VIDEO QUALITY AND COVERAGES
- 4) CONTINUOUS VIDEO MONITORING
- 5) VIDEO RETENTION
- 6) VIDEO SYSTEM MAINTENANCE

FS-2001-1000 ALARM SYSTEM

- 1) FACILITY ALARM SYSTEM
- 2) ALARM MONITORING
- 3) MOTION DETECTION
- 4) PANIC BUTTONS
- 5) ALARM SYSTEM MAINTENANCE

FS-2001-1100 HEALTH AND SAFETY

- 1) HEALTH AND SAFETY
- 2) HEALTH AND SAFETY PROGRAM
- 3) HEALTH AND SAFETY MANAGER
- 4) WORKER CLEANLINESS
- 5) HAND SANITATION
- 6) WOUNDS AND INFECTIONS
- 7) PROTECTIVE CLOTHING
- 8) PROHIBITED ITEMS
- 9) EATING AND DRINKING
- 10) SMOKING AND TOBACCO PRODUCTS
- 11) CONTROL OF DRUG USE
- 12) VIOLENCE AND WEAPONS
- 13) HEALTH AND SAFETY RISK ASSESSMENT
- 14) HEALTH AND SAFETY PROCEDURES AND TRAINING
- 15) PERSONAL PROTECTIVE EQUIPMENT
- 16) ACCIDENT AND EMERGENCY PROCEDURES
- 17) FIRST AID
- 18) DOMESTIC ANIMALS
- 19) DRINKING WATER
- 20) EYEWASH STATIONS
- 21) CHANGING AREA

FS-2001-1200 SANITATION

- 1) GENERAL CLEANLINESS
- 2) MASTER SANITATION SCHEDULE
- 3) SANITATION PROCEDURES AND TRAINING
- 4) CLEANING EQUIPMENT AND SUPPLIES
- 5) CLEANING EQUIPMENT IDENTIFICATION
- 6) SANITATION LOGS
- 7) FLOOR DRAIN CLEANING
- 8) SWAB TESTING
- 9) PRODUCT PROTECTION DURING CLEANING
- 10) TOILET AND HAND WASHING FACILITIES
- 11) SECONDARY HAND SANITATION STATIONS
- 12) WARE-WASHING SINK
- 13) FOOT DISINFECTANT DIPS

FS-2001-1300 HAZARD CONTROL

- 1) HAZARD CONTROL PLAN
- 2) ASSESSING THE HAZARD CONTROL PLAN
- 3) REVISING THE HAZARD CONTROL PLAN
- 4) CRITICAL CONTROL POINTS (CCPs)
- 5) CCP ASSIGNMENTS
- 6) CCP FORMS READINESS
- 7) CCP RECORDS VERIFICATION
- 8) CCP RECORDS MANAGEMENT

FS-2001-1400 PEST CONTROL

- 1) PEST MANAGEMENT PLAN
- 2) PEST CONTAMINANT INSPECTIONS
- 3) PEST CONTROL DEVICES
- 4) STORAGE AREAS

FS-2001-1500 PRODUCTION

- 1) PRODUCTION FLOW CHARTS
- 2) PRODUCT CLASSIFICATION AND CONTROL
- 3) PRODUCTION HAZARD ANALYSIS
- 4) PRODUCT SPECIFICATIONS
- 5) PRE-OPERATION INSPECTIONS
- 6) YIELD ANALYSIS AND RECONCILIATION
- 7) CORRECTIVE ACTION PLANS

FS-2001-1600 WATER QUALITY AND USE

- 1) PLUMBING CONTAMINATION
- 2) WATER USE PLAN
- 3) WATER USE RISK ASSESSMENT
- 4) WATER QUALITY ANALYSIS
- 5) POTABLE WATER

FS-2001-1700 EQUIPMENT MANAGEMENT

- 1) EQUIPMENT MANAGEMENT
- 2) EQUIPMENT DESIGN
- 3) EQUIPMENT CALIBRATION
- 4) UTENSILS AND TOOLS
- 5) COOLING COILS

FS-2001-1800 QUALITY CONTROL

- 1) PRODUCT QUALITY
- 2) CROSS CONTAMINATION PREVENTION
- 3) CONTAMINANTS AND FILTH
- 4) CONTROL OF CONTAMINANTS

FS-2001-1900 TESTING

- 1) PRODUCT TESTING PLAN
- 2) TEST RESULTS ANALYSIS
- 3) BATCH MONITORING
- 4) TEST RECORDS
- 5) SAMPLING PROCEDURES
- 6) TEST LAB STANDARDS
- 7) ALLOWABLE THRESHOLDS
- 8) MICROBIOLOGICAL TESTING
- 9) METALS
- 10) PESTICIDE RESIDUE
- 11) POTENCY AND CANNABINOID PROFILE
- 12) SOLVENT AND CHEMICAL RESIDUE
- 13) STABILITY TESTING

FS-2001-2000 TRACEABILITY AND RECALL

- 1) PRODUCT RECALL PROGRAM
- 2) TRACEABILITY SYSTEM
- 3) RECALL MOCK TEST
- 4) COMPLAINTS PROCEDURE

FS-2001-2100 PACKAGING AND LABELING

- 1) PACKAGING AND LABELING SPECIFICATIONS
- 2) LABELING PROTOCOL
- 3) WARNING LABELS
- 4) EXIT PACKAGING
- 5) CHILD RESISTANT PACKAGING
- 6) TAMPER EVIDENT PACKAGING
- 7) SUSTAINABLE PACKAGING
- 8) CANNABIS-INFUSED PRODUCT LABELING

FS-2001-2200 PRODUCT STORAGE

- 1) PRODUCT STORAGE
- 2) STORAGE AREA CONSTRUCTION
- 3) STORAGE AREA ACCESS CONTROL
- 4) CLEANING

FS-2001-2300 INVENTORY MANAGEMENT

- 1) CANNABIS INVENTORY
- 2) PRODUCT CONTAINERS
- 3) QUARANTINED PRODUCTS AND MATERIALS
- 4) QUARANTINED MATERIAL SEGREGATION

FS-2001-2400 WASTE MANAGEMENT

- 1) WASTE MANAGEMENT PLAN
- 2) HAZARDOUS MATERIALS DISPOSAL
- 3) CANNABIS WASTE DISPOSAL
- 4) WASTE CONTAINER CONTROL
- 5) MINIMIZE LANDFILL WASTE

FS-2001-2500 RECEIVING

- 1) SUPPLIER QUALIFICATION
- 2) INCOMING GOODS INSPECTION
- 3) PRODUCT REJECTION PROCESS
- 4) RAW MATERIAL INSPECTION

FS-2001-2600 TRANSFERS AND TRANSPORT

- 1) TRANSPORT MANAGER
- 2) TRANSPORT SECURITY PROCEDURES
- 3) TRANSPORT AGENTS
- 4) TRANSPORT AGENT CREDENTIALS
- 5) DELIVERY ROUTE PROCESS
- 6) SHIPMENT INVOICE
- 7) PRODUCT TRANSFERS
- 8) TRANSPORT PACKAGING
- 9) TRANSPORT VEHICLE CONTROLS
- 10) VEHICLE INSPECTIONS
- 11) SEALED TRAILERS AND TRUCKS
- 12) CONTRACT CARRIERS

FS-2001-2700 SOCIAL SUSTAINABILITY

- 1) COMMUNITY RELATIONS
- 2) CANNABIS INDUSTRY SUPPORT

FS-2001-2800 MANUFACTURING OPERATIONS

- 1) PRODUCT QUALITY EXPERTISE
- 2) PRODUCT MANUFACTURING PROCESSES
- 3) CONTROL OF ALLERGENS
- 4) NONCONFORMANCE TO PROCESS
- 5) INDEPENDENT THERMOMETERS
- 6) EQUIPMENT INSTALLATION AND TRAINING
- 7) EMERGENCY PROCEDURES

FS-2001-2900 EXTRACTION

- 1) QUALITY AND SAFETY CONTROLS
- 2) CO2 MONITORING
- 3) USE OF DRY ICE
- 4) FOOD-GRADE SOLVENTS
- 5) FOOD-GRADE ETHANOL
- 6) FOOD-GRADE CHEMICALS
- 7) SOLVENT SAFETY
- 8) SOLVENT RECOVERY
- 9) WASTE SOLVENT DISPOSAL

