

Food Protection Program
BUSINESS REQUIREMENTS DOCUMENT
(BRD)

Version 1.0

April 5th, 2016

Table of Contents

	Page
Acronyms	v
Glossary	vi
Document Purpose	1
Dependencies	1
Business Requirements	2
Security Requirements	2
Performance Requirements	3
Availability Requirements	4
User Requirements	4
1.0 Registration Process	5
1.1 Adding New Registrations	7
1.1.1 Web Registrations	7
1.1.2 Paper Registrations.....	7
1.2 Accepting and Rejecting Registrations	8
1.2.1 Accepting Web Registration Applications	8
1.2.1.1 Creating a Unique Identifier.....	8
1.2.2 Accepting Paper Registration Applications	9
1.2.2.1 Creating a Unique Identifier.....	9
1.2.3 Rejecting Web Registration Applications	9
1.2.4 Rejecting Paper Registration Applications.....	10
1.3 Resubmitting Registrations	10
1.3.1 Resubmitting Web Registrations.....	10
1.3.2 Resubmitting Paper Registration Applications	10
1.4 Updating Registrations	11
1.4.1 Updating Web Registrations	11
1.4.2 Updating Paper Registrations.....	12
1.5 Searching/Viewing Registrations	12
1.6 Validating Registrations	14
1.7 Saving Registrations.....	15
1.8 Generating and Printing Registration Certificates, Licenses and Permits.....	15
1.8.1 Generating and Printing via the Web	15
1.8.1.1 Generating and Printing Registration <u>Certificates</u>	15
1.8.1.2 Generating and Printing <u>Licenses</u> or <u>Permits</u>	15

Table of Contents

	Page
1.8.2 Generating and Printing via Central/Mobile System	15
2.0 Inspection Process	17
2.1 Adding New Inspections	17
2.2 Reviewing Inspections	18
2.2 Modifying Existing Inspections	19
2.3 Updating Inspections.....	20
2.4 Searching/Viewing Inspections.....	20
2.5 Validating Inspections.....	21
2.6 Saving Inspections.....	22
2.7 Printing Inspection Reports	23
2.7.1 Generating and Printing Licenses/Permits during Inspection Process	23
3.0 Complaint Process.....	23
3.1 Adding New Complaints.....	24
3.1.1 Web Complaints.....	24
3.1.2 In-House Complaints.....	25
3.2 Modifying/Updating Complaints	25
4.0 Samples Process	29
4.1 Adding Samples	29
4.2 Modifying/Updating Samples	30
4.3 Searching/Viewing Samples	30
5.0 Plan Review Applications Process (WholeSale Food Establishments)	33
5.1 Adding Plan Review Applications and Questionnaires	34
5.2 Accepting and Rejecting Plan Review Applications and Questionnaires	34
5.3 Resubmitting Plan Review Applications and Questionnaires	35
5.4 Updating Plan Review Applications and Questionnaires.....	35

Table of Contents

	Page
5.5 Searching/Viewing Plan Review Applications and Questionnaires.....	35
5.6 Validating Plan Review Applications and Questionnaires.....	35
5.7 Saving Plan Review Applications and Questionnaires	35
6.0 Operators Response to Inspection via the Web.....	35
6.1 Adding Operator Response to Inspection forms	36
6.2 Accepting Operator Response to Inspection forms	36
7.0 Synchronization Process	36
8.0 Training Activities	37
9.0 Viewing Inspections via the Web for the General Public	37
10.0 Work Queues.....	37
11.0 Inspection Schedules.....	38
12.0 Central and Field User Overrides.....	38
13.0 Interfacing with other Systems	38
14.0 General Reporting	38
15.0 General System Maintenance.....	39
System Requirements and Processing Rules	
Technical Services Impact Statement	40
System Environment Needs	40
Questions.....	41
Network Needs.....	42
Backup and Recovery Needs.....	42
Storage Capacity Needs	43
Telecommunications Load	43
Proposed Business Flow for the Food Protection Program	44
Information Flow	45

Acronyms

FPP	Food Protection Program
ISDH	Indiana State Department of Health
LHD	Local Health Department
IOT	Indiana Office of Technology
HACCP	Hazard Analysis and Critical Control Point

Glossary

The terms in this glossary are business or project-specific terms that might cause confusion. If you have difficulty with any term in the project documentation, consult this glossary for clarification:

Regulatory Authority	Indiana State Department of Health Food Protection Program or Indiana Local Health Department
Food Protection Data	All data that is captured, stored, and used by the Regulatory Authority
Food Establishment	Sites and locations that handle food in some form and must be inspected for compliance with sanitation regulations
Business Owner (or Operator)	Individual or entity who owns or operates a food establishment
Wholesale Food Establishment	An operation that manufactures and/or distributes to another entity for resale or distribution – ISDH only
Registration	Signing up with the Regulatory Authority in order to distribute food in the State of Indiana
Registration Certificate	A document received from the Regulatory Authority stating that a food establishment has signed up to do business in the State of Indiana
Permit/License	A document that gives legal permission for food businesses to operate as food establishments in the State of Indiana
Inspection	Dates and details of food establishments documenting the conditions, violations, follow-up requirements, etc.

Glossary (con't)

Standardization	A system that helps to determine an inspector's knowledge and skills through a series of field inspections
Hazard Analysis and Critical Control Point (HACCP)	A systematic preventive approach to food safety
Complaint	An issue that is brought to the attention of the Regulatory Authority about a food establishment or food product
Plan Review Application and Questionnaire	A plan detailing the construction or remodeling of a Wholesale food establishment
Sample	Any food or food product that requires examination by the Regulatory Authority in order to determine if it is unsafe for citizens
Central Users	State and Local Health Department Staff who operate with a direct connection to the central repository
Field Users	State and Local Health Department Staff who operate without a direct connection to the central repository
Central Repository	A repository that will contain all FPP food related data collected by all Regulatory Personnel
Mobile Unit Repository	A repository that will contain FPP food related data collected by individual field users
Synchronization	A process in which to combine data collected in the field with data that is already stored in the central repository

Document Purpose

The purpose of this document is to define the core business requirements and functionality for the proposed Food Protection Program (FPP) food inspection system. The proposed system should be a solution for registering food establishments and maintaining food related data for the State of Indiana. The system should be designed based on FPP guidelines to meet current needs and improve data quality.

Dependencies

Certain business dependencies exist that may affect the project team's ability to implement the project. These dependencies are listed below and should be communicated and addressed throughout the project.

- Project Funds must be exhausted by July 31, 2016 for Phase I and 06/30/2017 for Phase II
- Fully functioning system must be in place by July 1, 2017
- On-going IT support
- On-going costs to maintain system: database hosting, system maintenance, etc.
 - The FPP must find additional funding to support a new system

Business Requirements

The following business requirements must be in place for the system to function based on FPP needs. This section will address the following requirements:

- **Security Requirements:** measures that protect all captured data from unauthorized access, unintended use, disruption, unauthorized modifications, and destruction
- **Performance Requirements :** defined as “how” the system will behave to meet business needs, i.e., how many users can be on the system simultaneously
- **Availability Requirements:** are timeframes during which the system must be available to meet the needs of the business.
- **User Requirements:** defined as “what” the system should do.

Security Requirements

The following security requirements must be present in the final product in order to meet the needs of the new system:

- All network transactions that involve protected information shall be encrypted
- Users shall be required to log into the central and local applications to perform Food Protection activities using secure log-in information as per the Indiana Office of Technology (IOT) Security Policy “Practice 8.2.1 - END USER PASSWORD MINIMUMS”
- The system shall provide role-based security such that only authorized users will have access to specific data
- The system shall permit only approved personnel to create and edit reports and edit forms
- Only users authorized to access the Web Registration function, Plan Review Applications Function, and Operator Response to Inspection Function shall be permitted to enter and view system information. The system shall permit the general public to access the Complaint function via the ISDH Food Protection Website
- The system shall permit the general public to view Inspection reports via the ISDH Food Protection Website
- Per IOT Policy, access to network resources requires user verification. Users and devices must use encrypted authentication mechanisms unless otherwise granted an exception by the CISO
- Per IOTs Outsource Service Agreement, outsourcers (vendors outside of state government) shall comply completely with state security policy (attachment: State of Indiana Security Policy)

Performance Requirements

The following general performance requirements must be present in the final product. Additional or more stringent performance requirements may be placed upon the product as the need arises.

- **Response Times:**

- The central repository shall respond to central user requests within 1-2 seconds
- The mobile unit repository shall respond to field user requests within 1-2 seconds
- The mobile unit repository shall complete the synchronization process with the central repository within 3 minutes when only data is being exchanged
- The mobile unit repository shall complete the synchronization process with the central repository within 5 minutes when only system changes are being downloaded
- The mobile unit repository shall complete the synchronization process with the central repository within 5 minutes when data is being exchanged AND system changes are being download

- **How many users can work simultaneously:**

- The system shall allow at a minimum 500 concurrent users (**excluding Web functions**)
- The system shall allow 200 concurrent users during the synchronization process without diminishing response times

- **Scalability:**

- The system shall grow by 1 Gigabyte for every 3,000,000 records added to the database (**this can be modified in the future if needed**)

- **File Transfer and Batch Processing:**

Note: Batch processing will be supported by transferring data from one computer to another. When a group of food related data is sent from a third party applications to the FPP via computer, the system shall allow the 'batch' of data to be processed and saved in the central repository

- The system shall process all food related batches weekly. Specific batch processes and specific batch times shall be set by the FPP
- A web service through API method is preferred.

Availability Requirements

The system shall be available to the users at all times. If a problem occurs that brings down the system without warning, users will be notified as soon as possible. Whenever availability is interrupted, a notice will be sent to FPP management when the system is again available. FPP management will notify all users of system availability time.

- The system shall be available for 24 hours per day, 7 days per week, 365 days per year
- The system shall have an uptime of 99.95% including maintenance time (**down 2 days per year**)
- Users shall be notified 2 days prior to bringing down the system

User Requirements

The system shall perform each of the following processes in order to meet FPP business needs. Certain processes shall contain a Web data entry option in addition to the standard, local data entry function. All sections below include a brief summary, system functionality for each process, and required data elements.

All data entry layouts will be designed based on FPP guidelines

This section will address the following:

- **Registration Process:** focuses on signing up with the regulatory authority in order to distribute food in the State of Indiana whether by certificate, license, or permit
- **Inspection Process:** includes documenting dates and details of food establishment conditions, violations, follow-up requirements, etc.
- **Complaints Process:** handles issues that are brought to the attention of the regulatory authority about a food establishment or food product
- **Samples Process:** focuses on any food or food product that requires examination by the regulatory authority in order to determine if it is unsafe for citizens
- **Plan Review Application and Questionnaire Process:** includes documenting plans to help Wholesale food establishments maintain compliance
- **Operators Response to Inspection Process:** helps business owners provide feedback to the regulatory authority
- **Synchronization Process:** focuses on combining data collected in the field with data that is already stored in the central repository
- **Training Activities:** focuses on all training received by regulatory personnel (excluding Standardization)

User Requirements (con't)

- **Viewing Inspections on the Web:** provides consumers the ability view inspection activities via the Web.
- **Work Queues:** provides an overview of how work queues shall work within the system
- **Inspection Schedules:** discusses the ability for central users to develop schedules based on certain criteria
- **Central and Field User Overrides:** provides an overview of general overriding capability that shall be in the proposed system
- **Interfacing:** discusses the importance of the proposed system interfacing with other systems in order to function efficiently
- **General Reporting:** focuses on the reporting capabilities of the proposed system
- **General Maintenance:** focuses on general user maintenance of the system

1.0 Registration Process

Summary:

Food Establishments that plan to distribute food in the State of Indiana must register with the regulatory authority (**Food Protection Program or Local Health Department**) per IC 16-42-1-6 prior to operating. Wholesale food establishments must register by completing a Registration application. In order to support their goals, regulatory authority users will require a system that is capable of supporting the required Registration functionality and flexible enough to meet today's needs as well as any future needs of the Registration Process.

Registration Functionality:

- Adding New Registrations
- Accepting and Rejecting Registrations
- Resubmitting Registrations
- Updating Registrations
- Searching/Viewing Registrations
- Saving Registrations
- Validating Registrations
- Generating and Printing Registration Certificates
- Generating and Printing License/Permits

1.0 Registration Process (con't)

Registration Data Elements: (fields can be added or removed as the need arises):

- Business Owner Name
- Business Owner Mailing Address
- Business Owner Telephone Number
- Establishment Name
- Establishment Physical Address
- Establishment Mailing Address
- Establishment Telephone Number
- Business Type (Wholesale)
- Establishment County Name
- Water Source
- Sewer Disposal
- On-site Supervisor Name
- Certified Food Handler Name
- Foods to be Served
- Off-site Catering Indicator (Y/N)
- Type of Business (permanent, temporary, etc.)
- Facility Type
- Registration Date
- Entity Type (USDA, Meat and Poultry)
- Inspecting Organizations (ISDH, FDA, ETC)
- Firm Business Volume
- Firm Size
- Wholesale Percentage
- Interstate Percent Sold
- Event Name
- Event Physical Address
- Event Physical Location
- Event Telephone Number
- Event Contact Person
- Date of Operation
- Hours of Operation
- Off-site Food Prep/Storage Unit
- Off-site Food Preparation Physical Address
- Storage Unit Physical Address
- Foods to be Served

1.1 Adding New Registrations

The system shall provide the following methods for adding new Registration records:

- **Web Registration**
- **Paper Registration**

1.1.1 Web Registrations

Business owners will access the Registration application via the Web and enter their registration data. Upon completion of the application, business owners will select a 'submit option'. The 'submit option' shall be designed to move the data to the appropriate work queue (see: **10.0 Work Queues**) when the Registration application is complete. If there are issues with data elements (i.e., missing data, incorrect format) the system shall notify the business owner to fix the issues before selecting the 'submit option' again (see: **Registration Validation Process**).

Web Tracking Number

After Web Registration applications have been submitted to a work queue, the system shall generate a unique 'tracking number' that will allow business owners to monitor the status of their Registration application via the Web. Business owners will access the FPP website and input their unique 'tracking number'. The system shall list the Registration record and its status.

1.1.2 Paper Registrations

Business owners will submit a paper copy of the Registration application to the regulatory authority. Regulatory authority users will input the application data into the system (**Central system or Mobile System**).

Central Users

The system shall allow central users to input application information into the central System. Upon completion of the application, central users will select a 'submit option'. The 'submit option' shall be designed to 1) check for errors and invalid data and 2) move the data into the central repository. If there are issues with the data (i.e., missing data, incorrect format) the system shall immediately notify the central user to fix the issues. After fixing all issues, the system shall allow the central user to select the 'submit option' again to move the data into the central repository.

When work must be completed at a later time, the system shall allow central users to move incomplete work to their own work queue or a different work queue (see: **10.0 Work Queues**). For example, if a central user cannot complete a Registration application because they will be out of the office the next day, the system shall allow the central user to move the incomplete application to a different user's work queue to be completed.

1.1.2 Paper Registrations (con't)

Field Users

The system shall allow field users to input application information into a Mobile System. Upon completion of the application, field users will select a 'submit option'. The 'submit option' shall be designed to 1) check for errors and invalid data and 2) move the completed application data into their personal work queue for further processing. If there are issues with the data elements (i.e., missing data, incorrect format) the system shall notify field users to fix the issues. After fixing all issues the system shall allow the field user to select the 'submit option' again to move the data to a personal work queue for further processing (see: **8.0 Synchronization Process**).

When work must be completed at a later time, the system shall allow field users to move incomplete work to their personal work queue (see: **10.0 Work Queues**). For example, if a field user is unable to complete a Registration application due to lack of owner information, the system shall allow the field user to move the incomplete application to their personal work queue to be completed at a later time.

1.2 Accepting and Rejecting Registrations

The system shall allow central users to 'accept'/'reject' Web and Paper Registration applications.

1.2.1 Accepting Web Registration Applications

As Web Registration applications are submitted for Wholesale establishment and move the Registration data to the central user's work queue.

After central users verify the Registration data, the system shall provide a 'submit option' to move the 'accepted' application data to the central repository.

If the central user cannot make a determination of acceptance for a particular Registration application, the system shall allow the central user to move the application to a chosen work queue or their own work queue to be completed later.

1.2.1.1 Creating a Unique Identifier

When the Registration application passes through validation without errors and the central user has 'accepted' the application into the system, the system shall create a Unique Identifier based on the address of the business. Once the Unique Identifier has been created and associated with the business, the system shall move the data to the central repository.

1.2.2 Accepting Paper Registration Applications

Central Users

As central users enter Paper Registration applications into the system, the system shall allow users to ‘accept’ the application and ‘submit’ the application to the central repository at the end of the process instead of moving the Registration application to a work queue to be ‘accepted’ and ‘submitted’. The system shall provide an ‘accept/submit’ option in this case.

If the user cannot make a determination of ‘acceptance’ at the time the application is being entered, the system shall allow the user to move the application to a chosen work queue to be completed later.

Field Users

When field users enter Registration applications into their mobile systems the Registration applications shall be sent to their personal work queue when the applications are complete.

Since field users will not be authorized to ‘accept’ Registration Applications into the central repository, they will need a means for moving the data in their work queue to a central users work queue for ‘acceptance’ and ‘submission’. The system shall provide a synchronization process for field users to move their data from one computer to another (**see: 10.0**

Synchronization Process)

Note: other activities associated with a new Registration application must remain in the field users work queue until a Unique Identifier is created for the business.

1.2.2.1 Creating a Unique Identifier

When the Registration application passes through validation without errors and the central user has ‘accepted’ the application into the system, the system shall create a Unique Identifier based on the address of the business. Once the Unique Identifier has been created and associated with the business, the system shall move the data to the central repository.

1.2.3 Rejecting Web Registration Applications

The system shall allow central users to ‘reject’ Web Registration applications in their work queues based on criteria set by the FPP. For example, if a Web Registration application is submitted into a work queue without a mailing address, the central user will ‘reject’ the application and update the status of the application to ‘rejected – no mailing address’.

The system shall allow business owners or agents to access the FPP Website, check the status of their Registration application, fix any issues, and resubmit the application via the Web again (**see: 1.3.1 Resubmitting Web Registrations**). The system shall move the resubmitted application to the appropriate work queue and the ‘accept/reject’ process will begin again.

1.2.4 Rejecting Paper Registration Applications

As central users enter Paper Registration applications into the system, the system shall allow users to 'reject' an application at the end of the process instead of moving the Registration application to a work queue to be 'rejected'. The system shall provide a 'rejection' option in this case.

If the user cannot make a determination of 'rejection' at the time the application is entered, the system shall allow the user to move the application to a chosen work queue to be completed later.

1.3 Resubmitting Registrations

The system shall allow Registration applications to be resubmitted to the system when any of the following items change:

- Business Owner
- Establishment Name
- Establishment Address
- Establishment Type/Business Type (Wholesale)

1.3.1 Resubmitting Web Registrations

The system shall allow business owners to access the Web, search for a previous registration based on a Unique Identifier (**created during the initial registration process**) or other criteria and access their current Web Registration application. The system shall allow business owners to make any needed changes to the Registration application.

Business Owner, Establishment Name changes

The system shall allow business owners to modify the Business Owner, Establishment Name and resubmit the Registration application to the appropriate work queue for 'acceptance' or 'rejection'. When the Registration application is 'accepted' by the system, the system shall NOT generate a new Unique Identification number. The Unique Identifier shall be the same. The system shall generate a new Registration Certificate reflecting the changes made by the business owner.

Establishment Address changes

The system shall allow business owners to modify the **Establishment Address** of the Registration application and resubmit the application to the appropriate work queue for 'acceptance' or 'rejection'. When the Registration application is 'accepted' by the system, the system shall generate a NEW, Unique Identification because all establishment activities shall be based on the Address or Location of the establishment. The system shall generate a new Registration Certificate reflecting the changes made by the business owner.

1.3.2 Resubmitting Paper Registration Applications

The system shall allow central and field users to make changes to existing Registration Applications based on changes submitted via Paper Registration applications.

Business Owner, Establishment Name changes

The system shall allow central and field users to modify the Business Owner, Establishment Name based on changes from the Paper Registration application.

Central Users

The system shall allow central users to ‘accept’ and ‘submit’ the application to the central repository at the end of the process instead of moving the Registration application to a work queue to be ‘accepted’ and ‘submitted’. The system shall provide an ‘accept/submit’ option in this case.

When the Registration application is ‘accepted’ by the system, the system shall NOT generate a new Unique Identification number. The Unique Identifier shall be the same. The system shall generate a new Registration Certificate reflecting the changes made by the business owner.

Field Users

The system shall allow field users to move the modified Registration application to their personal work queue. The system shall move the application changes to a central users work queue via the Synchronization Process for ‘acceptance’ or ‘rejection’.

Establishment Address changes

The system shall allow central and field users to modify the Establishment Address based on changes from the Paper Registration application.

Central Users

The system shall allow central users to ‘accept’ and ‘submit’ the application to the central repository at the end of the process instead of moving the Registration application to a work queue to be ‘accepted’ and ‘submitted’. The system shall provide an ‘accept/submit’ option in this case.

When the Registration application is ‘accepted’ by the system, the system shall generate a NEW, Unique Identification Number as all establishment activities are based on the address or location of the establishment. The system shall generate a new Registration Certificate reflecting the changes made by the business owner.

Field Users

The system shall allow field users to move the modified Registration application to their personal work queue. The system shall move the application changes to a central users work queue via the Synchronization Process for ‘acceptance’ or ‘rejection’.

1.4 Updating Registrations

The system shall allow Registration applications to be updated. Updating means changing a miss-keyed item or adding **non-essential data (i.e. information that will not force a new Registration Certificate to be generated)**.

1.4.1 Updating Web Registrations

The system shall allow business owners to access the FPP website and retrieve their current Registration application using their Unique Identifier to update information. When business

owners update **non-essential data** (i.e. email address), the system shall allow the business owner to resubmit the application and the system shall automatically update, validate, and save the changes to the central repository. These **non-essential data** updates need not go through a work queue to be ‘accepted’ or ‘rejected’.

1.4.2 Updating Paper Registrations

The system shall allow central and field users to make changes to existing Registration applications based on changes submitted via Paper Registration applications.

Central Users

The system shall allow central users to enter **non-essential data** based on changes submitted via Paper Registration applications. The system shall provide the central user the ability to enter changes and ‘submit’ those changes directly to the central repository without having to ‘accept’ or ‘reject’ the Registration application.

Field Users

The system shall allow field users to enter **non-essential data** based on changes submitted via Paper Registration applications. The system shall move the Paper Registration application changes to the central repository via the Synchronization Process.

1.5 Searching/Viewing Registrations

The system shall provide the capability to search for and view records based on several criteria. The general search functionality shall be as follows:

- The search function shall have the option to search for “Exact Words”/”Wild Card Search”, and Exact Values
- There shall be sorting capability for search results
- There shall be advanced searching – searching on multiple criteria (ex. Establishment name and owner name)
- Central and field users shall search for records based on their user role
- FPP Management shall have the ability to search for all records

Below are examples of search criteria for the Registration function (**more can be added as the need arises**)

1.5 Searching/Viewing Registrations (con't)

- Establishment ID Number
- Business Owner Name
- Business Owner Address
- Establishment Name
- Establishment Address
- Business Type (Wholesale)
- Active Indicator (Y/N)
- Registration Date

Exact Words Search Example

When central and field users want to search using the exact name of a business, the system shall allow the user to enter the name. The system shall retrieve the record(s) that match the search criteria.

Exact Value Search Example

When central and field users want to search for a single establishment, the system shall allow searching using the Establishment ID Number, which shall be unique. A single record shall be retrieved.

Wild Card Search Example

When central and field users need to locate a business but are unaware of the address, they will have the option of searching for 'all' occurrences of that business. This means users can enter part of a business name to return a list of all the business names that contain the search information.

The system shall provide multiple sorting options of the returned data. Sorting options shall be based on FPP guidelines.

1.6 Validating Registrations

The system shall validate, or make sure all collected data is applicable, valid, and formatted correctly. The validation process shall enable central and field users to find errors during the data entry process. The system shall **NOT** alert or warn using popup windows. All errors shall be captured and displayed as users enter information. Central and field users shall be able to fix the information as needed. This enables users to finish data entry faster rather than answering too many alerts during the data entry process. The system shall not allow central and field users to finish a record until all the data elements are valid.

This section will address the following validation functionality for the Registration Process:

- **Basic Validations:** users must be prompted to correct the basic data entry errors such as valid dates, numbers, names, field formats, required fields, etc.
- **Automatic edits at time of data entry:**
 - Automatic messages will appear to the user immediately after data is entered for a given item. A message will display if there are issues with particular data (i.e., data out of range or inconsistent with other information) and allow the user to immediately modify the data.
 - Cross-item edits should be performed: for example, the system shall perform a cross-check between the main business menu-type with the temporary event's menu-type. The user should not have discretion as to whether the validation is performed.
- **Ability to edit related items together:** the system shall allow users to readily modify data entered for all related items when an edit has identified a problem. For example, if menu type is found to be different between the initial registration and the temporary registration, the system shall allow the user to correct both items since either could be inaccurate.
- **Range Check:** This check validates the entry made for a given field and lets the user know if the item is out of range.
- **Cross check:** A cross check will validate an entry made for a given field and compare it to other related fields for consistency.

1.7 Saving Registrations

To 'save' means to commit data to a repository for later retrieval.

Central Users

The system shall allow central users to save complete and incomplete Registration applications directly into the central repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc.

Field Users

The system shall allow field users to save complete and incomplete Registration applications directly into a mobile repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc. Field users shall move the saved data from the mobile repository to the central repository via the Synchronization Process.

Historical Purposes

Each time saved data is changed in the system, whether it is modified, updated, added, or deleted, the system shall retain or 'save' the **changed** data for historical purposes.

1.8 Generating and Printing Registration Certificates, Licenses and Permits

There shall be two options for generating and printing Registration Certificates, Licenses and Permits:

- **via the Web**
- **via the Central/Mobile System**

1.8.1 Generating and Printing via the Web

The system shall provide to business owners an option to generate and print Registration Certificates, Licenses and Permits via the FPP website from their own location.

1.8.1.1 Generating and Printing Registration Certificates

The system shall provide a 'generate and print' option to business owners once all Registration data has been 'accepted' into the system by central users.

1.8.1.2 Generating and Printing Licenses or Permits

The system shall provide 'generate and print' option to central users once all Registration data has been 'accepted' into the system by central users i.e. to print Licenses or Permits from their own location.

1.8.2 Generating and Printing via Central/Mobile System

The system shall provide central users and field users an option to generate and print Registration Certificates, Licenses and Permits.

1.8.2.1 Generating and Printing Registration Certificates

Central Users

The system shall allow central users to generate and print Registration Certificates for business owners who submit Paper Registration applications to the regulatory authority.

Field Users

The system shall allow field users to generate and print Registration Certificates for business owners who submit Paper Registration applications to the regulatory authority. The system shall allow field users to generate and print Registration Certificates **only after** field users have synchronized with the central repository and the Registration data has been 'accepted' by a central user.

1.8.2.2 Generating and Printing Registration Licenses or Permits

If business owners need a License or Permit to operate, they may be charged a fee by some counties or agencies.

Central Users

The system shall provide a 'generate and print' option, allowing central user to generate and print Licenses or Permits for businesses.

Field Users

The system shall provide a 'generate and print' option allowing the field user to generate and print Licenses and Permits.

Note for field users: the system shall allow field users to generate and print Licenses and Permits **only after** field users have synchronized with the central repository. Field users can then synchronize with the repository again to receive any updated information so they can generate and print Licenses and Permits for businesses.

2.0 Inspection Process

Summary

The Inspection process allows the regulatory authority in the State of Indiana to inspect Wholesale food establishments for compliance with sanitation regulations. The proposed inspection system must provide flexibility to meet today's needs as well as any future needs of the Inspection Process.

Inspection Functionality

- Adding New Inspections
- Reviewing Inspections
- Modifying Existing Inspections
- Updating Inspections
- Searching/Viewing Inspections
- Saving Inspections
- Validating Inspections
- Generating and Printing Inspection Reports
- Generating and Printing Licenses and Permits

Inspection Data Elements: (fields can be added or removed as the need arises):

- Establishment Name
- Establishment Address
- Business Owner Name
- Establishment ID Number
- Inspector Name
- County Name
- Inspection Purpose
- Menu Type
- Inspection Date
- Signature of Inspector and Business owner or agent
- Violations

2.1 Adding New Inspections

The system shall allow authorized central users to develop inspection schedules based on the availability of inspectors (field users), risk factors, and other criteria that are deemed relevant (see: **11.0 Inspection Schedules**). Each field user shall be provided a unique schedule of inspections they must perform.

The system shall provide a notice to field users showing which establishments are scheduled to be inspected at a given time.

2.1 Adding New Inspections (con't)

Field Users

The system shall allow field users to perform the following in order to add new Inspection records to the system:

- The system shall allow field users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (**see: 2.4 Searching/Viewing Inspections**). The system shall pre-populate saved fields for the establishment.
- The system shall allow field users to 'add new inspections' to the retrieved food establishment.
- The system shall allow field users to capture all relevant inspection data during an inspection.
- The system shall allow for electronic signature capture (**for field Inspections only**).
- The system shall allow field users to move completed inspection records from the Mobile System to the central System via the Synchronization Process.
- The system shall allow field users to approve inspection records before Synchronization.
- The system shall allow inspection information to be saved to the field user's personal work queue to be completed at a later time if needed.

Central Users

The system shall allow central users to perform the following to add new Inspection records to the system when the Inspection Record is a Paper copy:

- The system shall allow central users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (**see: 2.4 Searching/Viewing Inspections**). The system shall pre-populate saved fields for the establishment.
- The system shall allow central users to 'add new inspections' to the retrieved food establishment.
- The system shall allow central users to capture all inspection data from the paper copy of the Inspection form.
- The system shall allow central users to mark Inspection records as 'reviewed' (**see: 2.2 Reviewing Inspections**) immediately following data entry.
- The system shall allow inspection information to be saved to the central user's personal work queue to be completed at a later time if needed.

2.2 Reviewing Inspections

Reviewing inspections by central users to check each inspection record for accuracy before it is committed to the central repository (wish list for future). The system should provide this

option without much change to system design. An Inspection record can be generated by field users and central users.

- The system shall move all field user Inspection records to the appropriate central user's work queue for 'review' via the Synchronization Process.
- The system shall provide central users an option to mark each Inspection record as 'reviewed'.
- If issues are found during the 'review' the system shall allow central users to notify the appropriate field user of the problem. Field users shall fix the issue(s) and re-send the Inspection Record to the central users work queue via the Synchronization Process for another 'review'.
- The system shall save 'reviewed' inspection records to the central repository.
- The system shall allow central users to mark Inspection records as 'reviewed' immediately following data entry of a Paper Inspection record.

2.3 Modifying Existing Inspections

The system shall allow field and central users to modify existing Inspection records to reflect needed changes.

- The system shall allow field and central users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (**see: 2.4 Searching/Viewing Inspections**). The system shall pre-populate saved fields for the establishment.
- The system shall allow field and central users to modify selected fields based on a user role.
- The system shall save any changes made for historical purposes.
- The system shall remove the electronic signature(s) since the Inspection record will change.
- The system shall allow for electronic signature **recapture (for field user Inspections only)**.
- The system shall move modified field user Inspection records via the Synchronization Process.
- The system shall allow modified Inspection records to be saved to the field user's personal work queue to be completed at a later time if needed.
- The system shall allow modified Inspection records to be saved to the central user's work queue to be completed at a later time if needed.
- The system shall allow central users to 'review' a modified Inspection record at the end of the modification process instead of moving the Inspection record to a work queue to be 'reviewed'.
- The system shall allow the field and central users to reprint an Inspection report if necessary

2.4 Updating Inspections

The system shall allow Inspection records to be updated. In this case, updating shall mean adding items to the Inspection record that will **NOT** force the user to recapture an electronic signature.

Field Users

The system shall allow field users to update Inspection records to add **non-essential data** (i.e. notes, pictures, video, etc.). The system shall move the updated Inspection record to the central repository via the Synchronization Process.

Central Users

The system shall allow central users to update Inspection records to add **non-essential data** (i.e. notes, pictures, video, etc.). The system shall allow central users to ‘review’ a modified Inspection record at the end of the data entry process instead of moving the Inspection record to a work queue to be ‘reviewed’.

2.5 Searching/Viewing Inspections

The system shall provide the capability to search for and view records based on several criteria. The general search functionality shall be as follows:

- The search function shall have the option to search for “Exact Words”/”Wild Card Search”, and Exact Values
- There shall be sorting capability for search results
- There shall be advanced searching – searching on multiple criteria (ex. Establishment name and owner name)
- Central and field users shall search for records based on their user role
- FPP Management shall have the ability to search for all records

Below are examples of search criteria for the Inspection function (**more can be added as the need arises**)

- Establishment ID Number
- Establishment Name
- Establishment Address
- Business Owner Name
- Business Owner Address
- Inspector Name
- Inspection Purpose
- County Name
- Inspection Date

2.5 Searching/Viewing Inspections (con't)

Exact Words Search Example

When central and field users want to search using the exact name of a business, the system shall allow the user to enter the name. The system shall retrieve the record(s) that match the search criteria.

Exact Value Search Example

When central and field users want to search for a single establishment, the system shall allow searching using the Establishment ID Number, which shall be unique. A single record shall be retrieved.

Wild Card Search Example

When central and field users need to locate a business but are unaware of the address, they will have the option of searching for 'all' occurrences of that business. This means users can enter part of a business name to return a list of all the business names that contain the search information.

The system shall provide multiple sorting options of the returned data. Sorting options shall be based on FPP guidelines.

2.6 Validating Inspections

The system shall validate, or make sure all collected data is applicable, valid, and formatted correctly. The validation process shall enable central and field users to find errors during the data entry process. The system shall **NOT** alert or warn using popup windows. All errors shall be captured and displayed as users enter information. Central and field users shall be able to fix the information as needed. This enables users to finish data entry faster rather than answering too many alerts during the data entry process. The system shall **NOT** allow central and field users to finish a record until all the data elements are valid.

This section will address the following validation functionality for the Inspection Process:

- **Basic Validations:** users must be prompted to correct the basic data entry errors such as valid dates, numbers, names, field formats, required fields, etc.
- **Automatic edits at time of data entry:**
 - Automatic messages will appear to the user immediately after data is entered for a given item. A message will display if there are issues with particular data (i.e., data out of range or inconsistent with other information) and allow the user to immediately modify the data.

2.6 Validating Inspections (con't)

- Cross-item edits should be performed: for example, the system shall perform a cross-check between the main business menu-type with the temporary event's menu-type. The user should not have discretion as to whether the validation is performed.
- **Ability to edit related items together:** the system shall allow users to readily modify data entered for all related items when an edit has identified a problem. For example, if menu type is found to be different between the initial registration and the temporary registration, the system shall allow the user to correct both items since either could be inaccurate.
- **Range Check:** This check validates the entry made for a given field and lets the user know if the item is out of range.
- **Cross check:** A cross check will validate an entry made for a given field and compare it to other related fields for consistency.

2.7 Saving Inspections

To 'save' means to commit data to a repository for later retrieval.

Central Users

The system shall allow central users to save complete and incomplete Inspection records directly into the central repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc.

Field Users

The system shall allow field users to save complete and incomplete Inspection records directly into a mobile repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc. Field users shall move the saved data from the mobile repository to the central repository via the Synchronization Process.

Historical Purposes

Each time saved data is changed in the system, whether it is modified, updated, added, or deleted, the system shall retain or 'save' the **changed** data for historical purposes.

2.8 Printing Inspection Reports

Once an Inspection record has been reviewed, validated, and saved to the system an Inspection Report shall be generated and printed.

Field Users

The system shall provide field users a ‘generate and print’ option for Inspection Reports. The system shall allow field users to print reports generated by the system or in PDF format. The system shall allow field users to email PDF Inspection Reports to the business if the business prefers.

Central Users

The system shall provide central users a ‘generate and print’ option for Inspection Reports. The system shall allow central users to print reports generated by the system or in PDF format. The system shall allow central users to email PDF Inspection Reports to the business if the business prefers.

2.8.1 Generating and Printing Licenses/Permits during Inspection Process

The system shall provide field users an option to generate and print Licenses or Permits **after** the Inspection Process has been completed. This situation might occur when a business has not yet registered with the regulatory authority but needs to be inspected prior to registering (**see: 1.0 Registration Process**).

Once an inspection form has been validated, signed, and saved, the License or Permit can be generated and printed along with the Inspection Report.

The system shall allow field users to print reports generated by the system or in PDF format. The system shall allow field users to email PDF Inspection Reports to the business if the business prefers.

3.0 Complaint Process

Summary

The Complaint Process allows consumers to file an issue with the regulatory authority whenever they feel certain food practices or products may be harmful to the citizens of the State. Establishment Complaints usually refer to cleanliness, sanitation, poor employee practices, improperly cooked or handled food, food that tastes bad or foreign material in food. Food Product Complaints usually refer to foreign material in a product, chemical taste/smell or tampering with the product.

Complaints Functionality

- Adding Complaints
- Modifying/Updating Complaints
- Searching/Viewing Complaints
- Saving Complaints
- Validating Complaints
- Printing Complaints

Complaints Data Elements: (fields can be added or removed as the need arises):

- Establishment Name
- Establishment ID Number
- Establishment Address
- Complaint Type
- Complaint Description
- Injury Indicator (Y/N)

3.0 Complaint Process (con't)

- Illness Indicator (Y/N)
- Sample Collected Indicator (Y/N)
- County Name
- Complaint Staff Name
- Date of Complaint
- Complainant Name
- Complainant Address
- Complainant Phone Number
- Product label
- Manufacturer/Distributor indicator
- Manufacturer/Distributor Name

3.1 Adding New Complaints

The system shall provide the following methods for adding new Complaints:

- **Web Complaints**
- **In-House Complaints**

3.1.1 Web Complaints

The general consumer will access the Complaints function via the Web and enter their Complaint data. Upon completion, consumers shall select a 'submit option'. The 'submit option' shall be designed to move the data to the appropriate work queue. For example, if the complaint is regarding a food establishment in Morgan County the Complaint shall be moved to the central users work queue for review.

If there are issues with data elements (i.e., missing data, incorrect format) the system shall notify the consumer to fix the issues or add additional data before selecting the 'submit option' again.

Once the Web Complaint record is in the central users work queue, the following shall occur:

- The central user shall review the Complaint for accuracy and completeness
- The system shall allow central users to move the Complaint to a different central user's work queue when needed
- The system shall allow the central user to add the Complaint to the appropriate food establishment

- If the establishment does not exist in the system, the system shall allow the central user to add the establishment (see: **1.0 Registration Process**)
- If the Complaint is not yet complete, the system shall allow the central user to move the incomplete Complaint record to the appropriate work queue to be completed at a later time
- Authorized field users shall have access to Complaints so they may provide assistance in the field

3.1.2 In-House Complaints

At times, consumers may contact the regulatory authority directly to file a Complaint. In this case the system shall allow central users to capture Complaint data directly into the central system. The process shall be as follows:

- The system shall allow the central user to move the Complaint to the appropriate work queue. For example, if the complaint is regarding a Morgan County food establishment, then the Complaint shall be moved to the central user who handles Morgan County complaints.
- The system shall allow the central user search for the associated food establishment (see: **3.3 Searching/Viewing Complaints**)
- The system shall allow the central user to add a New Complaint to the food establishment
- If the establishment does not exist in the system, the system shall allow the central user to add the establishment (see: **1.0 Registration Process**)
- If the Complaint cannot be completed at the time of entry, the system shall allow the central user to move the incomplete Complaint record to the appropriate work queue to be worked at a later time
- Authorized field users shall have access to Complaints so they may provide assistance in the field

3.2 Modifying/Updating Complaints

The system shall allow field and central users to modify existing Complaint records to reflect needed changes.

- The system shall allow field and central users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (see: **3.3 Searching/Viewing Complaints**). The system shall pre-populate saved fields for the establishment.
- The system shall allow field and central users to modify selected fields based on a user role.
- The system shall save any changes made for historical purposes.
- The system shall allow modified Complaint records to be saved to the central users work queue to be completed at a later time if needed.

- The system shall allow modified Complaint records to be moved to a different central user's work queue if needed.

3.3 Searching/Viewing Complaints

The system shall provide the capability to search for and view records based on several criteria. The general search functionality shall be as follows:

- The search function shall have the option to search for “Exact Words”/”Wild Card Search”, and Exact Values
- There shall be sorting capability for search results
- There shall be advanced searching – searching on multiple criteria (ex. Establishment name and owner name)
- Central and field users shall search for records based on their user role
- FPP Management shall have the ability to search for all records

Below are examples of search criteria for the Complaints function (**more can be added as the need arises**)

- Establishment ID Number
- Establishment Name
- Establishment Address
- Complaint Type
- Complaint Description
- Injury Indicator (Y/N)
- Illness Indicator (Y/N)
- Sample collected indicator (Y/N)
- County Name
- Complaint Staff Name
- Date of Complaint
- Product label (for product complaints only)
- Manufacturer/Distributor indicator (for product complaints only)
- Manufacturer/Distributor Name (for product complaints only)

Exact Words Search Example

When central and field users want to search using a specific Complaint Type, the system shall allow the user to do so. The system shall retrieve the record(s) that match the search criteria.

Exact Value Search Example

When central and field users want to search for a single establishment, the system shall allow searching using the Establishment ID Number, which shall be unique. A single record shall be retrieved.

3.3 Searching/Viewing Complaints (con't)

Wild Card Search Example

When central and field users need to locate a business but are unaware of the address, they will have the option of searching for 'all' occurrences of that business. This means users can enter part of a business name to return a list of all the business names that contain the search information.

The system shall provide multiple sorting options of the returned data. Sorting options shall be based on FPP guidelines.

3.4 Validating Complaints

The system shall validate, or make sure all collected data is applicable, valid, and formatted correctly. The validation process will enable users to find the errors during the data entry process. Users will **NOT** be alerted or warned using popup windows. All errors will be captured and displayed as users enter information. Users can fix the information as needed. This enables the users to finish data entry faster rather than answering too many alerts during the data entry process. Users will **NOT** be able to finish and approve a record until all the data elements valid.

This section will address the following validation functionality for Complaints:

- **Basic Validations:** users must be prompted to correct the basic data entry errors such as valid dates, numbers, names, field formats, required fields, etc.
- **Automatic edits at time of data entry:**
 - Automatic messages will appear to the user immediately after data is entered for a given item. A message will display if there are issues with particular data (i.e., data out of range or inconsistent with other information) and allow the user to immediately modify the data.
 - Cross-item edits should be performed: for example, the system shall perform a cross-check between the 'injury/illness' option and the 'symptoms' option. The user should not have discretion as to whether the validation is performed.
- **Ability to edit related items together:** users should be able to readily modify data entered for all related items when an edit has identified a problem. For example if the 'injury/illness item is set to 'yes', their must be related 'symptoms.' The user should be able to correct both items since either could be inaccurate.

3.5 Saving Complaints

To 'save' means to commit data to a repository for later retrieval.

Central Users

The system shall allow central users to save complete and incomplete Complaint records into the central repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc.

Historical Purposes

Each time saved data is changed in the system, whether it is modified, updated, added, or deleted, the system shall retain or 'save' the **changed** data for historical purposes.

3.6 Printing Complaints

Once Complaint records have been validated, reviewed, and saved, the system shall allow central and field users to generate and print Complaint records.

The system shall provide central and field users a 'generate and print' option for Complaint Reports. The system shall allow central and field users to print Complaints generated by the system or in PDF format. The system shall allow central and field users to email PDF Complaint Reports to the appropriate personnel.

3.7 Other Complaints Functionality

The system shall notify authorized users when:

- More than 2 complaints of illness originate from the same establishment
- More than 2 complaints are filed with the FPP indicating the same illness
- More than 2 complaints originate from the same establishment but may not necessarily be due to illness

The criteria used in this functionality shall be based on FPP guidelines

4.0 Samples Process

Summary

Food samples can originate from a consumer, collected as a follow-up, obtained from surveillance, or be an official sample. When the regulatory authority obtains food samples to be tested, the system shall allow central users to add Sample records to the system. **All Sample records (excluding Surveillance Samples) must be added to an associated Complaint record.**

Samples Functionality

- Adding Samples
- Modifying/Updating Samples
- Searching/Viewing Samples
- Validating Samples
- Saving Samples
- Printing Samples

Samples Data Elements (fields can be added or removed as the need arises):

- Sample Number
- Sample Description
- Sample Origin (consumer, surveillance, etc)
- Sampling Description
- Consumer Complaint Form attached indicator (Y/N)
- Complaint Number
- Suspected Foodborne Illness Investigation Narrative Report Form attached indicator (Y/N)
- Analysis Requested indicator (Y/N)
- Jurisdiction
- Laboratory Name
- Processor Name

4.1 Adding Samples

The system shall allow central users to add Samples records:

- The system shall allow central users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (see: **4.3 Searching/Viewing Samples**). The system shall pre-populate saved fields for the establishment, including Complaint records
- The system shall allow central users to add Sample records to associated Complaint records for the establishment
- Authorized field users shall have access to Sample records so they may provide assistance in the field

4.2 Modifying/Updating Samples

The system shall allow central users to modify existing Samples records to reflect needed changes.

- The system shall allow central users to search for a particular food establishment using the Unique Identifier or by using one of the other search methods discussed (see: **4.3 Searching/Viewing Samples**). The system shall pre-populate saved fields for the establishment.
- The system shall allow central users to modify selected fields based on a user role
- The system shall save any changes made for historical purposes
- The system shall allow modified Complaint records to be saved to the central users work queue to be completed at a later time if needed.
- Authorized field users shall have the ability to modify Samples records so they may provide assistance in the field
- The system shall allow modified Samples records to be moved to a different central user's work queue if needed

4.3 Searching/Viewing Samples

The system shall provide the capability to search for and view records based on several criteria. The general search functionality shall be as follows:

- The search function shall have the option to search for “Exact Words”/”Wild Card Search”, and Exact Values
- There shall be sorting capability for search results
- There shall be advanced searching – searching on multiple criteria (ex. Establishment name and owner name)
- Central and field users shall search for records based on their user role
- FPP Management shall have the ability to search for all records

Below are examples of search criteria for the Samples function (**more can be added as the need arises**)

- Sample Number
- Sample Description
- Sample Origin (consumer, surveillance, etc)
- Sampling Description
- Consumer Complaint Form attached indicator (Y/N)
- Complaint Number
- Suspected Foodborne Illness Investigation Narrative Report Form attached indicator (Y/N)
- Analysis Requested indicator (Y/N)
- Jurisdiction
- Laboratory Name
- Processor Name

4.3 Searching/Viewing Samples (con't)

Exact Words Search Example

When central and field users want to search using a specific Sample origin, the system shall allow the user to do so. The system shall retrieve the record(s) that match the search criteria.

Exact Value Search Example

When central and field users want to search for a single establishment, the system shall allow searching using the Establishment ID Number, which shall be unique. A single record shall be retrieved.

Wild Card Search Example

When central and field users need to locate a business but are unaware of the address, they will have the option of searching for 'all' occurrences of that business. This means users can enter part of a business name to return a list of all the business names that contain the search information.

The system shall provide multiple sorting options of the returned data. Sorting options shall be based on FPP guidelines.

4.4 Validating Samples

The system shall validate, or make sure all collected data is applicable, valid, and formatted correctly. The validation process will enable users to find the errors during the data entry process. Users will not be alerted or warned using popup windows. All errors will be captured and displayed as users enter information. Users can fix the information as needed. This enables the users to finish data entry faster rather than answering too many alerts during the data entry process. Users will not be able to finish and approve a record until all the data elements valid.

This section will address the following validation functionality for samples:

- **Basic Validations:** users must be prompted to correct the basic data entry errors such as valid dates, numbers, names, field formats, required fields, etc.
- **Automatic edits at time of data entry:**
 - Automatic messages will appear to the user immediately after data is entered for a given item. A message will display if there are issues with particular data (i.e., data out of range or inconsistent with other information) and allow the user to immediately modify the data.

4.4 Validating Samples (con't)

- Cross-item edits should be performed: for example, the system shall perform a cross-check between the 'consumer complaint form attached' item and the presence of a related complaint form in the system. The user should not have discretion as to whether the validation is performed.
- **Ability to edit related items together:** users should be able to readily modify data entered for all related items when an edit has identified a problem. For example if the 'consumer complaint form attached' indicator is set to 'yes', then there should be a related complaint for in the system for the sample. The user should be able to correct both items since either could be inaccurate.

4.5 Saving Samples

To 'save' means to commit data to a repository for later retrieval.

Central Users

The system shall allow central users to save complete and incomplete Samples records into the central repository. Once data is in the repository it can be modified, updated, searched, viewed, reported, etc.

Historical Purposes

Each time saved data is changed in the system, whether it is modified, updated, added, or deleted, the system shall retain or 'save' the **changed** data for historical purposes.

4.6 Printing Samples

Once Samples records have been validated, reviewed, and saved, the system shall allow central and field users to generate and print Samples records.

The system shall provide central and field users a 'generate and print' option for Sample Reports. The system shall allow central and field users to print Sample Reports generated by the system or in PDF format. The system shall allow central and field users to email PDF Samples Reports to the appropriate personnel.

5.0 Plan Review Applications Process (Wholesale Food Establishments)

Summary

The owner or agent of an existing or proposed Wholesale food establishment shall submit to the regulatory authority an ‘**Application for Plan Review**’ and a ‘**Plan Review Questionnaire**’ before any of the following occur:

- The construction of a food establishment
- The conversion of an existing structure for use as a Wholesale food establishment
- The remodeling of a food establishment or a change of type of Wholesale food establishment or food operation if the regulatory authority determines that plans and specifications are necessary to ensure compliance

Plan Review Application Functionality

- Adding New Plan Review Applications and Questionnaires
- Accepting and Rejecting Plan Review Applications and Questionnaires
- Resubmitting Plan Review Applications and Questionnaires
- Updating Plan Review Applications and Questionnaires
- Searching/Viewing Plan Review Applications and Questionnaires
- Validating Plan Review Applications and Questionnaires
- Saving Plan Review Applications and Questionnaires

Plan Review Application Data Elements (fields can be added or removed as the need arises):

- Business Owner Name
- Business Contact Person
- Business Telephone Number
- Business Mailing Address
- Establishment Name
- Establishment Telephone Number
- Establishment Address
- Projected Start Date for Project
- Projected Due Date for Project
- Project Number
- Engineer/Architect Name
- Engineer/Architect Contact Person
- Engineer/Architect Telephone Number
- Engineer/Architect Mailing Address

5.0 Plan Review Applications Process (Wholesale Food Establishments) (con't)

Plan Review Questionnaire Data Elements (fields can be added or removed as the need arises):

- Food (will the food be received in a safe and sanitary manner)
- Food Preparation (limits/restricts the amount of pathogen growth in food)
- Hot and Cold Holding (keeps pathogens from growing in food)
- Sanitization (ensure the proper amount and application of sanitizer levels)
- Poisonous or Toxic Materials and Personal Care Items (covers the storage and use of these items)
- Miscellaneous (covers registration/permitting and food handling in the home)
- Warewashing/Dishwashing (covers the proper use and capacity of your equipment)
- Water Supply (is the water potable/drinkable)
- Waste Water/Sewage Disposal (is the sewage system in compliance)
- Plumbing (covers backflow, hot water capacity, hoses, and grease traps)
- Hand washing/Toilet Facilities (quantity, door closure, and ventilation)
- Room Finish Schedule (covers the interior of the kitchen and ensures that the materials are made to be smooth and easily cleanable)
- Personal Belongings (prevents contamination of food from employees)
- Equipment (requires all equipment materials be food-grade quality and approved for use in a commercial kitchen)
- Insect and Rodent Harborage (prevents insects and rodent activity)
- Reuse and Recyclables (covers the storage and disposal)
- Lighting (minimum amount of light needed to conduct operations)

5.1 Adding Plan Review Applications and Questionnaires

This process shall perform the same as 'Adding Registrations'.

5.2 Accepting and Rejecting Plan Review Applications and Questionnaires

This process shall perform the same as 'accepting and rejecting Registrations' with the following exceptions:

- The Unique Identifier shall be created during the Registration Process only
- The system shall **NOT** allow central users to 'accept' plan review applications and Questionnaires until all required data (i.e. construction plans) have been received by the regulatory authority. The system shall hold Plan Review Applications and Questionnaires in the appropriate queue until an authorized central user receives the required data and releases the hold.

5.3 Resubmitting Plan Review Applications and Questionnaires

This process shall perform the same as ‘Resubmitting Registrations’ with the following exceptions:

- The system shall allow Plan Review Applications and Questionnaires to be resubmitted if **any** of the data changes

5.4 Updating Plan Review Applications and Questionnaires

This process shall perform the same as ‘Updating Registrations’ with the following exceptions:

- All Web and Paper updates must be ‘accepted/rejected’ by the regulatory authority.

5.5 Searching/Viewing Plan Review Applications and Questionnaires

This process shall perform the same ‘Searching/Viewing Registrations’.

5.6 Validating Plan Review Applications and Questionnaires

This process shall perform the same as ‘Validating Registrations’.

5.7 Saving Plan Review Applications and Questionnaires

This process shall perform the same as ‘Saving Registrations’.

6.0 Operators Response to Inspection via the Web

Summary

Business owners may comment on an inspection performed by the regulatory authority. The Operator Response to Inspection form shall allow business owners to give their thoughts on the inspection and the inspector.

The form shall be accessed via the Web and allow business owners to input data that will be reviewed by the regulatory authority.

6.0 Operators Response to Inspection via the Web (con't)

Functionality

- Adding Operator Response to Inspection forms
- Accepting Operator Response to Inspection forms

Data Elements for Operators Response to Inspection

- Business Owner Name
- Establishment Name
- Establishment Address
- Comments

6.1 Adding Operator Response to Inspection forms

Business owners will access the Operator Response to Inspection form via the Web and enter their data. Upon completion, business owners will select a 'submit option'. The 'submit option' shall be designed to move the data to the appropriate work queue (see: **10.0 Work Queues**) when the response is complete. If there are issues with data elements (i.e., missing data, incorrect format) the system shall notify the business owner to fix the issues before selecting the 'submit option' again (see: **2.5 Validating Inspections**).

6.2 Accepting Operator Response to Inspection forms

As Operator Response to Inspection forms are submitted to the system and the system move the data to the appropriate central user's work queue for further steps.

After central users verify the data, the system shall provide a 'submit option' to move the 'accepted' form to the central repository.

If the central user cannot make a determination of acceptance for a particular form, the system shall allow the central user to move form to a chosen work queue or their own work queue to be completed later.

7.0 Synchronization Process

Synchronization is a process in which to combine data collected in the field with data that is already stored in the central office repository.

Field users need the capability to merge their data with the data in the central repository after they have registered a business, inspected an establishment, or performed other food related activities.

The synchronization process for field users shall be as follows:

1. Field users will input food related data into the mobile system
2. Field users will gain access to an Internet connection

3. The system shall allow field users to select a ‘synchronize option’ from their mobile system that will move the data to the central repository via web services.
4. Mobile units will be updated to reflect all current data that resides in the central repository

8.0 Training Activities

The system shall capture general training and other activities for all regulatory authority personnel. All activities such as meetings, presentations, employee training (excluding Standardization), conferences, etc. shall be associated with the regulatory staff members.

If a training inspection is considered a ‘routine inspection’ then that inspection shall be associated with the inspector and the establishment (see: 2.0 Inspection Process). The inspection shall be associated with the trainer as simply a training activity.

9.0 Viewing Inspections via the Web for the General Public

Indiana consumers shall have a means to view food establishment inspections on-line via the Web. The system shall allow general consumers to access a Web page that will contain individual inspection details that have been captured in the system.

The process shall allow consumers to access the FPP Web page and search for food establishment inspections using the following criteria:

- Establishment Name
- Establishment Address
- Establishment Type
- Status (Active/Inactive)
- Inspection From Date
- Inspection To Date

The Establishment Name and Establishment Address search fields shall allow consumers to enter an entire name or address. Consumers shall also be able to enter partial information into these same fields to find an establishment’s inspections. Searching on partial information shall return all establishments containing the information entered. The consumer shall be able to select a particular establishment from a list.

10.0 Work Queues

The system shall provide work queues for each regulatory authority staff member that lists the staff member’s responsibilities for the day, week, etc. Work queues shall be designed to not only list responsibilities, but also to update items that have been worked, flag items that are overdue, remind staff of upcoming tasks, and perform other functions that are currently managed by the regulatory authority.

The design and functions of work queues for this system shall be based on FPP guidelines.

11.0 Inspection Schedules

The system shall allow authorized central users to develop inspection schedules based on the availability of inspectors (field users), risk factors, and other criteria that are deemed relevant. Each field user shall be provided a unique schedule of inspections they must perform.

The system shall provide a notice to field users showing which establishments are scheduled to be inspected at a given time.

12.0 Central and Field User Overrides

Overrides give users the ability to change specific fields in the system when the need arises. At times, it may be necessary to change items that usually should not be changed by the general user. The system shall allow authorized users to perform overrides to already saved data.

13.0 Interfacing with other Systems

The system shall be able to interface with other systems within the FPPs scope of work. For instance, the regulatory authority shall interface with counties that have their own inspection systems in order to capture inspection data that has already been collected.

14.0 General Reporting

The system shall allow for pre-developed and ad-hoc reports. **Note:** *The system shall provide an option to generate all reports in PDF format.*

Pre-developed reports:

Pre-developed reports are reports that are developed by the vendor and are not modifiable by users. The formats and layouts will be based on Food Protection Program rules and guidelines. These reports shall include only records associated with and/or created by authorized regulatory personnel.

Ad-hoc reports:

Ad-hoc reports are customized reports that are developed by authorized users of the system and are absolutely modifiable. Users can also save ad-hoc reports to be used at a later date.

The system shall provide a tool for users to create customized reports. The tool shall allow staff to view familiar business data and information to develop relevant Food Protection reports.

Below are some of the reports (pre-developed and ad-hoc) that shall be contained in the system. Layouts and designs will be based on FPP rules and guidelines (**reports can be added or removed from this list as the need arises**):

- Inspection Report
- License/Permit Report

- Registration Certificate
- Consumer Complaint Report
- Sample Collection Report
- Monthly Activity Reports
- Inspection Summary
- Plans Review Form
- Plans Review Questionnaire
- Request for Variance Form
- Operator Response to Inspection Form
- Wholesale Inspection Report
- Activity Report
- Wholesale inspection activity report
- Wholesale Activity report
- Wholesale Recall Report
- Dashboard capabilities to provide data analytics

5.0 General System Maintenance

The system shall allow authorized users to perform system maintenance when the need arises. These users will be able to add, modify, update or delete the following items:

- Inspectors/Staff
- Authorized Business Users
- Violation Codes
- Complaint Type Codes
- Food/Product Categories
- County Codes
- State Codes
- Region Names
- Facility Types
- Inspection Purpose/Types
- Standardization Officers
- Violation Classes
- Industry Codes
- Industry Code Extensions
- Location Status Codes
- Event Locations (ex. Fairgrounds)
- Event Types (ex. Fairgrounds)
- Event Coordinators (ex. Fairgrounds)
- Special Event Occurrence List (ex. Consulting, presentations)

System Requirements and Processing Rules

The following section describes the system requirements and processing rules that must be part of the system.

Technical Services Impact Statement

This section describes the needs of this new system and the impact it will have on the technical infrastructure of ISDH. The following infrastructure needs are addressed:

- **System environment:** defines the hardware and software environment
- **Network:** describes the general network environment
- **Backup and recovery:** defines how the system shall backup existing data and recover lost data
- **Storage capacity:** defines the storage needs of the system
- **Telecommunications bandwidth:** defines the number of users that will be accessing the ISDH systems

System Environment Needs

This new system needs a specific hardware and software environment. The following environment is required to support the needs of the new system:

- Dedicated or Shared SQL Server Database supported per IOT: including but not limited to; support employees, hardware, database licensing, operating systems and annual maintenance, data backup and recovery, installation of database software, database performance monitoring and problem troubleshooting and resolution (attached: IOT Service Level Agreement)
- Windows Operating System
- Storage Area Network (SAN Storage)
- ISDH IT Technical Support
- Tablet PCs:
 - Microsoft Windows 7 Professional or greater
 - Minimum processor speed: 2 GHZ
 - Minimum RAM: 4 GB
 - 120 GB hard-disk space
 - CD ROM Drive
 - Internal Wi-Fi
- Desktop PCs:
 - Microsoft Windows 7 Professional or greater
 - Minimum processor speed: 2 GHZ
 - Minimum RAM: 4 GB
 - 160GB hard-disk space
 - Internet Access
 - Wired Connection

Questions

Is this a new system or an upgrade of an existing system?	New system
How many users does the business expect for the proposed system?	500
How many do you expect to be on the system concurrently?	300
How many are in Domestic Field Offices?	300
How many are in the Field	200
How many are in International Field Offices?	0
Do you expect the system to require feeds from outside of the ISDH Network?	Yes
Do you expect the system to require feeds from inside of the ISDH Network?	Yes
Do ISDH Partners need to access the system?	Yes
Do you need a new server for development?	NO
Do you need a new server for testing or staging?	Yes
Does the system have an E-mail dependency?	Yes
Is this system's server replacing an existing server?	Yes
Server being replaced:	
If no, are you acquiring a new server?	Yes
Does this system require a dedicated server for Production?	Yes

Network Needs

This new system has specific needs in terms of network connections, bandwidth, and general network environment. The following network attributes are required to support this system:

- **LHD's Central Office**:**
 - Internet Connectivity
 - Standard T1 Line
 - Bandwidth: 1.544 Mbps
- **FPP Central Office:**
 - Internet Connectivity
- **FPP Field Users:**
 - Internet Connectivity
 - VPN
- **LHD's Field Users:**
 - Internet Connectivity
- **Other Authorized Users (Business Owners – access to ISDH Web Portal)**
 - Internet Connectivity
- **General Public (access to ISDH Website)**
 - Internet Connectivity

** Incase LHD's like to review wholesale facilities data in their counties.

Backup and Recovery Needs

Backup and recovery services are provided by IOT. This section describes the backup needs for this system.

- System Backups:
 - Full system backup shall be performed: Initial backup
 - Daily, Incremental backups shall be performed: only new data shall be backed up
- System Recovery:
 - Data shall be stored for 1 year in the VERITAS backup library for the purposes of data retrieval and database restores per IOT
- System Storage:
 - As response time diminishes, data storage will become imminent. A solution for Long-term data storage (archiving) shall be discussed with IOT at that time

Storage Capacity Needs

This system has certain storage needs in order to function. These needs are outlined in the section below:

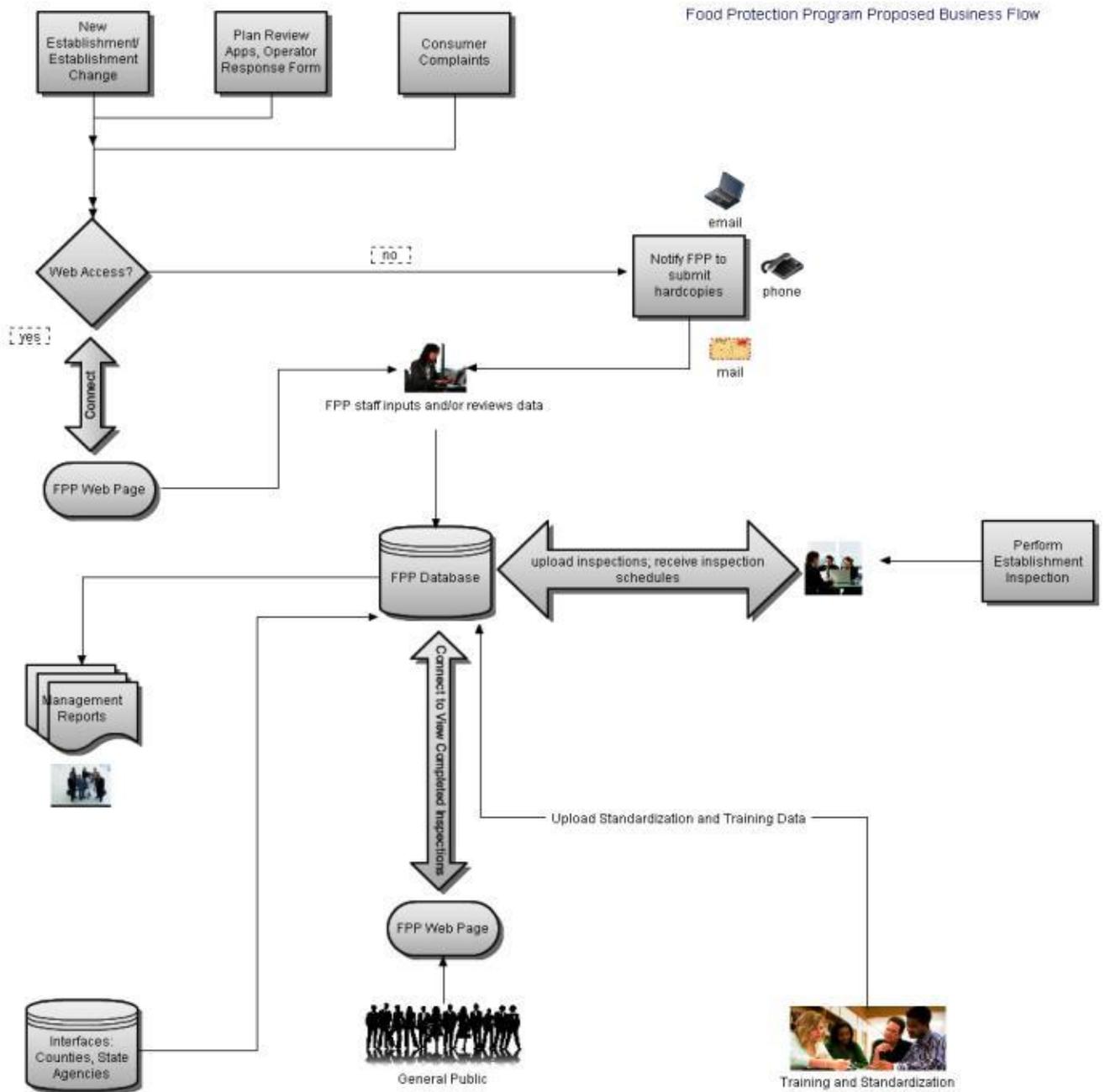
Device Name or Type	Initial Storage Estimate	Growth Rate Estimate
SQL Server Database	1.5 Gigabyte	TBD
Shared SAN Storage (overage)	1 Gigabyte	TBD

Telecommunications Load

This system will place a certain load on the telecommunication systems at ISDH. This section describes the parameters that contribute to the telecommunications load:

Department/Location	Est. No. of Users	Est. Rate of Use	Online?
Central Users (state-wide)	110	Heavy	Yes
Field Users (state-wide)	320	Low	No

Proposed Business Flow for the Food Protection Program



Information Flow

The information in the proposed business system flows from one place to another with a certain context. The following diagram displays the context of the proposed system. This diagram is a representation of how information flows from external entities to the proposed system.

Proposed System Context Diagram

