# 📋 Regulatory Document Search System

## Complete User Guide

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## 🎯 What is This System?

The Regulatory Document Search System is an AI-powered tool that helps you:

- **Upload regulatory documents** (FDA, OSHA, EPA, etc.)
- **Search documents** using natural language questions
- **Get instant AI summaries** of relevant regulations
- **Find specific requirements** quickly and accurately
- **Access information** from any device with internet

**Perfect for:** Compliance teams, regulatory professionals, legal departments, and anyone who needs to quickly find regulatory information.

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## 🚀 Getting Started

### Step 1: Access the System

1. **Open your web browser** (Chrome, Edge, Firefox, Safari)
2. **Go to:** `https://hwpc-reg.streamlit.app` *(or your specific URL)*
3. **Wait for the page to load** (may take 30 seconds on first visit)

### Step 2: Log In

1. **You'll see a login screen** with a password field
2. **Enter password:** `regulatory2024`
3. **Click "Login"**
4. **You'll see the home page** with system overview

### Step 3: Understand the Interface

**Left Sidebar Navigation:**

- 🏠 **Home** - System overview and quick search
- 📥 **Upload Documents** - Add new regulatory files

- 🔍 **Search Documents** - Find and analyze information
- 📊 **System Status** - Monitor system performance

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## 📤 How to Upload Documents

### Supported File Types:

- ✅ **PDF files** (.pdf) - Most common regulatory documents
- ✅ **Word documents** (.docx) - Modern Word format only
- ✅ **Text files** (.txt) - Plain text documents

### Step-by-Step Upload Process:

#### 1. Navigate to Upload Page

- **Click "Upload Documents"** in the left sidebar
- **You'll see the upload interface**

#### 2. Select Your Files

- **Click "Choose regulatory documents"**
- **Select one or more files** from your computer
- **File size limit:** 200MB per file
- **You can select multiple files** at once

#### 3. Review Selected Files

- **Check the file list** - you'll see file names and sizes
- **Remove any incorrect files** if needed
- **When ready, click "🚀 Process Documents"**

#### 4. Wait for Processing

- **Processing takes 30-60 seconds** per document
- **You'll see progress updates** for each file
- **AI analysis extracts:**
  - Document type (regulation, guidance, notice)
  - Regulatory agency (FDA, OSHA, EPA, etc.)
  - Key requirements and topics

- Summary and keywords

## 5. Review Results

- **Green checkmarks** = successful processing
- **Red X marks** = processing failed
- **Each processed document shows:**
  - Regulator and document type
  - Number of text chunks created
  - Key subjects and requirements
  - Brief summary

## Upload Tips:

- **Use official regulatory documents** for best results
- **Ensure PDFs contain searchable text** (not scanned images)
- **Descriptive filenames help** with organization
- **Upload documents regularly** to keep knowledge base current

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# 🔍 How to Search Documents

## Basic Search Process:

### 1. Go to Search Page

- **Click "Search Documents"** in left sidebar
- **Enter your question** in the search box

### 2. Enter Natural Language Queries

**Examples of effective searches:**

- "*What are FDA requirements for software validation?*"
- "*OSHA bloodborne pathogen training requirements*"
- "*How often must equipment be calibrated?*"
- "*What documentation is needed for device registration?*"

### 3. Use Advanced Filters (Optional)

Click " 🔧 Advanced Filters" to narrow results:

- **Regulator:** Filter by specific agency (FDA, OSHA, EPA)
- **Document Type:** Filter by document category
- **Date Range:** Search documents from specific time periods
- **Max Results:** Control how many results to show

## 4. Click " 🔍 Search"

- **System searches all uploaded documents**
- **Processing takes 2-5 seconds**
- **Results appear below the search box**

## Understanding Search Results:

### 🤖 AI Analysis Section

- **Appears first** after your search
- **Comprehensive answer** to your question
- **Key regulatory requirements** that apply
- **Most relevant documents** identified
- **Compliance considerations** highlighted

### 📑 Search Results Section

- **Lists relevant documents** with relevance percentages
- **Click any document** to expand details:
    - **Document metadata** (regulator, type, upload date)
    - **Key requirements** extracted by AI
    - **Subject areas** covered
    - **Most relevant excerpts** from the document

## Relevance Scores:

- **90-100%** = Highly relevant, directly answers your question
- **70-89%** = Very relevant, contains related information
- **50-69%** = Moderately relevant, may have useful context
- **Below 50%** = May not be directly relevant

## 💡 Search Tips & Best Practices

### Writing Effective Queries:

### ✅ Do This:

- **Be specific:** "FDA 510(k) submission requirements" vs. "FDA requirements"

- **Use complete questions:** "How often must safety training occur?" vs. "safety training"

- **Include context:** "OSHA requirements for laboratory chemical storage"

- **Use regulatory language:** "validation," "compliance," "documentation"

### ❌ Avoid This:

- **Single keywords:** "safety" (too broad)

- **Abbreviations without context:** "CFR" (specify which CFR section)

- **Vague questions:** "What do I need to do?"

### Getting Better Results:

**Start Broad, Then Narrow:**

1. **First search:** "FDA medical device requirements"

2. **Follow-up search:** "FDA Class II device premarket notification"

3. **Specific search:** "FDA 510(k) predicate device comparison"

**Use Different Phrasings:**

- If "validation requirements" doesn't work, try:
    - "verification and validation"
    - "V&V procedures"
    - "testing requirements"

**Search by Scenario:**

- "*What happens if we fail an inspection?*"

- "*How do we prepare for FDA audit?*"

- "*What records must be maintained for quality system?*"

**Leveraging AI Analysis:**

- **Read the AI summary first** - often answers your question completely

- **Use AI-suggested documents** for deeper research

- **Follow up on referenced requirements** with specific searches

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## 📊 Using System Status

**Monitor System Health:**

- **Click "System Status"** to see:
  - Total documents uploaded

  - System performance metrics

  - Available regulators and document types

  - Recent upload activity

**Troubleshooting:**

- **If searches return no results:** Check that documents are uploaded

- **If upload fails:** Verify file format and size

- **If system is slow:** Check the status page for performance issues

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## 🔧 Troubleshooting Guide

**Login Issues:**

**Problem:** Can't access the system **Solutions:**

- Verify URL is correct

- Try different browser or incognito mode

- Contact administrator for password

- Clear browser cache and cookies

**Upload Issues:**

**Problem:** Document won't upload or process **Solutions:**

- **Check file format** - must be PDF, DOCX, or TXT

- **Verify file size** - must be under 200MB

- **Ensure PDF has searchable text** - not scanned images

- **Try smaller batches** - upload fewer files at once

- **Check internet connection** - large files need stable connection

## Search Issues:

**Problem:** No search results found **Solutions:**

- **Try broader search terms** - "requirements" instead of "21 CFR 820.30"

- **Check uploaded documents** - make sure relevant docs are in system

- **Use different phrasing** - "validation" vs. "verification"

- **Remove filters** - clear advanced filters and try again

**Problem:** Search results not relevant **Solutions:**

- **Be more specific** in your query

- **Include regulator name** - "FDA," "OSHA," "EPA"

- **Use complete questions** instead of keywords

- **Try related terms** if initial search doesn't work

## General Issues:

**Problem:** System is slow or unresponsive **Solutions:**

- **Wait for processing** - AI analysis takes time

- **Refresh the page** - sometimes resolves temporary issues

- **Try different browser** - Chrome, Firefox, or Edge

- **Check internet connection** - system requires stable internet

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## 🎯 Advanced Features

### Document Management:

- **Organize by regulator** - use search filters to find specific agency documents

- **Track document dates** - use date filters for recent regulations

- **Monitor updates** - regularly check System Status for new uploads

### Team Collaboration:

- **Share search results** - copy and paste AI summaries into reports

- **Save effective queries** - keep a list of searches that work well

- **Document findings** - use search results to build compliance documentation

## Compliance Workflows:

1. **Upload new regulations** as they're published

2. **Search for requirements** relevant to your products/processes

3. **Generate compliance reports** using AI summaries

4. **Track regulatory changes** over time

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# 🔢 Mobile & Device Access

## Using on Mobile:

- **Full functionality** available on phones and tablets

- **Upload documents** from mobile device storage

- **Search and review results** on any screen size

- **Same login and password** as desktop

## Browser Recommendations:

- **Desktop:** Chrome, Firefox, Edge, Safari

- **Mobile:** Chrome, Safari, Firefox mobile

- **Internet required** - system doesn't work offline

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# 🚨 Security & Privacy

## Data Protection:

- **Password protected** - only authorized users can access

- **Secure transmission** - all data encrypted in transit (HTTPS)

- **Document privacy** - your uploaded documents are not shared

- **API security** - AI processing uses encrypted connections

## Best Practices:

- **Don't share login password** with unauthorized users

- **Log out when finished** on shared computers

- **Use secure networks** - avoid public WiFi for sensitive documents

- **Keep documents current** - remove outdated regulations

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# 📞 Getting Help

**Common Questions:**

**Q: Can I delete uploaded documents?** A: Contact your system administrator - deletion requires backend access

**Q: How long are documents stored?** A: Documents remain until manually removed by administrator

**Q: Can I download search results?** A: Copy and paste AI summaries and document excerpts as needed

**Q: How accurate are the AI summaries?** A: Very accurate for factual regulatory content, but always verify with source documents

**Q: Can I upload confidential documents?** A: Yes, documents are private to your team, but check your organization's data policies

**Contact Information:**

- **Technical Issues:** Contact your system administrator

- **Training Questions:** Reference this guide or request additional training

- **Feature Requests:** Submit through your organization's IT process

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# 🎉 Quick Reference

**Essential URLs:**

- **System Access:** `https://hwpc-reg.streamlit.app`
- **Password:** `regulatory2024`

**File Formats:**

- ✅ PDF (.pdf)

- ✅ Word (.docx)

- ✅ Text (.txt)

## Quick Actions:

- **Upload:** Documents → Choose files → Process

- **Search:** Enter question → Click Search → Review AI summary

- **Filter:** Use Advanced Filters for specific regulators or dates

## Best Search Examples:

- "*What are the FDA requirements for [your specific need]?*"

- "*OSHA standards for [your workplace situation]*"

- "*How do I comply with [specific regulation]?*"

- "*What documentation is required for [your process]?*"

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🚀 **You're ready to use the Regulatory Document Search System effectively!**

**Remember:** The AI is your assistant for finding regulatory information quickly, but always verify important requirements with the original source documents.