An Integrated System for Fulfilling DoD Dange System shility Degriffensonts



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The CCS "Core" Database System

2,500

CHEMICAL COMPOUND DICTIONARY

Tabulation of 2,500 specific chemicals within 58 compound categories

6,400

CHEMICAL DISPOSAL CODES

Disposal and compatible chemical family storage classifications for 3,200 chemicals

80,000

RATING INFORMATION OF CHEMICAL HAZARDS

A rating classification covering health, fire, reactivity, environmental, protective equipment, etc., for 3,200 chemicals

6,400

SAFE CHEMICAL

Chemical hazard and compatible family storage classifications for 3,200 chemicals

2,125,000

COMPENDIUM OF TOXIC EFFECTS OF CHEMICAL

SUBSTANCES A compilation of acute and chronic health effects for 140,000 chemicals

340,000

CHEMICAL CROSS REFERENCE **DICTIONARY**

A cross-referencing system of CAS numbers and their associated synonyms

350,000

LIST OF LISTS

Reference listings for 4,650 regulated hazardous chemicals and associated data found on 300 local, state, federal and international lists

2,500

CAMEO

Information data for responders to hazardous chemical emergencies (firefighting, health, first aid, etc.)

MATERIALS TECHNICAL

spill response and harmful effects

6,900,000

ITEM INDEX & PRODUCT DESCRIPTIONS

Unique identifiers for over 75,000 chemical product items

3,000,000

PRODUCT COMPONENTS

Specific descriptors for more than 300,000 product components

MSDS IMAGES

Mode 4 TIF multi-page images of manufacturer

375,000

265,000

MANUFACTURERS

Detailed information for

8,200 manufacturers of

chemical products

PRODUCT USER **DIRECTORY**

Dictionary listing of organizations that use each of the 75,000 unique items

> **Master Product Reference Data** (10.960.000 References)

> > 670

PROCESS CODES

Dictionary of USN, DA

and MD categories used to

track HM usage and

HW generation

413

GENERIC CATEGORIES

Product classification codes derived from federal/state commodity lists that categorize similar products

360,000

MSDS INDEX

Searchable parameters for each of our 60,000 imaged MSDSs

STORAGE CODES

1.100

Master Chemical

Reference Data

(2,915,000 References)

CHEMICAL HAZARD **RESPONSE INFORMATION SYSTEM**

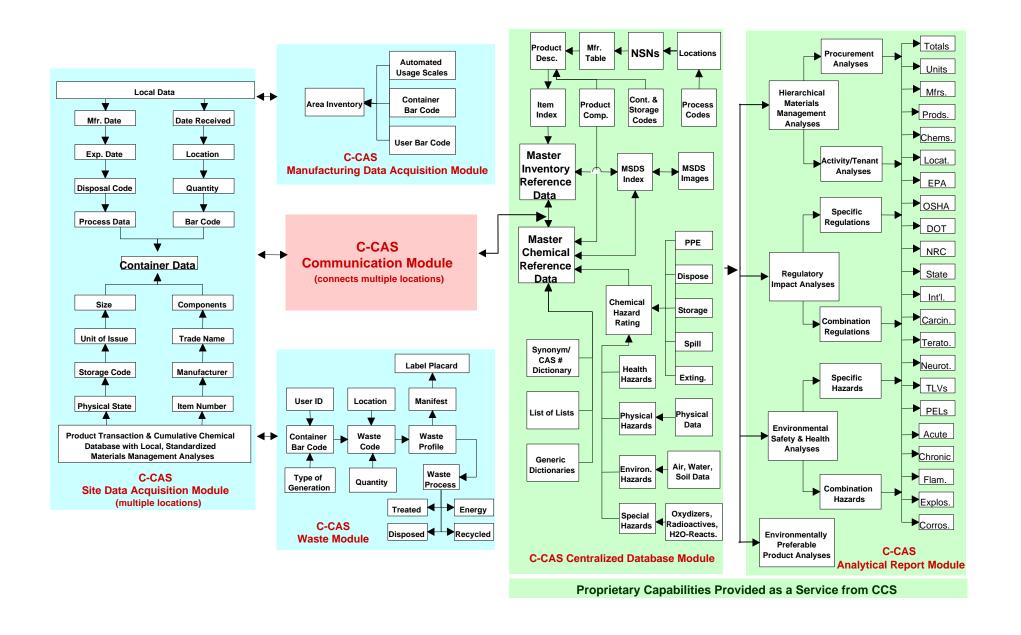
Comprehensive source of preventive, precautionary and response data

1,050

OIL & HAZARDOUS ASSISTANCE DATA SYSTEM

Information relating to

Chemical Compliance Analytical System (C-CAS)



Centralized Chemical Hazard and Environmental Management System (C-CHEMS)

Centralized and Relational Databases

Industrial Hygiene (IH-CAS)

Locations & Types
Processes
Test Results

Natural Resources

INRM Plan NEPA AR-200-3

Air (A-CAS)

Permits Processes Test Results

Green Products (GP-CAS)

Health Impact Green Rating Site-Specific

Water (W-CAS)

Permits Treatments Test Results

Toxics (T-CAS)

Locations & Types
Inspections
Test Results

Wireless
Communication
Options

Pesticides (P-CAS)

Permits Schedules Inspections

Chemical Tracking (C-CAS) or Existing System

Chemicals/Products MSDS Images/ Index Location

CCS Core Database

Commercial Products

Munitions

Chemicals

Chemical Agents

Agent Simulants

Regulations

Restoration Program

Soil GIS NJAC 7:14 CERCLA

Environmental Audits (E-CAS)

Permits & Standards Evaluation Criteria Checklists

Chemical Safety (CS-CAS)

Hazards Incompatibilities Storage

Cultural Resources

Inventory NEPA Mitigation Plans

Munitions (MACS)

MIDAS Characterization Constraints Dispositions

Green Munitions (GM-CAS)

Health Impact Green Rating Site-Specific

Storage Tanks (ST-CAS)

Types & History Permits Inspection Criteria

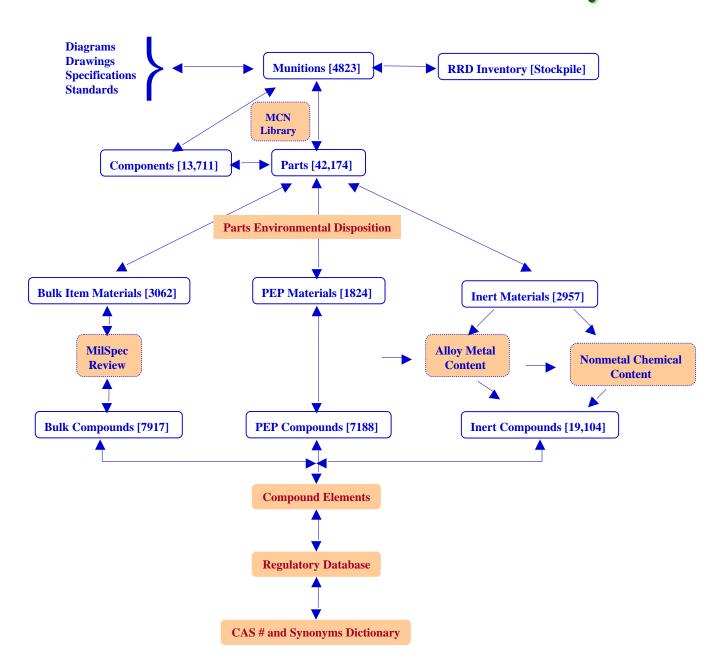
Hazardous Waste (HW-CAS)

Locations & Permits Schedules Dispositions

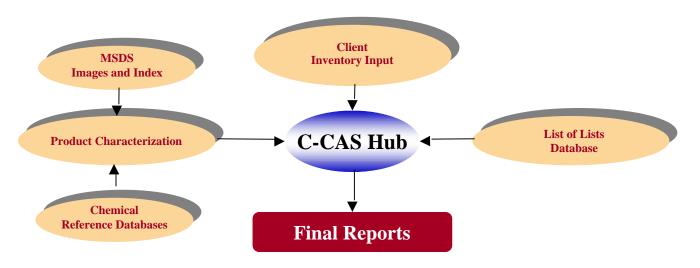
Solid Waste (SW-CAS)

Locations & Types Schedules Dispositions Secure Web Access Options

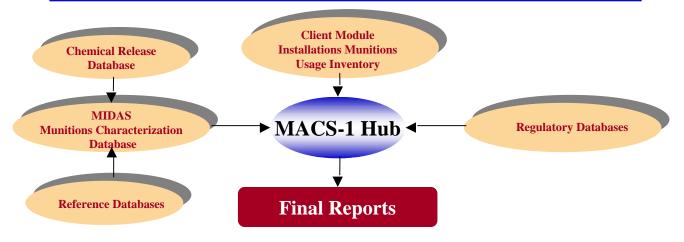
Enhanced MIDAS Database Library



Chemical Compliance Analytical System (C-CAS) Derivative Systems

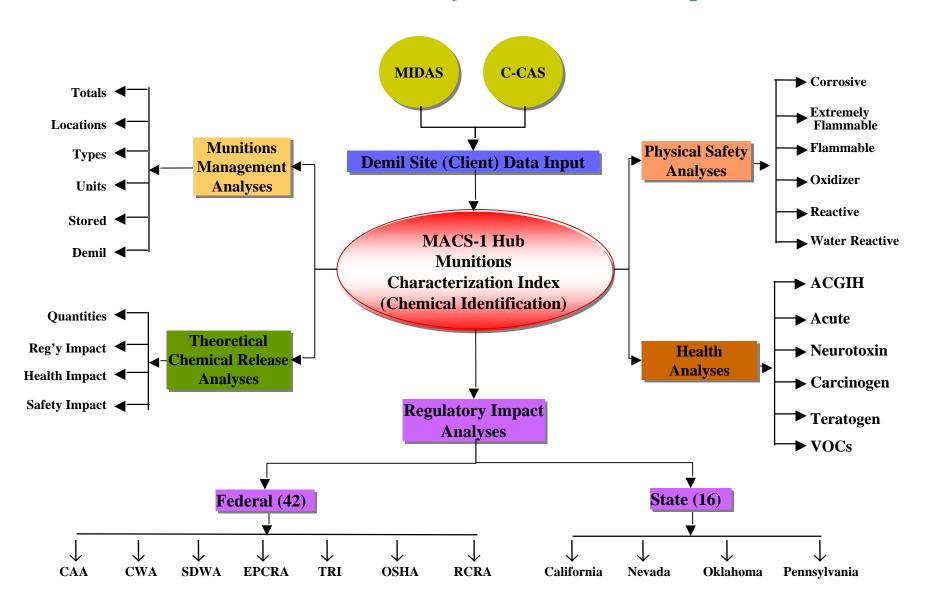


Munitions Analytical Compliance System for Demil (MACS-1)



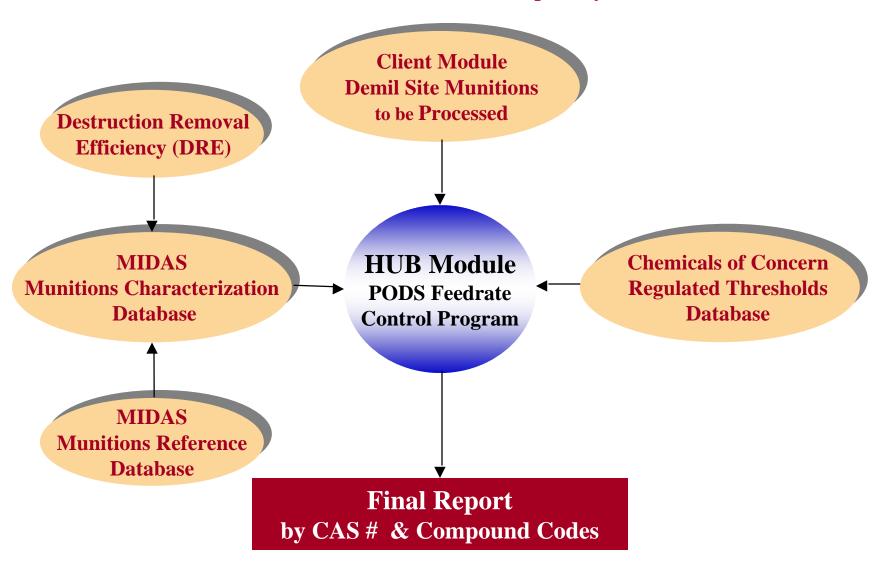
MIDAS Interface

Munitions Constituent Analytical Assessment Capabilities

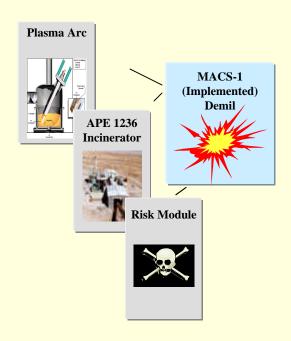


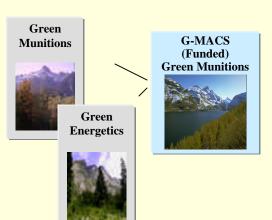
Munitions Analytical Compliance System (MACS)-1

PODS Feedrate Control Capability



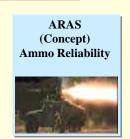
Munitions Analytical Compliance Systems (MACS)

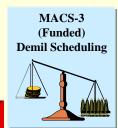


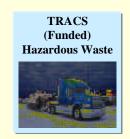








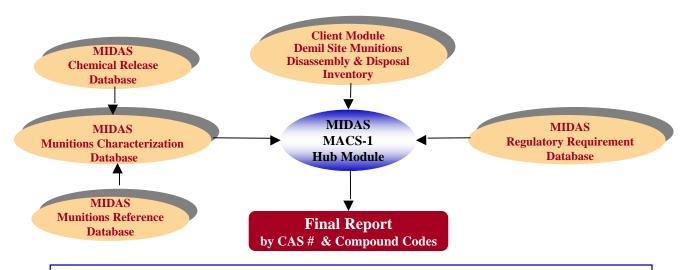




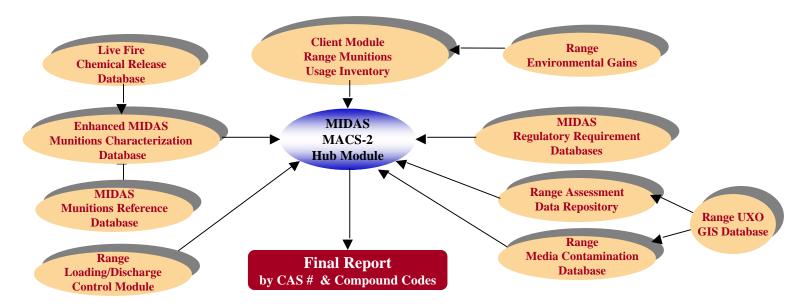


Other Potential MACS-1 Derivative Systems

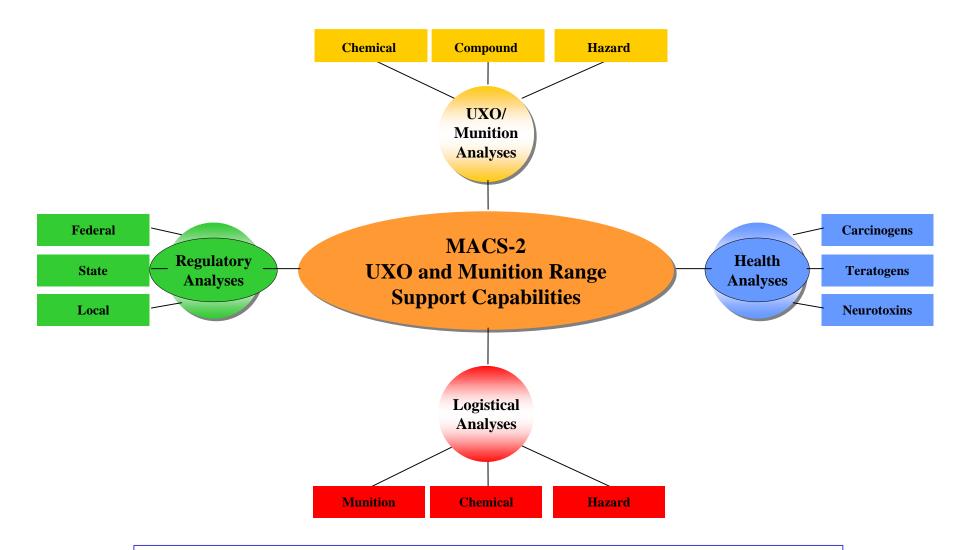
MACS-1 Demil Site Environmental Analysis Capability



MACS-2 Installation/Range Environmental Analysis Capability



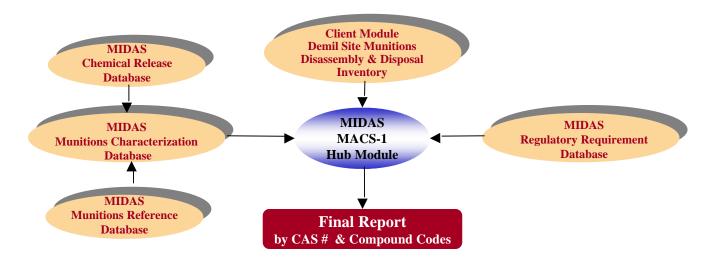
MACS-2 UXO and Munition Range Support Capabilities



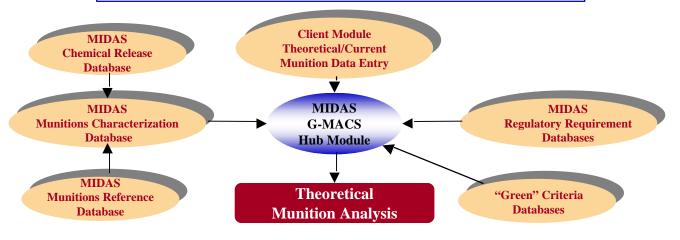
Cost Effective and Easily Implemented Best Management Practices

Other Potential MACS-1 Derivative Systems

MACS-1 Demil Site Environmental Analysis Capability

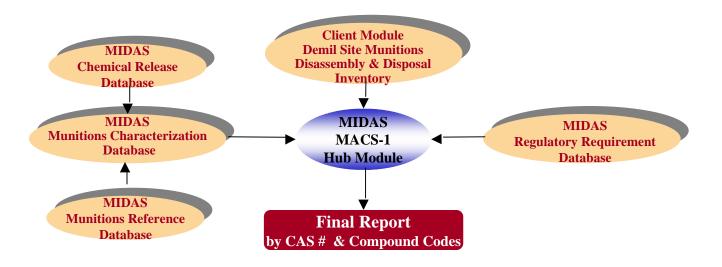


"Green Munitions" Analysis Capability (G-MACS)

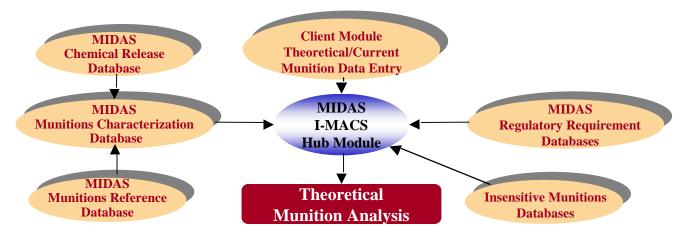


Other Potential MACS-1 Derivative Systems

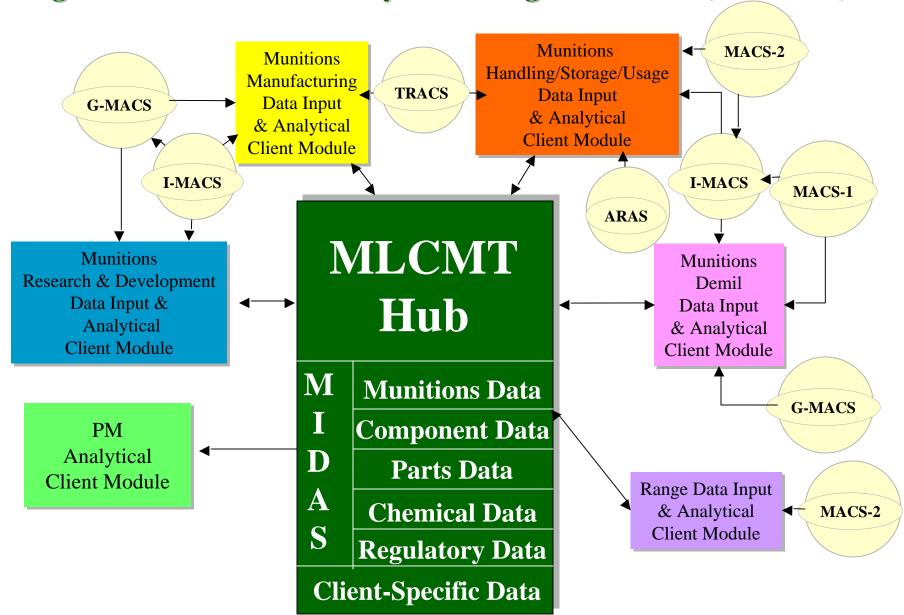
MACS-1 Demil Site Environmental Analysis Capability



Insensitive Munitions Analysis Capability (I-MACS)



Integrated Munitions Life Cycle Management Tool (MLCMT)



Environmental Pressure Points—Support Capabilities EPCRATTRI Munitions Rule Threatened and species Munitions Emissions Noise Safe Drinking Water Act **Impact Lead Bullets Areas** Maneuver Clean Water Act **Areas** Permits MMR Spillover Public Lands Withdrawals Son of Range Rule Native American Issues Future Concerns? Public Health Concerns Clean Air

Range Political Issue Support Capabilities

MACS-1 Demil Database

- 2 Years of Demil Data
- 13 Demil Sites
- Site Analyses
- National Analyses

CY02 Applications

- HAPs MACT Standard Analysis
- Perchlorate Analysis

MACS-2 Range Usage Database

- Ongoing Analytical Resource
- Information Excellence (MIDAS-based)
- Integrated Management Resource
- Outreach Resource

Key to Sustainable Range Plan and EMS

Range Sustainability Capabilities

Range Issues

CCS Range Support Capability

Environmental Compliance

MACS-2

Pollution Prevention

MACS-2, G-MACS, I-MACS

Environmental Technology

MLCMT, G-MACS, I-MACS

Acquisition

G-MACS, I-MACS, MLCMT

Conservation

MLCMT, C-CHEMS

Restoration

MACS-2