Center for Chemical Process Safety

Overview:
Process Safety Incident Database (PSID)

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Purpose: the cost effective collection and sharing of process safety incident experiences among participating companies so we can learn from the experiences of others.

Process Safety
PSID
Incident Database

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What are the goals of PSID in sharing Information?

A. -- Focus on "Key" information

B. -- Easy to input data

C. -- Searchable (Very Important)

D. -- Able to extract information easily, i.e. Reports

E. -- High Quality Information

F. -- Insures Confidentiality & Security

G. -- Accessible to those that "Need to Know"

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What are some of the ways members use the database?

- **Proactive improvements to facilities.**

- **PHA analysis.**

- **Identify high risk activities.**

- **Accident investigations**

- **Operator and engineering training.**

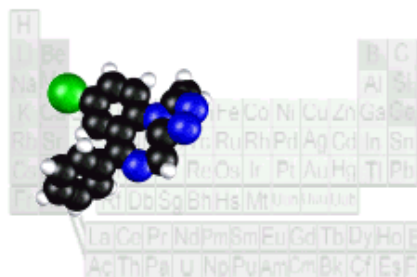- **New chemical screening resulting from acquisitions, etc..**

PSID can function as the "Voice of Experience."
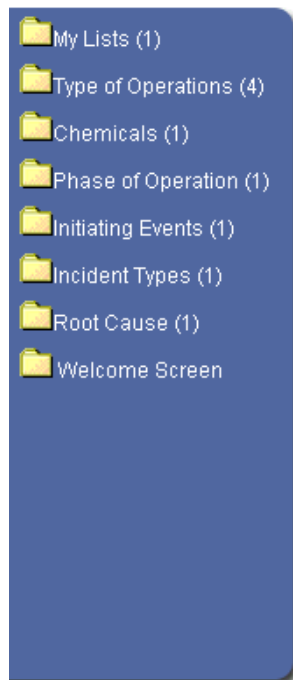
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On line instructions and tutorials

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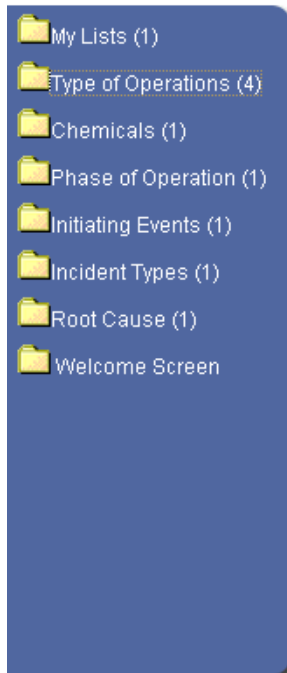**Opening screen after Members Log in**

Incidents already in Database

Your company incidents drafted, but not yet submitted for approval to CCPS Database Administrator

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Welcome To PSID

My Lists (1)	Type of Operations(4) Set As Default View
Type of Operations (4)	
Chemicals (1)	Chemicals Mfg.(5) Petroleum & Gas (92) Storage(32)
Phase of Operation (1)	Transportaion(18)
Initiating Events (1)	
Incident Types (1)	
Root Cause (1)	
Welcome Screen	

Each of these categories are broken down into several more detailed lists

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Working With "Free Search" Tool

- **"Free Search" is a <u>Key</u> tool for finding data.**

- **You can run a query for any data in the database. (picklists, dates, text, etc.)**

- **You can generate a List of Incidents that meet the query criteria.**

- **List can be given a name and saved as a Refreshable list that is updated each time you log on.**

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Reporting Information
(easily extract information)

The system contains 3 major canned reports

- 2D SUMMARY
  - KEY LEARNINGS

- CROSS TAB
  - INCIDENT REPORTS
  - FOLLOW-UP ACTIONS

- PARETO - CONTRIBUTING FACTORS

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Working With "Reports"

- **The 2D Summary Report**

    - **One of the main "analytical" reports**

    - **Reports one "field" (Incident type, phase of operation, equipment type, etc) vs. incident count.**

    - **Results may be view as either a Graph or Report.**

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2D Summary

Report

Chemicals

Contributing Factor

Contributing Factors Detail

Equipment Category

Equipment Detail

Incident Detail

Incident Type

Initiating Event

Occurs in Country Code

Phase of Operation

Source of Ignition

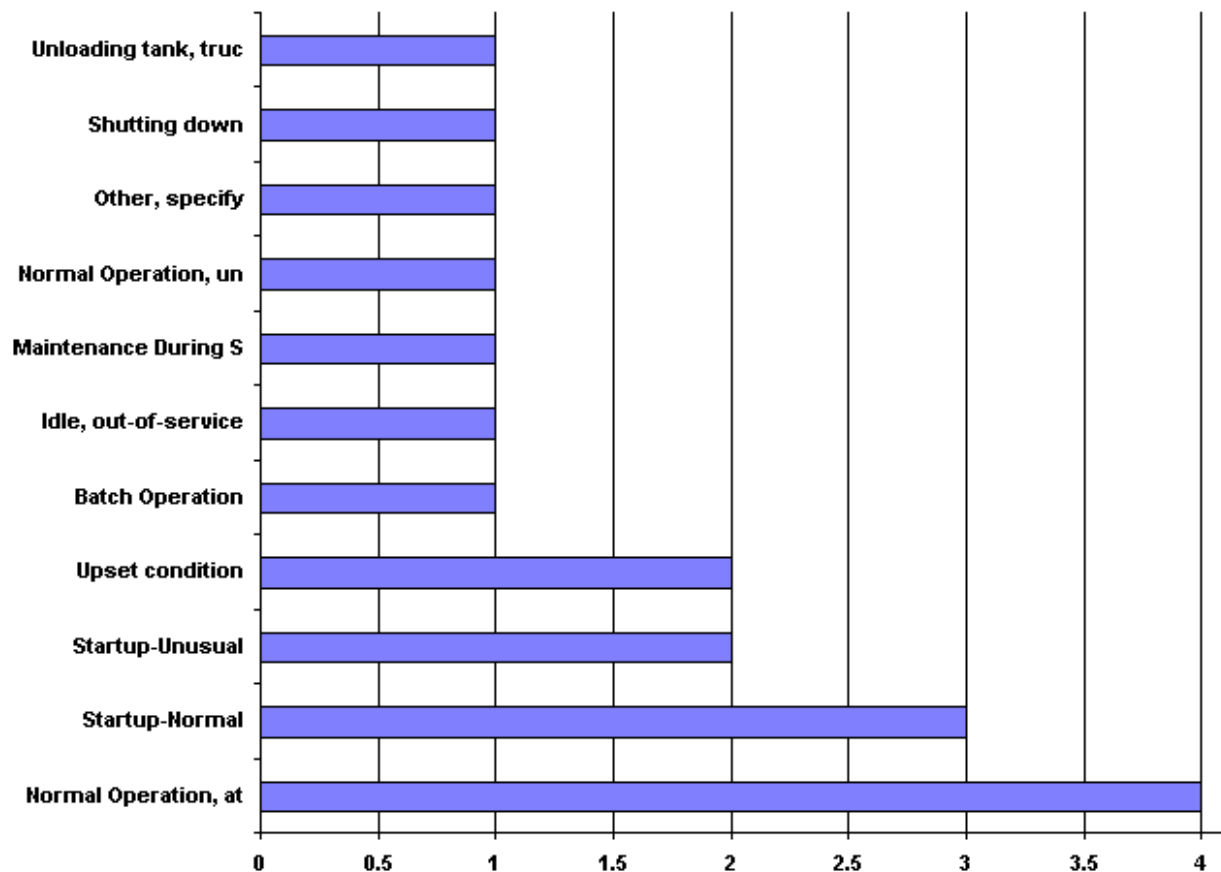Type Op Category

Type Op Detail

Type Op Type

View

Report ☼

Chart ☼

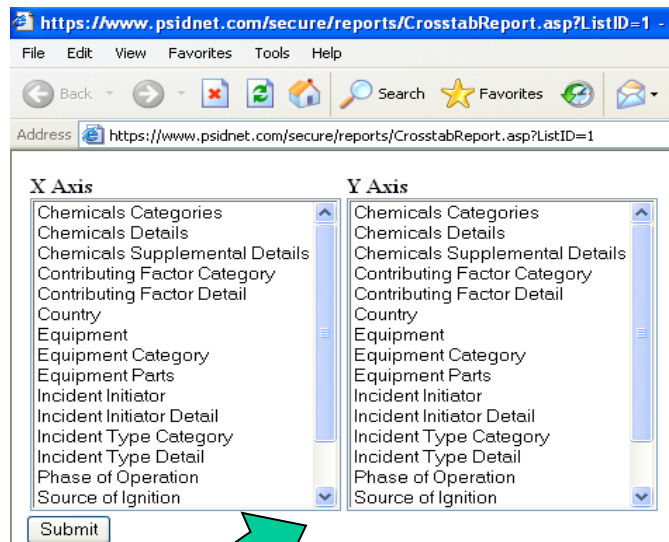# Center for Chemical Process Safety

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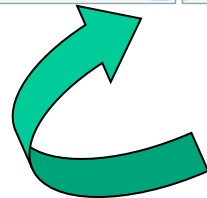
Working With "Reports"

- **Cross Tab Report:**
  - **Compares two "pick lists" field within the database and counts the number of incidents meeting BOTH criteria.**

  - **Used to quickly find the "Hot Spots" where incidents occurred most often, for example fires during start-up.**
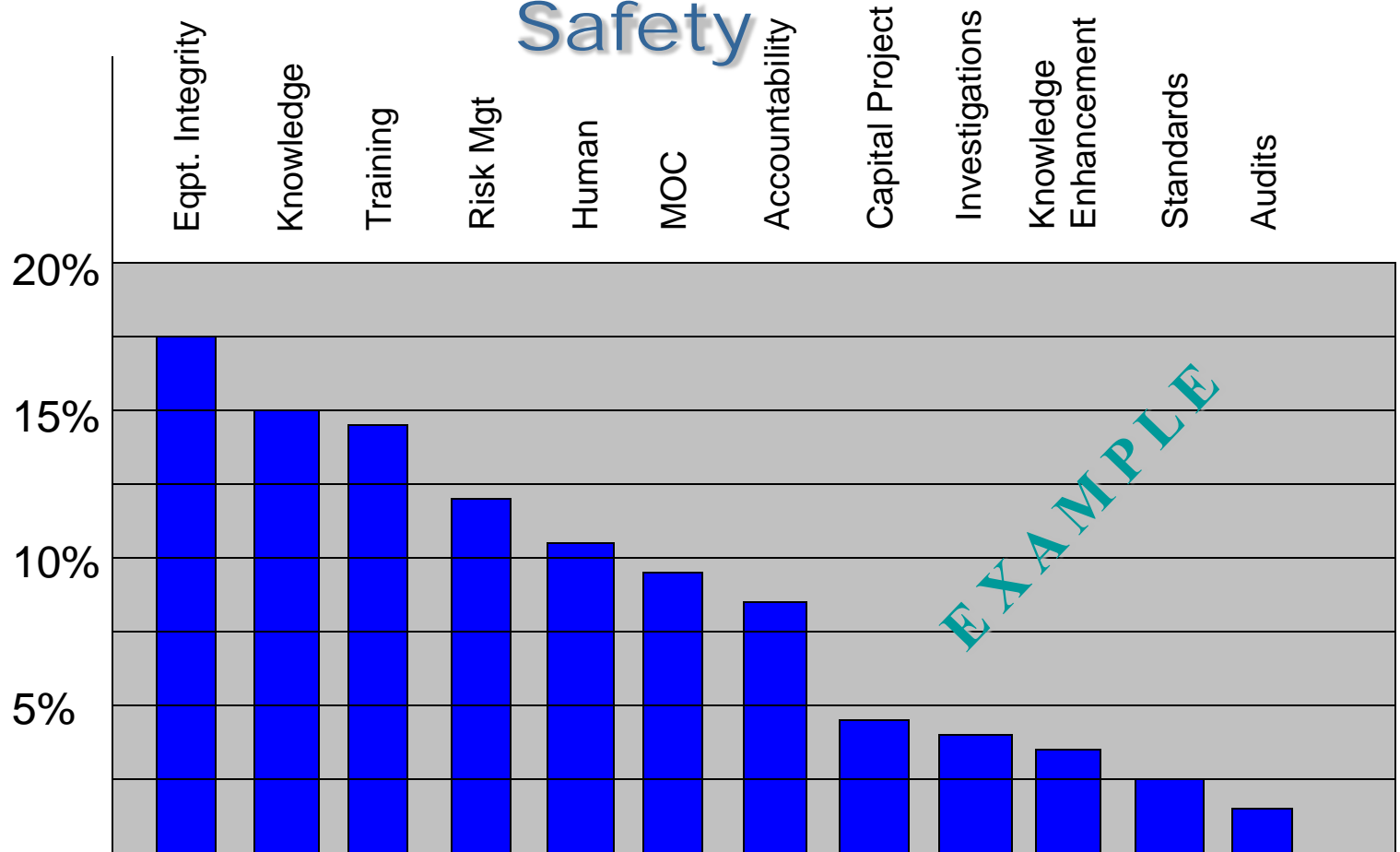
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Cross Tab

'X" Axis and "Y" Axis components

Pick one of each.

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Pareto Chart of Contributing Factors to Accidents

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Data Input Requirements
(Focus on the Critical Few)
(Required Fields)

- **Brief Description** (text)
- **Full Description** (text)
- **Lessons Learned** (text)
- **Follow-up Actions** (text)
- **Country** (Pick list)
- **Chemicals involved** (Pick)

- **Dollar Loss** (Pick)
- **Type Operation** (Pick)
- **Initiating Event** (Pick)
- **Type of Incident** (Pick)
- **Equip. Involved** (Pick)
- **Contribut'g Factors** (Pick)

- **Injury Statistics** (Yes/No)

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Data Input Requirements
(Optional Fields)

- **State or Province**   **(Pick)**
- **Date**   **(Text)**

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Example Input Screen

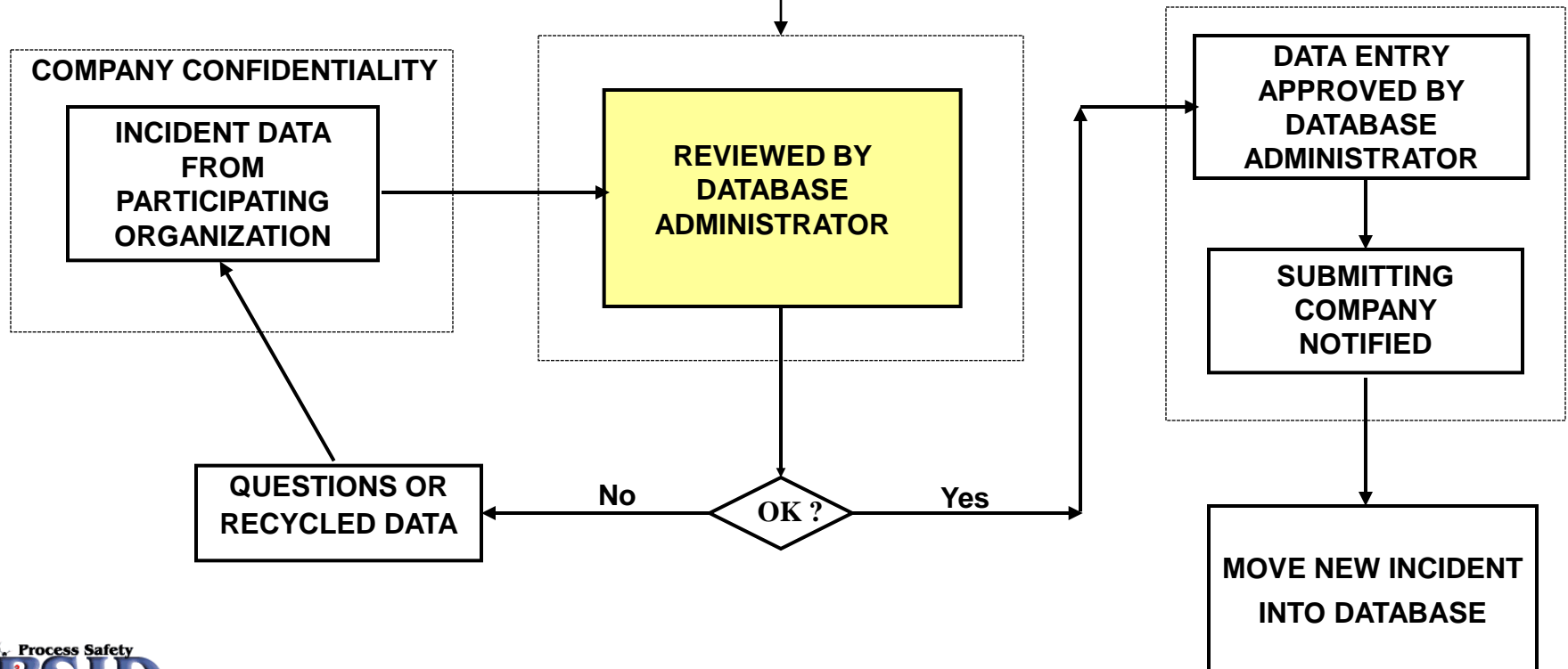Data input employs the extensive use of pull down menus

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PSID Security

DATA SUBMITTED

DATABASE ADMINISTRATOR & COMPANY CONFIDENTIALITY

SCREENED DATA TRANSFERRED

COMPANY CONFIDENTIALITY

INCIDENT DATA FROM PARTICIPATING ORGANIZATION

REVIEWED BY DATABASE ADMINISTRATOR

DATA ENTRY APPROVED BY DATABASE ADMINISTRATOR

SUBMITTING COMPANY NOTIFIED

QUESTIONS OR RECYCLED DATA

No ← OK ? → **Yes**

MOVE NEW INCIDENT INTO DATABASE

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Want to know more?

Contact Adrian Sepeda for more information, demonstration or to sign up.

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- 972-335-9252 or 214-938-2817 cell