

Center for Chemical Process Safety

Overview: Process Safety Incident Database (PSID)

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Process Safety Incident Database (PSID)

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

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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..

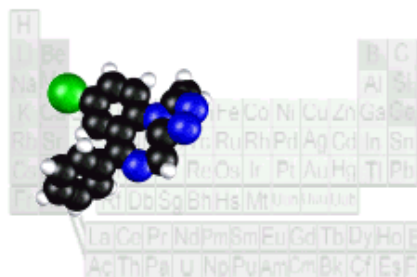
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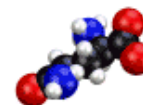
Welcome To PSID

[About PSID](#)[About CCPS](#)[Contact](#)[Events](#)[Proven Ground](#)[Links](#)[Members Only](#)

*Welcome,
Please select an area of
interest from the menu
to the left.*



State of the Art
Process Safety Technology



The **Center for Chemical Process Safety** (CCPS) facilitated the development of the **Process Safety Incident Database** to **collect** and **share** incident information and experiences among participating companies so everyone within those companies could learn from the experiences of others, and do so while minimizing corporate liability. This database is the joint property of the participating companies.

**Members Log In
with ID and Pass Word**

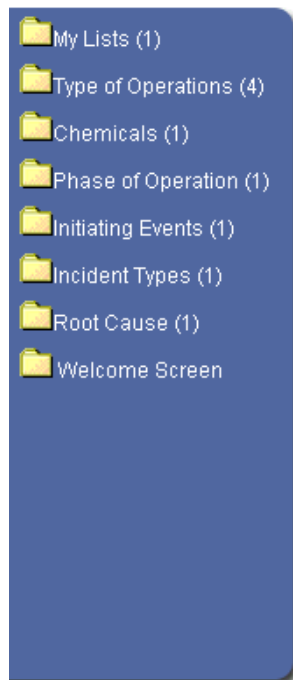


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Welcome To PSID



Welcome To The Application

[View Samples](#)
[Learn About Lists \(Powerpoint Presentation\)](#)
[Take A Tour \(Brief Overview of Site Functionality\)](#)
[Start Using PSID](#)

} On line
instructions and
tutorials

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Opening screen after Members Log in

The screenshot shows the PSID Incident Database web application. The browser window is titled "CCPS - Microsoft Internet Explorer" and the address bar shows "https://www.psidnet.com/Secure/default.asp?Action=Login". The page header includes the "Process Safety PSID Incident Database" logo, a "Welcome To PSID" message, and a "home" link. A left sidebar contains a navigation menu with items like "My Incident List (3)", "Type of Operation (4)", "Chemicals Involved (9)", "Phase of Operation (16)", "Initiating Event (7)", "Incident Type (8)", "Contributing Factors (2)", "Equipment Type (1)", "Incident Cost (5)", "Free Search", "Welcome Screen", "SysAdmin Menu", and "My Password". The main content area displays "My Incident List(3)" with a "Set As Default View" button. Below this, there are three categories: "Verified(464)", "Third Party(20)", and "All Incidents(484)". A green arrow points from the "My Incident List(3)" link in the sidebar to the "Verified(464)" category. A bracket on the right side of the categories points to the text "Incidents already in Database". The Windows taskbar at the bottom shows the "start" button, open applications including "Microsoft Outlook", "Microsoft Excel - C...", "9-September", "About PSID_5.ppt", and "CCPS - Microsoft I...", along with the system clock showing "7:54 PM".

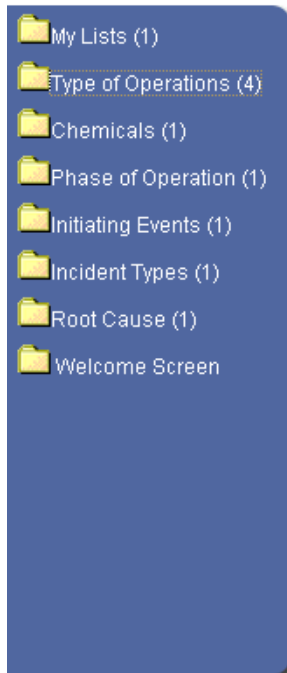
Incidents already in Database

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

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Welcome To PSID



Type of Operations(4)

Set As Default View

Chemicals Mfg.(5)

Petroleum & Gas (92)

Storage(32)

Transportation(18)

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 Key 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.

Center for Chemical Process Safety 2D Summary

Report	View
Chemicals	
Contributing Factor	
Contributing Factors Detail	Report 
Equipment Category	Chart 
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	

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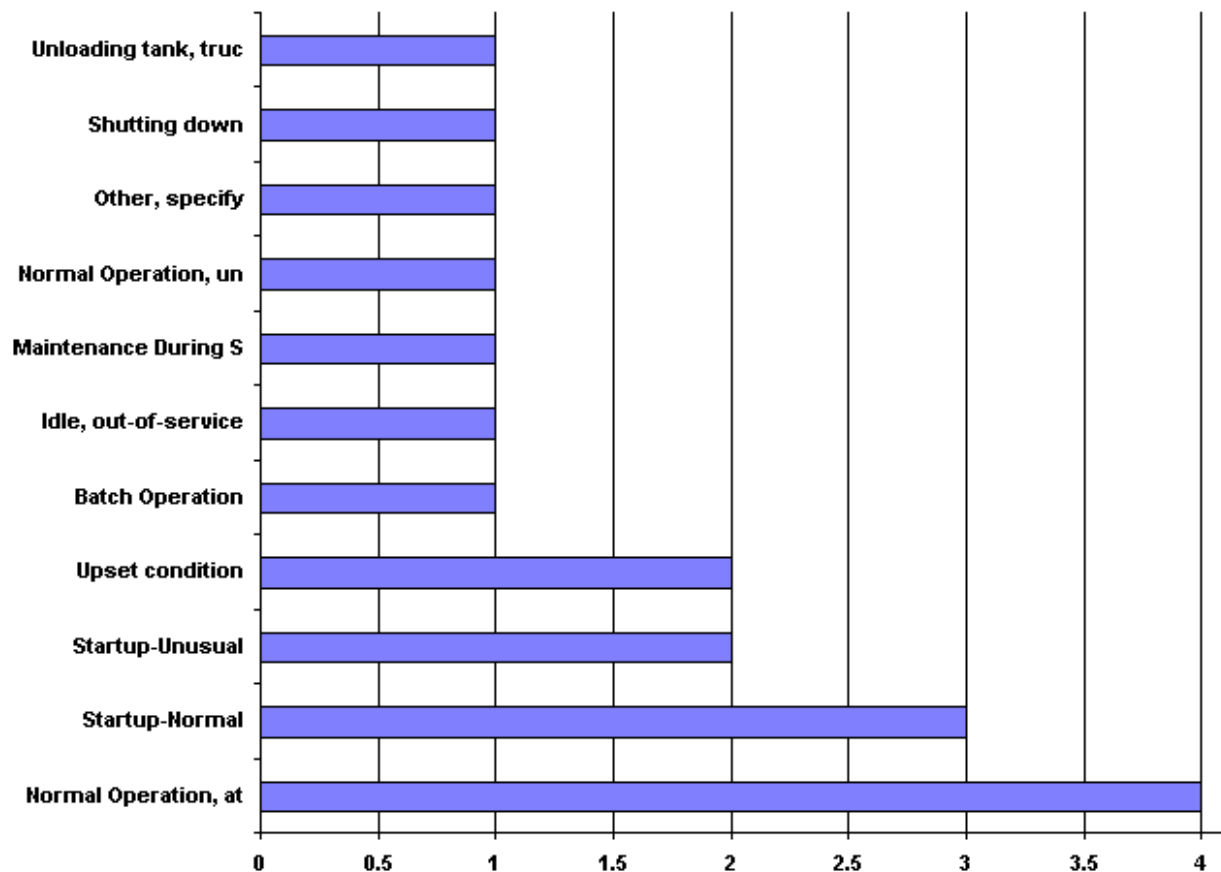
2D Summary

-

Phase of Operation : Incident Count

Date: 10/23/99

Time: 1:25:47 PM



EXAMPLE

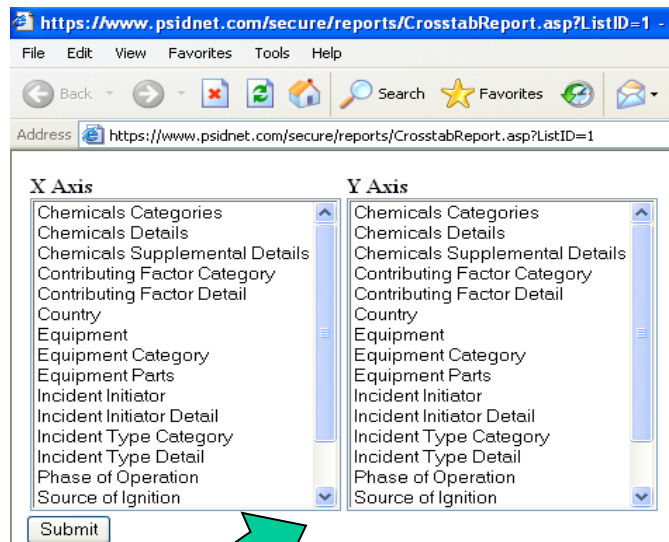
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Working With “Reports”

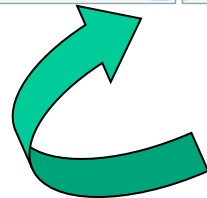
- **Cross Tab Report:**
 - Compares two “pick lists” field within the database and counts the number of incidents meeting **BOTH** criteria.
 - Used to quickly find the “Hot Spots” where incidents occurred most often, for example fires during start-up.

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Cross Tab



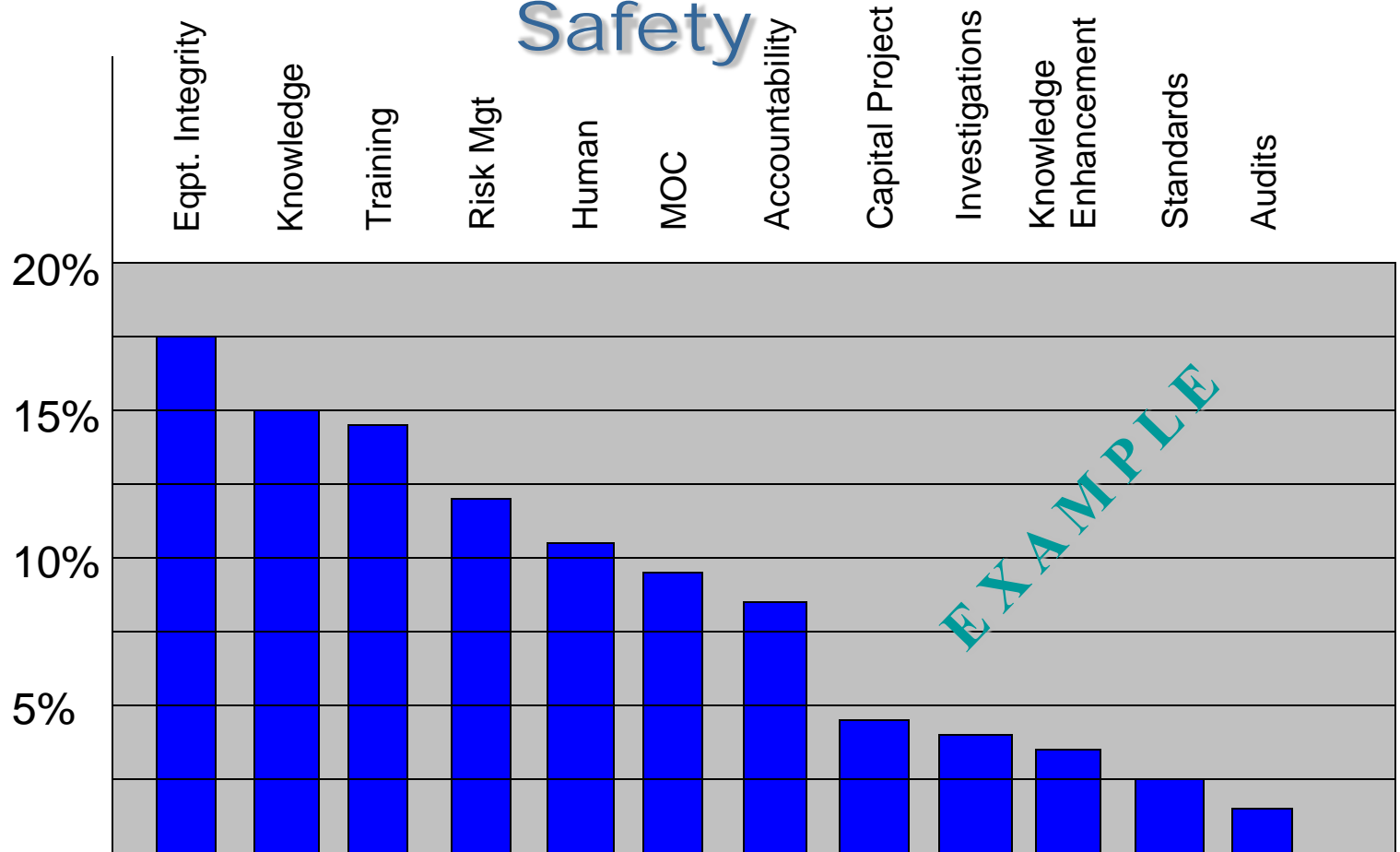
The screenshot shows a web browser window with the address bar displaying <https://www.psidnet.com/secure/reports/CrosstabReport.asp?ListID=1>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains buttons for Back, Forward, Stop, Home, Search, Favorites, and a Refresh button. The main content area is titled "X Axis" and "Y Axis", each with a list of categories. The "X Axis" list includes: Chemicals Categories, Chemicals Details, Chemicals Supplemental Details, Contributing Factor Category, Contributing Factor Detail, Country, Equipment, Equipment Category, Equipment Parts, Incident Initiator, Incident Initiator Detail, Incident Type Category, Incident Type Detail, Phase of Operation, and Source of Ignition. The "Y Axis" list includes: Chemicals Categories, Chemicals Details, Chemicals Supplemental Details, Contributing Factor Category, Contributing Factor Detail, Country, Equipment, Equipment Category, Equipment Parts, Incident Initiator, Incident Initiator Detail, Incident Type Category, Incident Type Detail, Phase of Operation, and Source of Ignition. A "Submit" button is located at the bottom left of the form.



‘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

The screenshot shows a web browser window titled "Incident Attributes - Microsoft Internet Explorer". The page header includes the "CCPS" logo (Center for Chemical Process Safety, An AIChE Industry Technology Alliance) and the "Process Safety PSID Incident Database" logo. A "close this window" button is in the top right. The main content area has a heading "Please Select an Initiating Event Category" above a pull-down menu. The menu is open, showing options: "(nothing selected)", "Design Related", "Embrittlement", "Maintenance", "Metal Fatigue", "Operations Related", "Other Factors", and "Vibration". Below the menu are "Cancel", "AddMore", and "Save" buttons. A text field below the menu contains the text "Metal Fatigue\Metal Fatigue". The Windows taskbar at the bottom shows the "start" button.

Incident Attributes - Microsoft Internet Explorer

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An AIChE Industry
Technology Alliance

Process Safety
PSID
Incident Database

close this window

Please Select an Initiating Event Category

(nothing selected)

(nothing selected)

Design Related

Embrittlement

Maintenance

Metal Fatigue

Operations Related

Other Factors

Vibration

Cancel AddMore Save

Metal Fatigue\Metal Fatigue

start

Data input employs the extensive use of pull down menus

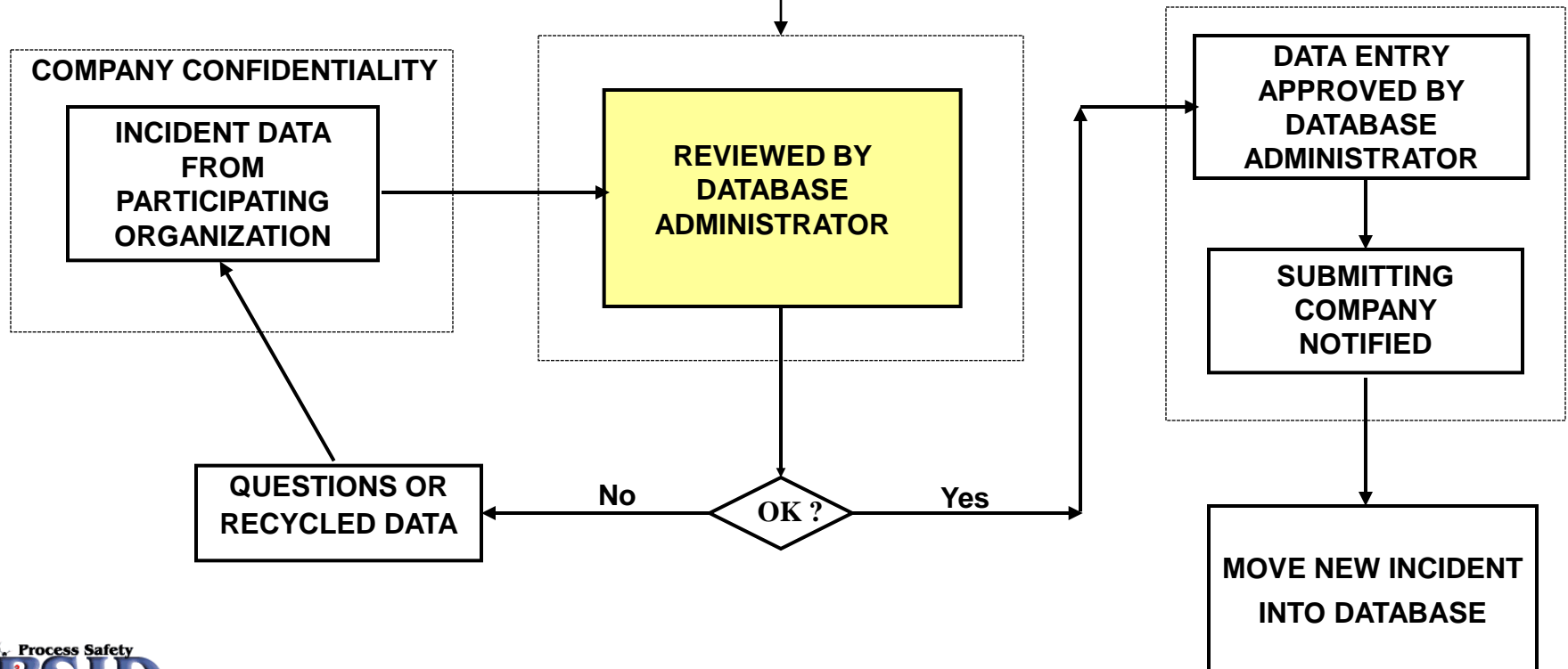
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PSID Security

DATA SUBMITTED

DATABASE ADMINISTRATOR &
COMPANY CONFIDENTIALITY

SCREENED DATA
TRANSFERRED



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Want to know more?

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

- CCPS_PSID@aiche.org
- 972-335-9252 or 214-938-2817 cell