

Disrupt Fentanyl Supply Chains: Illicit Synthetic Opioid (ISO) Determination Engine

Section 004 DAEN-690 (Spring 2025)

Team ISO DETERMINERS



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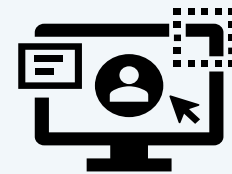
AGENDA



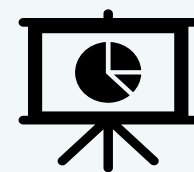
Problem / Solution Overview



Data



Engineering



Results



Summary

PROBLEM OVERVIEW

Risk Weighting Factors Are Inflexible



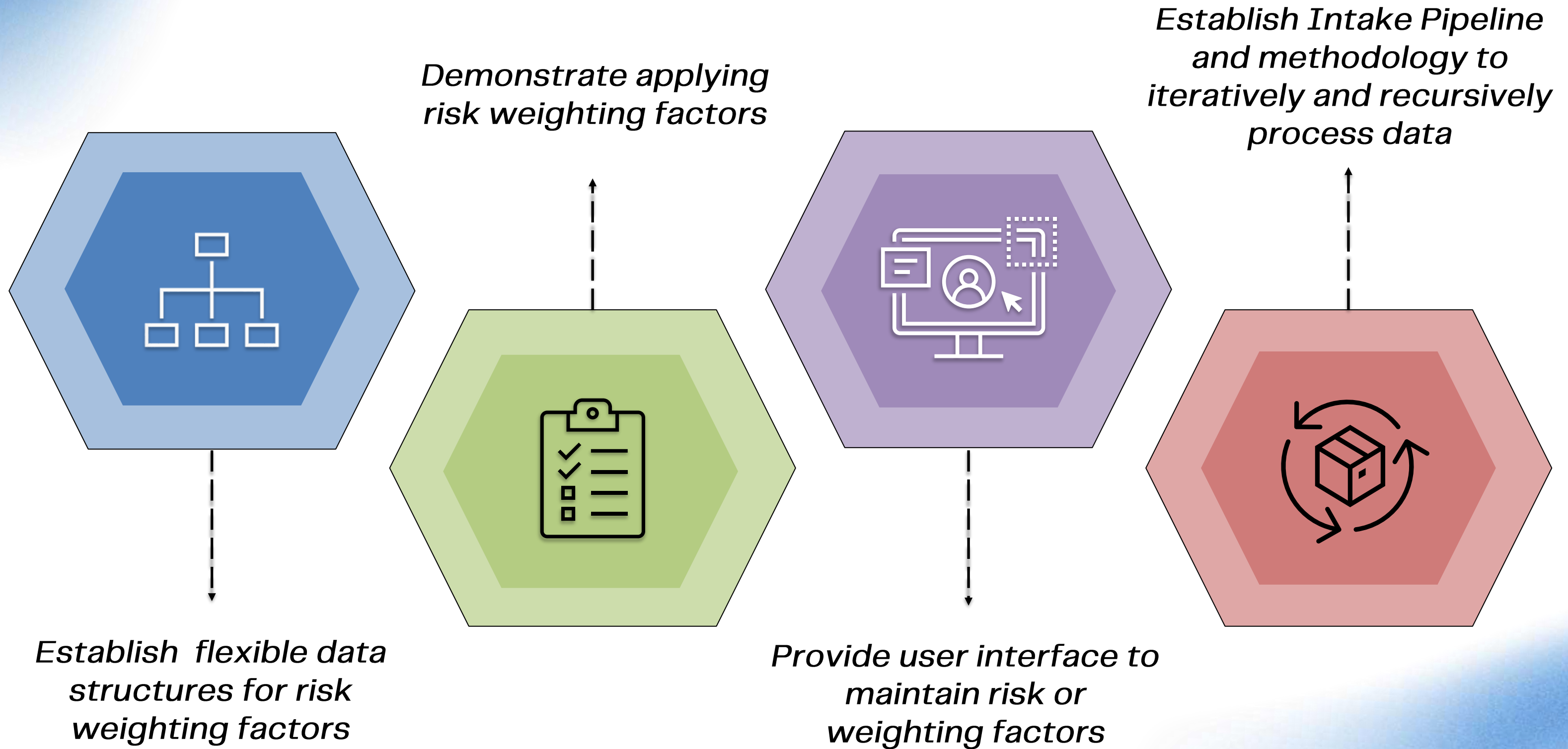
- Risk weighting factors are not flexible enough to evolve as needs change
- Tagging risk weighting factors to substances and companies is manually-intensive



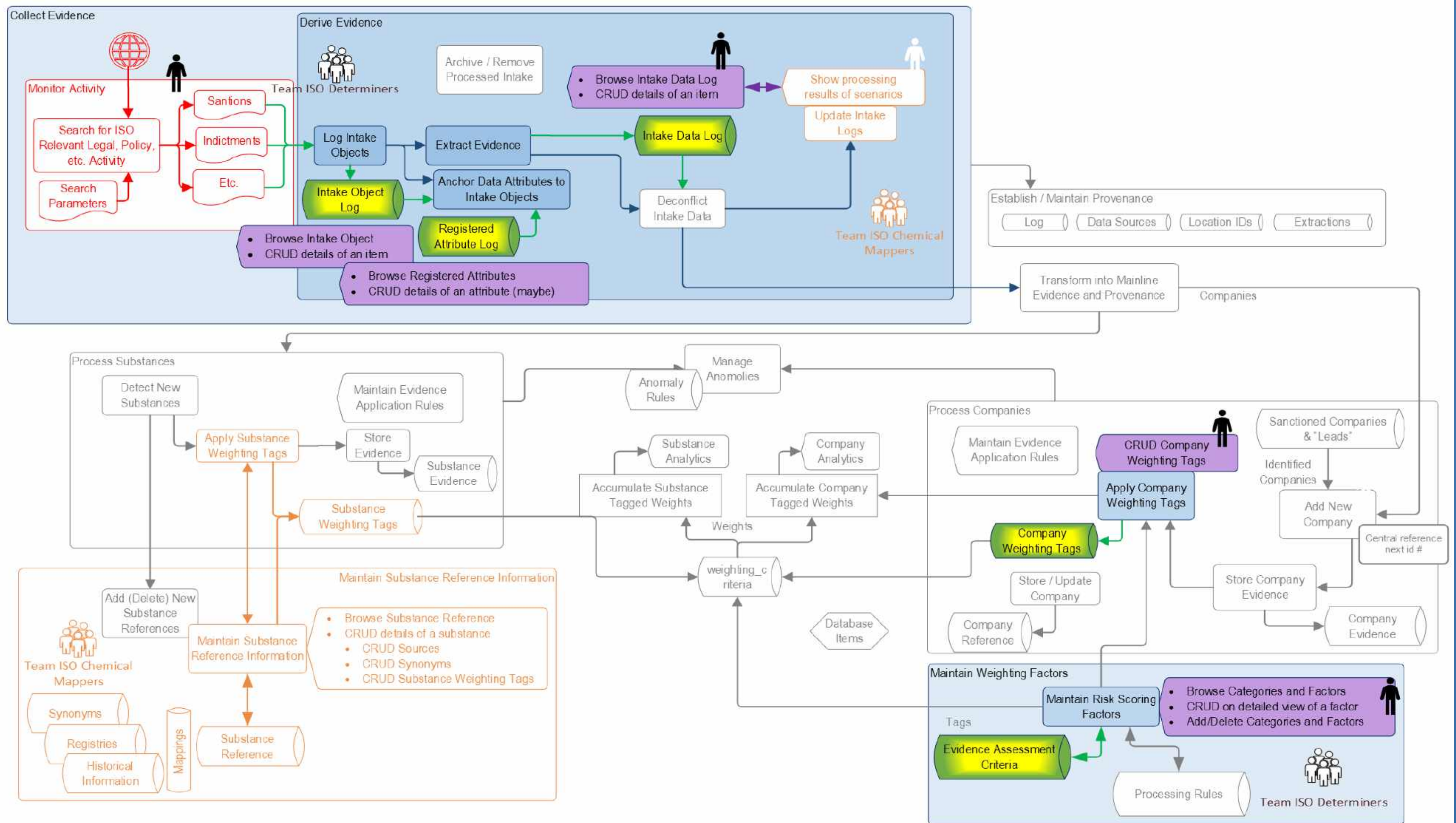
New Evidence Is Hard to Integrate

- Collecting sanctions & indictments is still manually-intensive
- New evidence cannot flow directly into the baseline
 - Iterative processing is required
 - Derived evidence must be traced to its source
 - Conflicts (e.g., duplicates) must be resolved first
 - Not all types of evidence (e.g., people, financial) are established in the baseline evidence yet

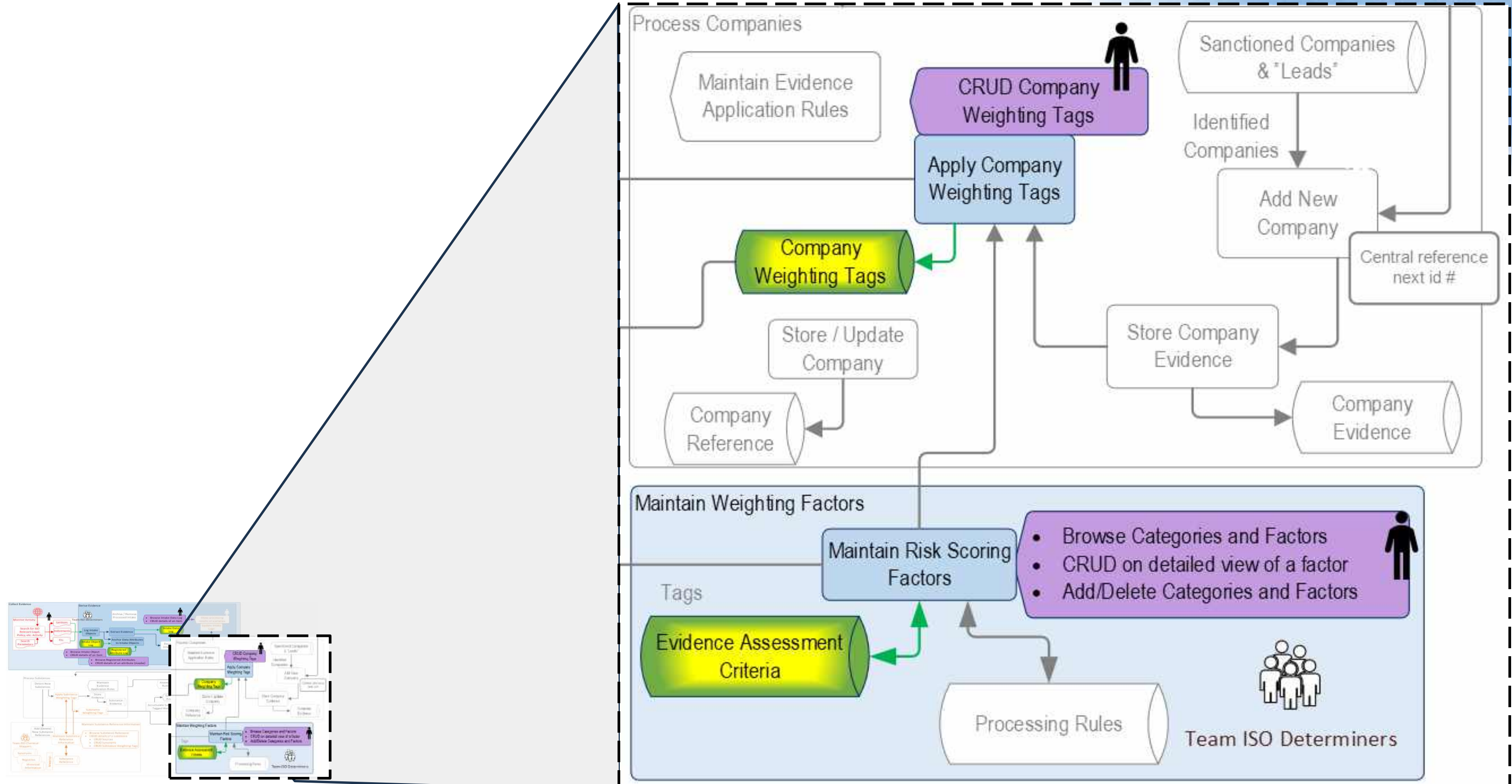
SOLUTION OVERVIEW



SOLUTION SCHEMATIC



Project Objective 1: Maintain Weighting Factors



■ STARTING POINTS

ID	Criteria	Weight
1	Remarks	Manual
2	Corporate Association with Government	500
3	Government Association with Corporation	500
4	Found by Marpu	350
5	Flagged by Matt / Andy	350
6	Sanctioned Company List	150
7	Other Illicit Drug	70
8	Flagrant	20
9	Advertisement	20
10	On TraCCC Registered List	10
11	TraCCC Alias	10
12	On Leads List	10
13	Derived from Native	9
14	Derived from Image	7
15	Multiple Sources	7
16	Corporate Alias	5
17	On TraCCC Unidentified List	5
18	No Tier	0
19	Tier 1	200
20	Tier 2	150
21	Tier 3	100
22	Tier 4	50

README: Weighted Scoring Model for DEA SSL Chemicals

Objective

This scoring model uses data from sanctions, government subsidies, and complicity indicators to assess and rank chemicals based on risk factors. The goal is to produce a weighted score for each chemical that reflects its relative importance based on these risk factors.

Step 1: Define Risk Parameters

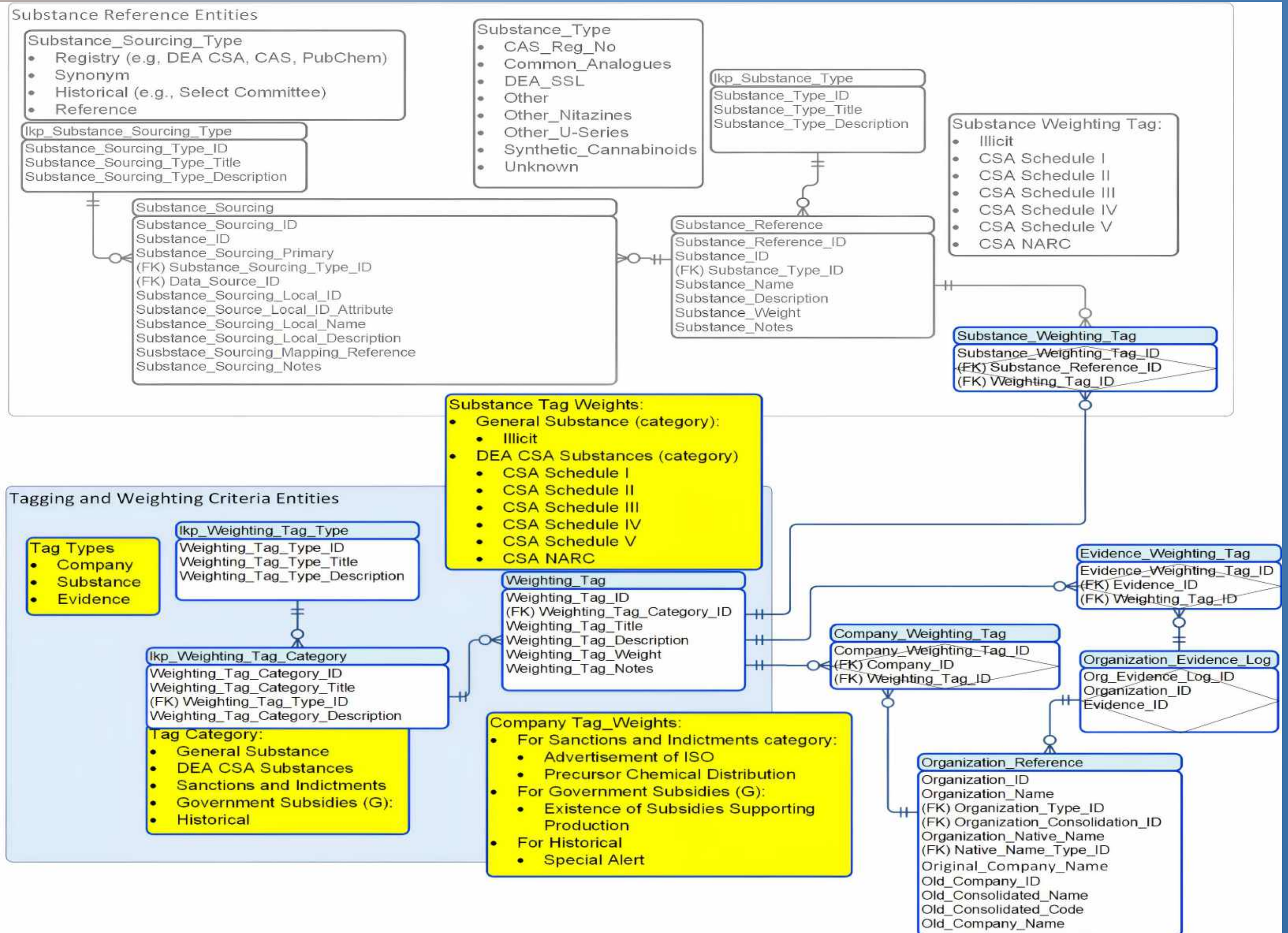
We will assess each chemical based on three primary parameters:

1. **Sanctions and Indictments (S)**
2. **Government Subsidies (G)**
3. **Complicity Indicators (C)**

Each parameter is scored independently, with sub-factors that allow for more precise scoring based on specific types of sanctions, subsidies, and indicators of complicity.

Weight Scoring Model from Select Committee Staff

DATA MODEL



Weighting Factor Data Tables

Weighting_Tag_Type_ID	Weighting_Tag_Type_Title	Weighting_Tag_Category_ID	Weighting_Tag_Category_Title	Weighting_Tag_Type_ID	Pull from Weighting Tag Type (Joined)
1	Company	1	General Substance	2	Substance
2	Substance	2	DEA CSA Substances	2	Substance
3	Evidence	3	General Company	1	Company
4	Government	4	Sanctions and Indictments	1	Company
		5	Government Subsidies (G)	1	Company
		6	Complicity Indicators	1	Company
		7	Historical	1	Company
		8	Others	2	Substance

Weighting_Tag_ID	(FK) Weighting_Tag_Category_ID	Weighting Tag Category (Joined from Weighting Tag Category)	Tag Type (Joined from Weighting Tag Category)	Weighting Tag Title	Weighting Tag Weight	Weighting Tag Notes
1	3	General Company	Company	Advertisement of ISO	10	Applicable to only companies
2	4	Sanctions and Indictments	Company	Precursor Chemical Distribution	15	Applicable to only companies
3	4	Sanctions and Indictments	Company	Existence of Subsidies Supporting Production	12	Applicable to only companies
4	4	Sanctions and Indictments	Company	Attempted Distribution of Synthetic Opioids	10	Applicable to only companies
5	4	Sanctions and Indictments	Company	Precursor Chemical Distribution	15	Applicable to only companies
6	4	Sanctions and Indictments	Company	Specific Opioid Importation Attempts (e.g., Protonitazene)	12	Applicable to only companies
7	4	Sanctions and Indictments	Company	Bitcoin Wallet Associations (e.g., for money laundering)	8	Applicable to only companies
8	4	Sanctions and Indictments	Company	Money Laundering Involvement	5	Applicable to only companies
9	5	Government Subsidies (G)	Company	Existence of Subsidies Supporting Production	10	Applicable to only companies
10	5	Government Subsidies (G)	Company	Promotion of Export Industries for Chemicals	8	Applicable to only companies
11	5	Government Subsidies (G)	Company	Lack of Enforcement Support Funding	5	Applicable to only companies
12	6	Complicity Indicators	Company	Weak Regulatory Framework	15	Applicable to only companies
13	6	Complicity Indicators	Company	Minimal Enforcement Actions	10	Applicable to only companies
14	6	Complicity Indicators	Company	Failure to Uphold International Agreements	12	Applicable to only companies
15	6	Complicity Indicators	Company	Evidence of Cooperation with Traffickers	20	Applicable to only companies
16	6	Complicity Indicators	Company	Favorable Market Access for Chemical Producers	8	Applicable to only companies
17	7	Historical	Company	Special Alert	10	Applicable to only companies
18	1	General Substance	Substance	Illicit	10	Applicable to only substances
19	2	DEA CSA Substances	Substance	CSA Schedule I	20	Applicable to only substances
20	2	DEA CSA Substances	Substance	CSA Schedule II	15	Applicable to only substances
21	2	DEA CSA Substances	Substance	CSA Schedule III	10	Applicable to only substances
22	2	DEA CSA Substances	Substance	CSA Schedule IV	5	Applicable to only substances
23	2	DEA CSA Substances	Substance	CSA Schedule V	2	Applicable to only substances
24	2	DEA CSA Substances	Substance	CSA NARC	2	Applicable to only substances
25	8	Others	Substance	Others?	5	Applicable to only substances

Weighting Factors Applied to Companies

Organization_Weighting_Tag_ID	(FK) Company_ID	Company Name (Joined)	(FK) Weighting_Tag_ID	Weighting Tag Title (Joined)	Weighting Tag Category (Joined)	Weighting_Tag_Type (Joined)	Weighting_Tag_Weight (Joined)																																												
1	1	Shanghai Lanjing BioTechnology Co Ltd(2012)	1	Advertisement of ISO	General Company	Company	10																																												
2	22	ShijiazhuangZulei Commerce Co Ltd./ShijiazhuangZu Lei Trading Co Ltd.(2005)	2	Precursor Chemical Distribution	Sanctions and Indictments	Company	15																																												
3	22	ShijiazhuangZulei Commerce Co Ltd./ShijiazhuangZu Lei Trading Co Ltd.(2005)	3	Existence of Subsidies Supporting Production	Sanctions and Indictments	Company	12																																												
4	55	Wuhan Fantaike Pharmaceutical Technology Co Ltd	4	Attempted Distribution of Synthetic Opioids	Sanctions and Indictments	Company	10																																												
5	55	Wuhan Fantaike Pharmaceutical Technology Co Ltd	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15																																												
6	100	Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)	6	Specific Opioid Importation Attempts (e.g., Protonitazene)	Sanctions and Indictments	Company	12																																												
7	100	Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)	7	Bitcoin Wallet Associations (e.g., for money laundering)	Sanctions and Indictments	Company	8																																												
8	100	Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)	8	Money Laundering Involvement	Sanctions and Indictments	Company	5																																												
9	33	Chiyang Biological Technology Co Ltd.(2015)	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15																																												
10	20	Hangzhou Xiangshengjie Import & Export Co Ltd.(revoked)	6	Specific Opioid Importation Attempts (e.g., Protonitazene)	Sanctions and Indictments	<table><tr><th>Company</th><th>Count of Weighting_Tag_Weight</th><th>Sum of Weighting_Tag_Weight</th></tr><tr><td>Chiyang Biological Technology Co Ltd.(2015)</td><td>1</td><td>15</td></tr><tr><td>Dalian Pinmai Biotechnology Co Ltd.(cancelled)</td><td>1</td><td>10</td></tr><tr><td>Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)</td><td>4</td><td>45</td></tr><tr><td>Hangzhou Xiangshengjie Import & Export Co Ltd.(revoked)</td><td>2</td><td>24</td></tr><tr><td>Hebei MoSu Trade Co Ltd</td><td>1</td><td>10</td></tr><tr><td>Hunan Longxianng Runhui Trading Co Ltd</td><td>1</td><td>10</td></tr><tr><td>Lante Technology Co Ltd.(1997)</td><td>1</td><td>12</td></tr><tr><td>Shanghai Chemisci Technology Co Ltd</td><td>1</td><td>8</td></tr><tr><td>Shanghai Lanjing BioTechnology Co Ltd(2012)</td><td>1</td><td>10</td></tr><tr><td>Shanghai Potentpharm Co Ltd</td><td>1</td><td>10</td></tr><tr><td>Shanghai Zerun BioTechnology Co Ltd.(2003)(revoked)</td><td>1</td><td>15</td></tr><tr><td>Shijiazhuang Zulei Commerce Co Ltd./Shijiazhuang Zu Lei Trading Co Ltd.(2005)</td><td>2</td><td>27</td></tr><tr><td>Wuhan Fantaike Pharmaceutical Technology Co Ltd</td><td>2</td><td>25</td></tr><tr><td>Grand Total</td><td>19</td><td>221</td></tr></table>	Company	Count of Weighting_Tag_Weight	Sum of Weighting_Tag_Weight	Chiyang Biological Technology Co Ltd.(2015)	1	15	Dalian Pinmai Biotechnology Co Ltd.(cancelled)	1	10	Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)	4	45	Hangzhou Xiangshengjie Import & Export Co Ltd.(revoked)	2	24	Hebei MoSu Trade Co Ltd	1	10	Hunan Longxianng Runhui Trading Co Ltd	1	10	Lante Technology Co Ltd.(1997)	1	12	Shanghai Chemisci Technology Co Ltd	1	8	Shanghai Lanjing BioTechnology Co Ltd(2012)	1	10	Shanghai Potentpharm Co Ltd	1	10	Shanghai Zerun BioTechnology Co Ltd.(2003)(revoked)	1	15	Shijiazhuang Zulei Commerce Co Ltd./Shijiazhuang Zu Lei Trading Co Ltd.(2005)	2	27	Wuhan Fantaike Pharmaceutical Technology Co Ltd	2	25	Grand Total	19	221
Company	Count of Weighting_Tag_Weight	Sum of Weighting_Tag_Weight																																																	
Chiyang Biological Technology Co Ltd.(2015)	1	15																																																	
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Wuhan Fantaike Pharmaceutical Technology Co Ltd	2	25																																																	
Grand Total	19	221																																																	
11	60	Hebei MoSu Trade Co Ltd	9	Existence of Subsidies Supporting Production	Government Subsidies (G)																																														
12	58	Shanghai Zerun BioTechnology Co Ltd.(2003)(revoked)	12	Weak Regulatory Framework	Complicity Indicators																																														
13	75	Dalian Pinmai Biotechnology Co Ltd.(cancelled)	13	Minimal Enforcement Actions	Complicity Indicators																																														
14	99	Lante Technology Co Ltd.(1997)	14	Failure to Uphold International Agreements	Complicity Indicators																																														
15	20	Hangzhou Xiangshengjie Import & Export Co Ltd.(revoked)	14	Failure to Uphold International Agreements	Complicity Indicators																																														
16	100	Fu Bai Na Pharmaceutical Chemical Reagent Co Ltd.(2012)	15	Evidence of Cooperation with Traffickers	Complicity Indicators																																														
17	500	Shanghai Chemisci Technology Co Ltd	16	Favorable Market Access for Chemical Producers	Complicity Indicators																																														
18	202	Hunan Longxianng Runhui Trading Co Ltd	17	Special Alert	Historical																																														
19	600	Shanghai Potentpharm Co Ltd	17	Special Alert	Historical																																														

Company Weighting Factors assigned

Weighting Rolled Up to companies

Weighting Factors Applied to Substances

Substance_Weighting_Tag_ID	(FK) Substance_Reference_ID	Substance ID (Joined)	Substance Name (Joined)	(FK) Weighting_Tag_ID	Weighting Tag Title (Joined)	Weighting Tag Category (Joined)	Weighting_Tag_Type (Joined)	Weighting_Tag_Weight (Joined)	
1	1	19099-93-5	1-Z-4-Piperidone, 4- Piperdone	18	Illicit	General Substance	Substance	10	
2	1	19099-93-5	1-Z-4-Piperidone, 4- Piperdone	18	Illicit	General Substance	Substance	10	
3	2	28578-16-7	3,4-MDP-2-P ethyl glycidic	19	CSA Schedule I	DEA CSA Substances	Substance	20	
4	2	28578-16-7	3,4-MDP-2-P ethyl glycidic	19	CSA Schedule I	DEA CSA Substances	Substance	20	
5	2	28578-16-7	3,4-MDP-2-P ethyl glycidic	20	CSA Schedule II	DEA CSA Substances	Substance	15	
6	3	103-63-9	(2-Bromoethyl) Benzene	22	CSA Schedule IV	DEA CSA Substances	Substance	5	
7	3	103-63-9	(2-Bromoethyl) Benzene	23	CSA Schedule V	<div><div>Substance IDs</div><div>Count of Weighting_Tag_Weight</div><div>Sum of Weighting_Tag_Weight</div></div>			
8	4	1474-02-8	N-(1-benzylpiperidin-4-yl)-N-phenylpropionamide	24	CSA NARC				
9	4	1474-02-8	N-(1-benzylpiperidin-4-yl)-N-phenylpropionamide	25	Others?		103-63-9	2	7
10	5	23056-29-3	N-phenylpiperidin-4-amine	22	CSA Schedule IV		1474-02-8	2	7
11	5	23056-29-3	N-phenylpiperidin-4-amine	19	CSA Schedule I		19099-93-5	2	20
							23056-29-3	2	25
						28578-16-7	3	55	
						Grand Total	11	114	

Weighting Factors Applied to Substances contd...

(FK) Evidence_ID	Evidence Company (Joined)	Evidence Substance_ID (Joined)	Evidence Substance Name (Joined)	Substance Weight (Joined)	(FK) Weighting_Tag_I D	Weighting Tag Title (Joined)	Weighting Tag Category (Joined)	Weighting_Tag_Type (Joined)	Weighting_Tag_W eight (Joined)	Total Evidence Weight for Substance		
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15	35		
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15	35		
7	AFINE CHEMICALS LIMITED	598-22-1	Propanoyl bromide	20	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15	35		
8	Wenling Shitang Xiangyang Chemical Factory	598-22-1	Propanoyl bromide	20	6	Specific Opioid Importation Attempts (e.g., Protonitazene)	Sanctions and Indictments	Company	12	32		
9	Huaian Liebang kangtai Co., Ltd.	598-22-1	Propanoyl bromide	20	5	Precursor Chemical Distribution	Sanctions and Indictments	Company	15	35		
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	6	Specific Opioid Importation Attempts (e.g., Protonitazene)	Sanctions and Indictments	Company	12	32		
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	23	CSA Schedule V	DFA CSA Substances	Substance	2	22		
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	24	CSA NARC	Company / Substance	Count of Weighting_Tag_Weight	Sum of Substance Weight	Sum of Weighting_Tag_Weight	Sum of Total Evidence Weight for Substance	
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	25	Others?		AFINE CHEMICALS LIMITED	1	20	15	35
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	25	Others?		598-22-1	1	20	15	35
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	22	CSA Schedule	Chemik Chemicals CO.,LTD.	2	40	15	55	
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	22	CSA Schedule	103-82-2	2	40	15	55	
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	19	CSA Schedule	Chongqing Changfeng Chemical Co., Ltd.	1	20	2	22	
5	Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	103-63-9	(2-Bromoethyl) Benzene	20	19	CSA Schedule	103-82-2	1	20	2	22	
15	Yancheng HuaDe (DanCheng) Biological Engineering Co.,Ltd.	79-09-4	Propionic acid	20	22	CSA Schedule	Huaian Liebang kangtai Co., Ltd.	1	20	15	35	
15	Yancheng HuaDe (DanCheng) Biological Engineering Co.,Ltd.	79-09-4	Propionic acid	20	22	CSA Schedule	598-22-1	1	20	15	35	
15	Yancheng HuaDe (DanCheng) Biological Engineering Co.,Ltd.	79-09-4	Propionic acid	20	23	CSA Schedule	Shanghai Experiment Reagent Co.,LTD.	1	20	2	22	
15	Yancheng HuaDe (DanCheng) Biological Engineering Co.,Ltd.	79-09-4	Propionic acid	20	23	CSA Schedule	103-82-2	1	20	2	22	
20	Spec-Chem Industry Inc.	60-12-8	Benzeneethanol	20	18	Illicit	Spec-Chem Industry Inc.	1	20	10	30	
22	Wuhan Youji Industries Company Limited	103-82-2	Benzeneacetic acid	20	19	CSA Schedule	60-12-8	1	20	10	30	
23	Chemik Chemicals CO.,LTD.	103-82-2	Benzeneacetic acid	20	21	CSA Schedule	Wenling Shitang Xiangyang Chemical Factory	1	20	12	32	
23	Chemik Chemicals CO.,LTD.	103-82-2	Benzeneacetic acid	20	22	CSA Schedule	598-22-1	1	20	12	32	
24	Chongqing Changfeng Chemical Co., Ltd.	103-82-2	Benzeneacetic acid	20	23	CSA Schedule	Wuhan Youji Industries Company Limited	1	20	20	40	
25	Shanghai Experiment Reagent Co.,LTD.	103-82-2	Benzeneacetic acid	20	24	CSA NARC	103-82-2	1	20	20	40	
							Yancheng HuaDe (DanCheng) Biological Engineering Co.,Ltd.	2	40	7	47	
							79-09-4	2	40	7	47	
							Yangzhou Princechem Co., Ltd.(former Gaoyou Organic Chemical Factory)	8	160	76	236	
							103-63-9	8	160	76	236	
							Grand Total	19	380	174	554	

Evidence weighting Factors assigned

Evidence Totals				
19	380	174	554	

Subsidies

Indictments

USER INTERFACE FOR WEIGHT SCORING MODEL

Weighting Tag Management System

⚡ A Streamlined Platform to Manage Tag Types, Categories, and Mappings Efficiently

✦ Explore the Sections Below

📄 Weighting Tag Types

Weighting Tag Types

Manage different types for weighting tags.

📄 Weighting Tag Categories

Weighting Tag Categories

Manage categories under each weighting tag type.

📄 Weighting Tags

Weighting Tags

View and manage all defined weighting tags.

📄 Organization Weighting Tags

Organization Weighting Tags

Map organizations to corresponding weighting tags.

📄 Substance Weighting Tags

Substance Weighting Tags

Map substances to corresponding weighting tags.

📄 Evidence Weighting Tags

Evidence Weighting Tags

Link evidence to weighting tags and manage scores.

The diagram illustrates the evidence processing workflow, divided into two main phases: **Collect Evidence** and **Derive Evidence**.

Collect Evidence Phase:

- Monitor Activity:** A user (represented by a person icon) interacts with a globe icon and a search box labeled "Search for ISO Relevant Legal, Policy, etc. Activity". Below this is a "Search Parameters" box.
- Search Results:** The search leads to three categories: "Sanctions", "Indictments", and "Etc.".

Derive Evidence Phase:

- Team ISO Determiners:** A group of people icon representing the team that processes the collected evidence.
- Log Intake Objects:** The evidence is logged into an "Intake Object Log" (cylinder icon).
- Extract Evidence:** The logged objects are processed by "Extract Evidence" (rectangle icon).
- Anchor Data Attributes to Intake Objects:** The extracted evidence is anchored to the intake objects, using a "Registered Attribute Log" (cylinder icon).
- Intake Data Log:** The processed data is stored in the "Intake Data Log" (cylinder icon).
- Deconflict Intake Data:** The data is then processed by "Deconflict Intake Data" (rectangle icon).
- Update Intake Logs:** The deconflicted data is used to "Update Intake Logs" (rectangle icon).
- Show processing results of scenarios:** The final results are shown to a user (person icon).
- Team ISO Chemical Mappers:** A group of people icon representing the team that maps the chemical data.

Additional Features:

- Archive / Remove Processed Intake:** A box for managing processed intake data.
- User Interactions:** Several purple boxes indicate user actions:
 - "Browse Intake Object" and "CRUD details of an item" (near the Intake Object Log).
 - "Browse Intake Data Log" and "CRUD details of an item" (near the Intake Data Log).
 - "Browse Registered Attributes" and "CRUD details of an attribute (maybe)" (near the Registered Attribute Log).

The diagram is a complex flowchart with many interconnected boxes and cylinders, representing the data flow and user interactions in the evidence processing system.

■ USDOJ Indictments

press release date	press release [URL link]	USDOJ action [URL link]	U.S. District	Cr. No.	action date [on]	role	company or individual	primary name (company or individual)	in our evidence database?	in our "top 25" list?	ISOTAC unique ID # [UID]
23 Jun 2023	USDOJ	indictment	EDNY	23-CR-263	16 Jun 2023	chemical manufacturer	company	Anhui Rencheng Technology Co. Ltd.	yes	no	DOJ-0001
23 Jun 2023	USDOJ	indictment	EDNY	23-CR-263	16 Jun 2023	chemical manufacturer	company	Anhui Moker New Material Technology Co.	yes	yes #8	DOJ-0002
23 Jun 2023	USDOJ	indictment	EDNY	23-CR-264	16 Jun 2023	chemical manufacturer	company	Hefei GSK Trade Co. Ltd.	no	no	DOJ-0007
23 Jun 2023	USDOJ	indictment	SDNY	23-CR-302	22 Jun 2023	chemical manufacturer	company	Hubei Amarvel Biotech Co. Ltd.	yes	no	DOJ-0009
03 Oct 2023	USDOJ	indictment	MDFL	23-CR-333	27 Sep 2023	chemical manufacturer	company	Xiamen Wonderful Biotechnology Co., Ltd.	yes	no	DOJ-0013
03 Oct 2023	USDOJ	indictment	MDFL	23-CR-334	27 Sep 2023	chemical manufacturer	company	Henan Ruijiu Biotechnology Co., Ltd.	yes	no	DOJ-0015
03 Oct 2023	USDOJ	indictment	MDFL	23-CR-335	27 Sep 2023	unspecified company	company	Hebei Shenghao Import and Export Co., Ltd.	yes	no	DOJ-0017
03 Oct 2023	USDOJ	indictment	MDFL	23-CR-336	27 Sep 2023	chemical manufacturer	company	Lihe Pharmaceutical Technology Co., Ltd.	yes	no	DOJ-0022
03 Oct 2023	USDOJ	indictment	MDFL	23-CR-338	27 Sep 2023	chemical manufacturer	company	Anhui Ruihan Technology Co., Ltd.	yes	yes #22	DOJ-0025
03 Oct 2023	USDOJ	indictment	SDFL	23-CR-20393	27 Sep 2023	pharmaceutical company	company	Jiangsu Bangdeya New Material Technology Co., Ltd.	yes	yes #14	DOJ-0026
03 Oct 2023	USDOJ	indictment	SDFL	23-CR-20394	27 Sep 2023	pharmaceutical company	company	Hanhong Medicine Technology (Hubei) Co., Ltd.	yes	no	DOJ-0028
03 Oct 2023	USDOJ	indictment	SDFL	23-CR-60176	27 Sep 2023	chemical manufacturer	company	Hubei Guanlang Biotechnology Co., Ltd.	yes*	no	DOJ-0031
24 Oct 2024	USDOJ	indictment	MDFL	23-CR-00440	#####	chemical manufacturer	company	Jiangsu Jiye Chemical	yes	no	DOJ-0033
24 Oct 2024	USDOJ	indictment	MDFL	23-CR-00441	#####	chemical manufacturer	company	Wuhan Jinshang Import & Export Trading Co., Ltd.	yes	no	DOJ-0035
24 Oct 2024	USDOJ	indictment	MDFL	24-CR-00008	04 Jan 2024	chemical manufacturer	company	Hubei Shanglin Trading Co.	yes	no	DOJ-0037
24 Oct 2024	USDOJ	indictment	MDFL	24-CR-00009	04 Jan 2024	chemical manufacturer	company	Wuhan Mingyue Information Technology	no	no	DOJ-0039
24 Oct 2024	USDOJ	indictment	MDFL	23-CR-00010	04 Jan 2024	chemical manufacturer	company	Tianjin Furuntongda Co., Ltd.	yes	no	DOJ-0041
24 Oct 2024	USDOJ	indictment	MDFL	24-CR-00012	04 Jan 2024	chemical manufacturer	company	Guangzhou Tengyue Chemical Co., Ltd.	yes	no	DOJ-0043
#####	USDOJ	PACER	CDCA	24-CR-00299	#####	pharmaceutical company	company	Hubei Aoks Bio-Tech Co., Ltd.	yes	no	DOJ-0045
24 Oct 2024	USDOJ	indictment	MDFL	24-CR-00259	07 Jun 2024	chemical manufacturer	company	Henan Oumeng Trade Co., Ltd.	yes	no	DOJ-0050
24 Oct 2024	USDOJ	indictment	MDFL	24-CR-00260	07 Jun 2024	chemical manufacturer	company	Shanghai Senria New Materials Co. Ltd.	yes	no	DOJ-0052


COLLECTING INDICTMENTS

Data Source:

- U.S. Department of Justice (DOJ) (<https://www.justice.gov/>)

Press Release containing indictments

DOJ Menu



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U.S. Department of Justice

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Information for Journalists

Justice.gov > Office of Public Affairs > News > Press Releases > Justice Department Announces Charges Against China-Based Chemical Manufacturing Companies and Arrests of Executives in Fentanyl Manufacturing

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This is archived content from the U.S. Department of Justice website. The information here may be outdated and links may no longer function. Please contact webmaster@usdoj.gov if you have any questions about the archive site.

PRESS RELEASE

Justice Department Announces Charges Against China-Based Chemical Manufacturing Companies and Arrests of Executives in Fentanyl Manufacturing

[SDNY Indictment](#) [EDNY Indictment 2](#) [EDNY Indictment 1](#)

[edny_unsealed_23-cr-263_anhi_moker_new_marketing_tech_co_et_al_indictment.pdf](#) [PDF, 3 MB]

[edny_unsealed_23-cr-264_hefei_gsk_trade_co_ltd_et_al_indictment.pdf](#) [PDF, 5 MB]

[sdny_unsealed_2023.06.22_amarvel_biotech_indictment_stamped_redacted.pdf](#) [PDF, 11 MB]

FJN/EDP:CWE/AA
F. #2022R00238/OCDETF #NY-NYE-653

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK
----- X

UNITED STATES OF AMERICA

- against -

ANHUI MOKER NEW MATERIAL
TECHNOLOGY CO.,
ANHUI RENCHENG
TECHNOLOGY CO., LTD.,
SHUTONG WANG,
also known as “王书通,”
SHIFANG RUAN,
also known as “Eva” and
“阮世芳,”
XINYU ZHAO,
also known as “Sarah”
and “赵新,” and
YUE GAO,
also known as “Ellie”
and “高悦,”

Defendants.
----- X

THE GRAND JURY CHARGES:

INTRODUCTION

At all times relevant to this Indictment, unless otherwise indicated:

The Defendants

1. The defendant ANHUI RENCHENG TECHNOLOGY CO., LTD.

(“RENCENG”) was a chemical and pharmaceutical company located in Baohe District, Hefei City, Anhui Province in the People’s Republic of China (“China”).

FILED
IN CLERK’S OFFICE
US DISTRICT COURT E.D.N.Y.
* JUNE 16, 2023 *
BROOKLYN OFFICE

Cr. No. **23-CR-263**
(T. 18, U.S.C., §§ 371, 981(a)(1)(C),
982(a)(7), 982(b)(1), 2 and 3551 et seq.;
T. 21, U.S.C., §§ 331(a), 333(a)(2),
802(32), 813, 841(a)(1),
841(b)(1)(A)(vi), 841(b)(1)(C), 846,
853(a), 853(p) and 970; T. 28, U.S.C.,
§ 2461(c))
Judge Eric N. Vitaliano
Magistrate Judge Cheryl L. Pollak

Indictment Details after clicking the link

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COLLECTING SANCTIONS

Data Source:

- OFAC Sanctions List (<https://sanctionssearch.ofac.treas.gov>)

Manual Data Collection:

- Company Name Entry in OFAC Sanctions Search
 - Team members manually entered company names into the OFAC sanctions database.
 - Retrieved sanction details such as entity name, sanction program, country, and risk factors.
 - Downloaded available sanction reports as PDFs for documentation.
- Linking Sanctions to Risk Factors: Risk scores are assigned based on predefined factors such as government complicity, prior offenses, and regulatory enforcement levels.

Type:All

Name:Wuhan Yuancheng Gongchuang 1

ID # / Digital Currency Address:

Program:All

Minimum Name Score:75

Address:

City:

State/Province:

Country:All

List:All

Search

Reset

Lookup Results: 14 Found

Name	Address	Type	Program(s)	List	Score
WUHAN YUANCHENG GONGCHUANG TECHNOLOGY CO., LTD.	No. 426 Zhongshan Road, Wuchang District	Entity	ILLICIT-DRUGS-EO14059	SDN	100
WUHAN TONGSHENG TECHNOLOGY CO., LTD.	F038, Floor 5-8, 13, 15, Block B, No. 2 Factory Building, Guangyuan Science Park, No. 6 Huashiyuan North Road	Entity	RUSSIA-EO14024	SDN	90
WUHAN HUAZHONG NUMERICAL CONTROL CO., LTD.	Huangong Science and Technology Park, East Lake Development Zone	Entity	RUSSIA-EO14024	SDN	86
WUHAN SHUOKANG BIOLOGICAL TECHNOLOGY CO., LTD.	H05106, Building 1, No. 58, Guangxi Avenue, East Lake New Technology Development Zone	Entity	ILLICIT-DRUGS-EO14059	SDN	86
WUHAN GLOBAL SENSOR TECHNOLOGY CO., LTD.	Building 2, No. 6, Huanglongshan S. Road, Dazhu Development Zone	Entity	RUSSIA-EO14024	SDN	85

OFAC Sanctions Search Interface

Sanctions Record of a Company



OFAC

Office of Foreign Assets Control

Sanctions List Search

Download the SDN List

Download the Consolidated Non-SDN List

Sanctions List Search: Rules for use

Program Code Key

Visit The OFAC Website

Details:

Type:Entity

Entity Name:WUHAN YUANCHENG GONGCHUANG TECHNOLOGY CO., LTD.

List:SDN

Program:ILLICIT-DRUGS-EO14059

Remarks:

Identifications:

Type	ID#	Country	Issue Date	Expire Date
Registration Number	420106000105666	China		

Addresses:

Address	City	State/Province	Postal Code	Country
No. 426 Zhongshan Road, Wuchang District	Wuhan	Hubei		China
No. 425 Zhongshan Road, Wuchang District	Wuhan	Hubei		China


Back

DERIVING EVIDENCE (Alternatives explored for automation)



AWS Textract

- **Limited NER Customization**
Difficult to tailor NER for specific entities unique to illicit trafficking.
- **High Cost for Complex Documents**
Parsing intricate legal and regulatory documents with varied layouts increased expenses.

**OFAC**
Office of Foreign Assets Control

Sanctions List Search

Specially Designated Nationals and Blocked Persons list ("SDN List") and all other sanctions lists administered by OFAC, including the Foreign Sanctions Evaders List, the Non-SDN Iran Sanctions Act List, the Sectoral Sanctions Identifications List, the List of Foreign Financial Institutions Subject to Correspondent Account or Payable-Through Account Sanctions and the Non-SDN Palestinian Legislative Council List. Given the number of lists that now reside in the Sanctions List Search tool, it is strongly recommended that users pay close attention to the program codes associated with each returned record. These program codes indicate how a true hit on a returned value should be treated. The Sanctions List Search tool uses approximate string matching to identify possible matches between word or character strings as entered into Sanctions List Search, and any name or name component as it appears on the SDN List and/or the various other sanctions lists. Sanctions List Search has a slider-bar that may be used to set a threshold (i.e., a confidence rating) for the closeness of any potential match returned as a result of a user's search. Sanctions List Search will detect certain misspellings or other incorrectly entered text, and will return near, or proximate, matches, based on the confidence rating set by the user via the slider-bar. OFAC does not provide recommendations with regard to the appropriateness of any specific confidence rating. Sanctions List Search is one tool offered to assist users in utilizing the SDN List and/or the various other sanctions lists; use of Sanctions List Search is not a substitute for undertaking appropriate due diligence. The use of Sanctions List Search does not limit any criminal or civil liability for any act undertaken as a result of, or in reliance on, such use.

[Download the SDN List](#)[Sanctions List Search: Rules for use](#)[Visit The OFAC Website](#)

[Download the Consolidated Non-SDN List](#)[Program Code Key](#)

Details:

Type:Entity

List:SDN

Entity Name:HEBEI GUANLANG BIOTECHNOLOGY CO., LTD.

Program:ILLICIT-DRUGS-EO14059

Remarks:

Identifications:

Type	ID#	Country	Issue Date	Expire Date
Unified Social Credit Code (USCC)	91130104336154011D	China		
Phone Number	8619930505208			
Phone Number	8613273412322			
Website	www.guanlang-group.com			
Organization Established Date	30 Apr 2015			

Aliases:

Type	Category	Name
f.k.a.	strong	SHIJIAZHUANG FA KE TRADING COMPANY

Addresses:

Address	City	State/Province	Postal Code	Country
Room 2914, Bldg. B Weekend Max Mara No. 108 West Zhongshan Road Qiaoxi District	Shijiazhuang	Hebei Province	050000	China

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MICROSOFT POWER AUTOMATE

- **Inconsistent Document Structure**
Each document's unique format required building and training separate models.
- **Maintenance Overhead Frequent**
updates to document layouts led to continuous model retraining, increasing maintenance.

WHY SecureGPT?

SecureGPT

New Chat

Danny

provide me the important inf...

provide me the important information like entity name, type, alias, address, ussc code from these sanctions documents and put the information in a table

Based on the provided sanction documents, I have extracted the important information and created a table for you:

Entity Name	Type	Alias	Address	USSC Code
JIANGSU BANGDEYA NEW MATERIAL TECHNOLOGY CO., LTD.	Entity		8#-2-1211, Jinxiu Jiayuan, Xuzhou City, Jiangsu Province, 221000, China Jianguo West Road, Quanshan District www.bangdeyapharm.com Phone Number: 86017849577539	91320311MA2507C946

Note: The alias field is empty as there is no explicit alias mentioned in the provided documents. If you need any further assistance, please let me know.

Source Document(s):
1. [JIANGSU BANGDEYA NEW MATERIAL TECHNOLOGY CO. LTD.KM2413.pdf](#) (score: 0.72)

No Context

Single Doc

Multi Docs

Similar Docs

Structured Data

Search web

Context Mode

Single Doc

Select Docs

(1)

Assistants

Ask anything

Model: Finetuned Multimodal LLM - Generated content may be inaccurate or false.

Share this conversation

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smannav@gmu.edu

Upload Files

Admin

Theme

Settings

Privacy

Prompt

Select Evidence Documents

SecureGPT RESULTS

extract important information from this document in a tabular format....

Based on the provided context, I will extract the important information from the document in a tabular format. Here is the extracted information:

Image ID	Case Number	Document Type	Filing Date	Page Number	Page ID
a8c39304_wuhan_mingyue_information_technology_image.jpeg	8:24-cr-00009-WFJ-AEP	Document 1	01/04/24	1	1
aa98584f_wuhan_mingyue_information_technology_image.png	8:24-cr-00009-WFJ-AEP	Document 1	01/04/24	2	2
b8c0d13e_wuhan_mingyue_information_technology_image.png	8:24-cr-00009-WFJ-AEP	Document 1	01/04/24	3	3
78c7b078_wuhan_mingyue_information_technology_image.png	8:24-cr-00009-WFJ-AEP	Document 1	01/04/24	4	4

Search web ⓘ

Context Mode ⓘ

Documents ▼

Select Docs

(1)

AI Agents ⓘ

00041ree_wuhan_mingyue_information_technology_image.png

8:24-cr-

Document

01/04/24

5

5

Ask anything

Model: Finetuned Multimodal LLM - Generated content may be inaccurate or false. for any query please [contact us](#) [Share this conversation](#)

A collage of eight pages from a legal document. The top row shows a US District Court filing for the Southern District of Florida, Case No. 2:24-cr-00009-WFJ-AEP, dated 01/04/24. The middle row shows an indictment and an introduction section. The bottom row shows a summary of evidence, including a list of defendants and a list of exhibits. The document is titled "UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF FLORIDA" and "INDICTMENT". It includes a section titled "INTRODUCTION" and a list of defendants: "WUHAN MINGYUE INFORMATION TECHNOLOGY" and "HUANHUAN SONG". The document also includes a list of exhibits, including "Exhibit A" and "Exhibit B".

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■ STORING DATA

Type	Entity Name	Program	List	Remarks	Unified Social Credit Code (USCC)
Entity	HEBEI CROVELL BIOTECH CO., LTD.	ILLCIT-DRUGS-E014059	SDN		91130104MAOD4G9Q45
Entity	ARAB CHINA TRADING COMPANY	SDGT	SDN	(Linked To: SHAMLAKH, Zuhair)	
Entity	HUBEI VAST CHEMICAL CO., LIMITED	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	
Entity	QINGDAO CEMO TECHNOLOGY DEVELOP CO., LTD.	ILLCIT-DRUGS-E014059	SDN		91370202MA948F4T49
Entity	SHANGHAI JARRED INDUSTRIAL CO., LTD.	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	91310116MA1JBTHR4N
Entity	JIANGSU BANGDEYA NEW MATERIAL TECHNOLOGY CO., LTD.	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	91320311MA2507C946
Entity	HEBEI GUANLANG BIOTECHNOLOGY CO., LTD.	ILLCIT-DRUGS-E014059	SDN		91130104336154011D
Individual	Du Chaggen	ILLCIT-DRUGS-E014059	SDN		
Entity	HEBEI XIUNA TRADING CO., LTD	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	91130105MAOFRNGTXX
Entity	SHANGHAI CISHUN FINE CHEMICAL CO, LTD.	ILLCIT-DRUGS-E014059	SDN		91310115MA1K41CK14
Entity	HEBEI YAXIN RESTAURANT MANAGEMENT CO., LTD.	ILLCIT-DRUGS-E014059	SDN	(Linked To: WANG, Tianmin)	91130104MA7B2YLD31
Entity	HEBEI HUANHAO BIOTECHNOLOGY CO., LTD	ILLCIT-DRUGS-E014059	SDN		91130104MA07T43608
Entity	HEBEI GUANLANG BIOTECHNOLOGY CO.,	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	
Entity	LILY SUITES COMPANY LIMITED	CYBER2	SDN		
Entity	WUHAN YUANCHENG GONGCHUANG TECHNOLOGY CO., LTD.	ILLCIT-DRUGS-E014059	SDN		
Entity	A-TEAM CHEMICALS COMPANY LTD.	SDNTK	SDN		
Entity	HUBEI VAST CHEMICAL CO., LIMITED	ILLCIT-DRUGS-E014059	SDN	(Linked To: DU, Changgen)	
Entity	ALPHAONE PHARMACEUTICAL B.V.	GLOMAG	SDN	(Linked To: RG GROUP FZE)	
Entity	PRIMEIRO COMANDO DA CAPITAL	ILLCIT-DRUGS-E014059	SDN		

INTAKE PIPELINE: KEY-VALUE DATA LOG

Data_Log_ID	Anchor_Object_ID	Anchor_Object Title	Anchor_Object Type-SubType	Anchor_Object Type-SubType	Anchor_Object Type-SubType	Anchor_Object Type-SubType	Anchor_Object Type-SubType
1	4	Sanction 1	Document:Sanction		35	Substance ID	101345-60-2
2	4	Sanction 1	Document:Sanction		36	Substance Name	Thiafentanil
3	5	DOJ 6/23/2023 Indictment Press Release	Document:Indictment		35	Substance ID	100-46-
4	5	DOJ 6/23/2023 Indictment Press Release	Document:Indictment		36	Substance Name	(2-Bromoethyl)benzene
5	16	Sanction 2	Document:Sanction		36	Substance Name	Methylacetylfentanyl
6	17	Sanction 3	Document:Sanction		36	Substance Name	Parabolan
7	19	Sanction 5	Document:Sanction		36	Substance Name	Acetamide
8	20	Sanction 6	Document:Sanction		36	Substance Name	Schoolboy

INTAKE PIPELINE: KEY-VALUE OBJECT LOG

Object_ID	Anchor_Object_Name	Source Local ID	Object_Type_SubType	Corresponding_Object_ID	Process Status	Filename	Reference_URL
1	Shanghai Lanjing Biotechnology Co., Ltd(2012)	IDC_1	Organization:Company		Processed Fully		
2	Foreign Trade Product Description Field		Field:		Processed Partially (NLP/NER)		
3	Foreign Trade Scraped Substance Name Field		Field:		Unprocessed		
4	Sanction 1		Document:Sanction		Unprocessed		
5	DOJ 6/23/2023 Indictment Press Release	Indictment_3293939	Document:Indictment	13	Unprocessed	DOJ 6-23-2023 Indictment.pdf	https://www.justice.gov/opa/pr/justice-department-announces-charges-against-china-based-chemical-manufacturing-companies
6	Image_1 (Extracted from TraCCC data)		Image:		Processed Partially (OCR)	image_1 filename.pdf	
7	Image_2 (Pulled by Divya's Team)		Image:		Processed Partially (OCR)	image_2 filename.pdf	
8	Image_3 (Extracted from Indictment)		Image:		Unprocessed	image_3 filename.pdf	
9	Image_4 (Extracted from Sanction)		Image:		Unprocessed	image_4 filename.pdf	
10	Company_1 (Derived from Indictment)		Organization:Company		Unprocessed		
11	Company_2 (Derived from Sanction)		Organization:Company		Unprocessed		
12	DEA CSA List		Document:Reference		Unprocessed	c_cs_alpha.pdf	https://www.deadiversion.usdoj.gov/schedules/orangebook/c_cs_alpha.pdf
13	DOJ 6/23/2023 Formal Indictment			5	Unprocessed		

INTAKE PIPELINE: KEY-VALUE ATTRIBUTE LOG

Attribute_ID	Attribute_Name	Source?	Comments	Old_TraCCC_Attribute_ID
0	New Attribute to be registered	Spring 2025 Key-Value Methodology		N/A
1	Identifer	Spring 2025 Key-Value Methodology		N/A
2	Old_Identifier	Spring 2025 Key-Value Methodology		N/A
3	Company Name	2019 TraCCC Data		0
4	NewSpring 2025 Company_ID	2025 Re-conxsituted Data	To be retired once crossed over	0.5
5	Chinese Name	2019 TraCCC Data		1
6	Address	2019 TraCCC Data		2
7	Products	2019 TraCCC Data		3
8	Production Capacity	2019 TraCCC Data		4
9	Pricing(\$)	2019 TraCCC Data		5
10	Payment method	2019 TraCCC Data		6
11	Terms of Sale	2019 TraCCC Data		7
12	Packaging	2019 TraCCC Data		8
13	Delivery	2019 TraCCC Data		9
14	Contact	2019 TraCCC Data		9.5
15	Phone_Number	2019 TraCCC Data		10
16	Website	2019 TraCCC Data		11
17	IP Address	2019 TraCCC Data		12
18	Server Location	2019 TraCCC Data		13
19	Active Level	2019 TraCCC Data		14
20	Main Market	2019 TraCCC Data		15
21	Remark	2019 TraCCC Data		16

USER INTERFACE FOR KEY VALUE DATA LOG

Navigation

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☐ Key-Value Object Log


☐ Data Log


☐ Attribute Log Manager

☐ Risk Assessment

Deploy

Illicit Synthetic Opioid (ISO) Determination Engine

 A Streamlined Platform to Assess, Trace, and Manage Chemical Risk Intelligence Efficiently




Select a Module Below

☐ Key-Value Object Log


☐ Data Log

☒ Attribute Log Manager


☐ Risk Assessment

 **Key-Value : Object Log**


Trace object logs and custom entries through a flexible data model.

 **Data Log**

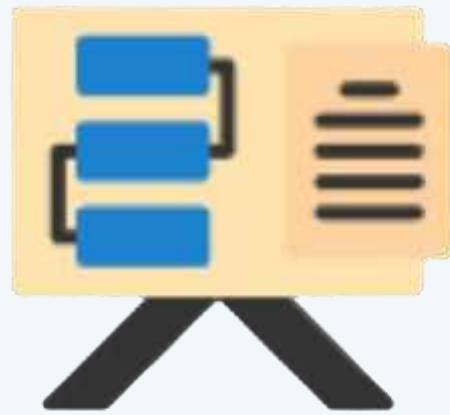
Manage data logs and entries linked to attributes and sources.

 **Attribute Log**

Manage structured attributes tied to substances and sanctions.

 **Risk Assessment**

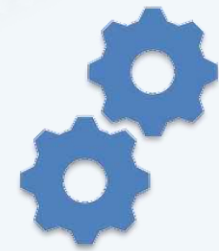
Score and analyze chemical sources and evidence to determine risk.



LESSONS LEARNED

- ⇒ Structured Data Modeling Matters
- ⇒ Communication & Collaboration Drove Success
- ⇒ Scrum Helped Us Stay Agile
- ⇒ Design Iteration is Key
- ⇒ User Centered Design Enhances Usability

FUTURE DEVELOPMENTS



Automate Evidence
Collection



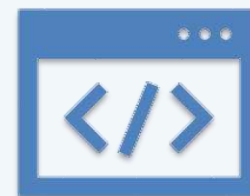
Refine Risk Model
Logic



User Access &
Workflow



Interactive
Dashboards

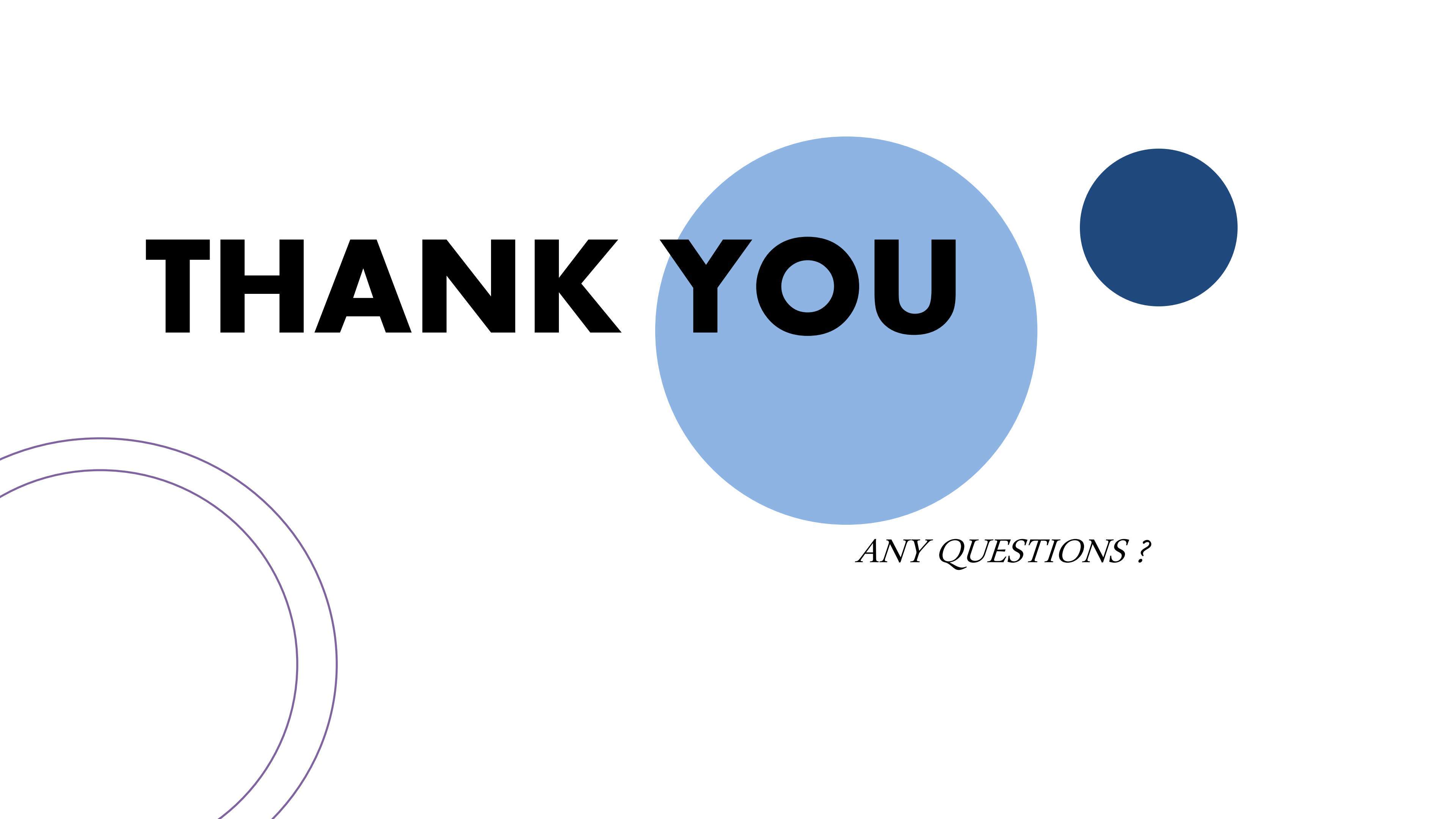


Enable Full Record
Management



Compliance &
Security





THANK YOU

ANY QUESTIONS ?