

# RMP High-Risk Facility Inspections

Jim Belke  
U.S. EPA  
Office of Emergency Management

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## Agenda

- ◆ FY 2010 Inspection Summary
- ◆ FY 2011 Inspection Targets
- ◆ Accident Trends
- ◆ Revise High Risk Criteria?
- ◆ Learning From Inspections & Accidents

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## FY 2010 vs 2011 Inspection Targets

- ◆ FY 2010 NPM Guidance:
  - Inspect 5% of RMP facilities
  - 10% of inspections at HR facilities
- ◆ FY 2011 NPM Guidance:
  - Inspect 5% of RMP facilities
  - 25% of inspections at HR facilities

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## What is a High-Risk Facility?



Facilities with large population in WCS zone



Facilities with large number & quantity of chemicals



Facilities with accidents in last 5 years

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## High Risk Facility Criteria

- ◆ RMP WCS population  $\geq 100,000$
- ◆ Any accident meeting RMP reporting criteria within last 5 years
- ◆ Hazard Index  $\geq 25$ 
  - Hazard index measures number & quantity of different RMP chemicals on site

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## FY 2010 National Summary of High Risk Facility Criteria

Region	RMP Facilities			Unique Criteria			Double Criteria					
	Current	Hi-Risk	Population	Hazard Index	Accident	Population	Hazard Index	Accident	Population	Hazard Index	Accident	Population
	01	167	23	8	11	9	3	8	7	2	1	3
02	343	64	31	35	17	17	19	10	3	5	13	13
03	713	116	30	82	39	9	57	24	10	14	20	20
04	1855	279	84	165	109	41	109	65	23	36	35	35
05	2906	327	84	191	133	34	129	93	20	35	44	44
06	2277	773	158	646	177	63	483	56	47	114	90	90
07	2488	164	16	100	72	7	78	56	2	15	8	8
08	853	151	10	134	28	2	117	13	4	13	6	6
09	1157	163	68	88	52	41	57	28	14	18	23	23
10	475	48	14	23	24	6	14	14	4	5	6	6
<b>Totals</b>	<b>13234</b>	<b>2108</b>	<b>503</b>	<b>1475</b>	<b>660</b>	<b>228</b>	<b>1071</b>	<b>366</b>	<b>129</b>	<b>256</b>	<b>248</b>	<b>248</b>

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## FY 2011 National Summary of High Risk Facility Criteria

Region	RMP Facilities			Unique Criteria			Double Criteria				
	Current	Hi-Risk	Population	Hazard Index	Accident	Population	Hazard Index	Accident	Population	Hazard Index	Accident
01	161	22	7	10	9	3	8	7	2	0	2
02	324	63	30	34	18	16	18	11	3	5	13
03	708	116	29	83	36	10	61	21	10	15	19
04	1815	264	82	156	108	38	97	62	23	38	36
05	2872	296	80	166	132	33	104	91	21	36	43
06	2271	645	162	524	172	63	357	50	47	114	92
07	2473	172	15	104	78	8	82	59	3	18	6
08	818	95	9	81	25	2	65	11	4	13	6
09	1141	149	65	74	54	38	45	31	15	17	21
10	483	50	14	22	27	6	14	19	5	5	5
<b>Totals</b>	<b>13066</b>	<b>1872</b>	<b>493</b>	<b>1256</b>	<b>659</b>	<b>217</b>	<b>851</b>	<b>362</b>	<b>133</b>	<b>261</b>	<b>243</b>

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## FY 2010 vs 2011 HR Facility Comparison

Criterion	Year	FY 2010	FY 2011
Pop ≥ 100K		503 (223)	493 (217)
Accident within last 5 years		660 (366)	659 (362)
Hazard Index ≥ 25		1475 (1071)	1256 (851)
<b>Total (any criteria)*</b>		<b>2108</b>	<b>1872</b>

\* Not a column sum as some facilities meet multiple criteria

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## Raise Hazard Index Threshold?

Increasing HI to 50 drops 481 facilities:

NAICS Description	#
Natural Gas Extraction	112
Other Chemical & Allied Product Wholesale	50
Ethyl Alcohol Manufacturing	41
All Other Basic Organic Chem Manufacturing	30
Plastics Material & Resin Manufacturing	26
Petroleum Bulk Stations & Terminals	21
All Other Misc Chem Product & Prep Mnfr	18
Nitrogenous Fertilizer Manufacturing	10
Petrochemical Manufacturing	10
Petroleum Refineries	10

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## FY 2010 – Completed RMP Inspections

Region	RMP Bid	Actual	High Risk Req.	HR Actual
1	20	22	2	3
2	25	37	3	4
3	33	44	3	14
4	56	73	6	19
5	50	86	5	29
6	150	152	15	34
7	40	43	4	20
8	45	48	5	8
9	57	71	6	15
10	24	27	2	3
Total	500	603	51	149

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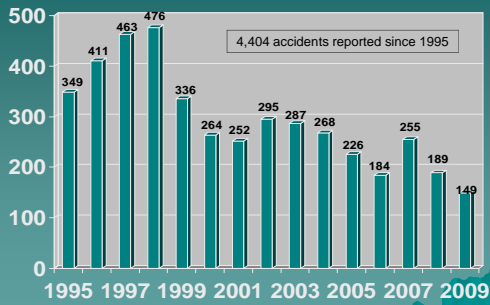
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## RMP-Reported Accidents by Year




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## Learning from Inspections

- ◆ EPA has completed over 5000 RMP inspections.
- ◆ Where is the inspection information?
  - ICIS contains top-level information on inspections done since 2004.
  - Regional offices and delegated states maintain inspection reports & inspection documentation
- ◆ No national repository of detailed inspection information exists

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## Possible Benefits of a National Inspection Report Archive?

- ◆ Improved inspection results
- ◆ Improved case development
- ◆ Better inspection planning
- ◆ Inspector training resource
- ◆ Facility knowledge base
  - Enable broad-based research & analysis
  - Answer stakeholder questions
  - Support policy development

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## Some challenges...

- ◆ Regional offices & states have different inspection procedures:
  - What portions of a facility are inspected & how?
  - What rule elements are inspected?
  - What information is gathered?
  - Inspection report format?
- ◆ Limited sharing of inspection information:
  - HQ does not see regional inspection reports
  - Regions do not see delegated state reports
  - No national database of inspection reports exists

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## Some ideas...

- ◆ Implement common inspection protocols
  - Obtain copies of RMP documents (compliance audits, incident reports, MOC files, etc.)
- ◆ Establish an electronic inspection report template
  - Inspection narrative, Inspector ID, Facility & processes inspected, dates of inspection, findings/deficiencies, completed checklist, etc.
- ◆ Upload completed inspection reports & supporting RMP documents to a central database
- ◆ Analyze inspection reports

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