



WSWRA August 2018

Couple Things I&C to cover today:

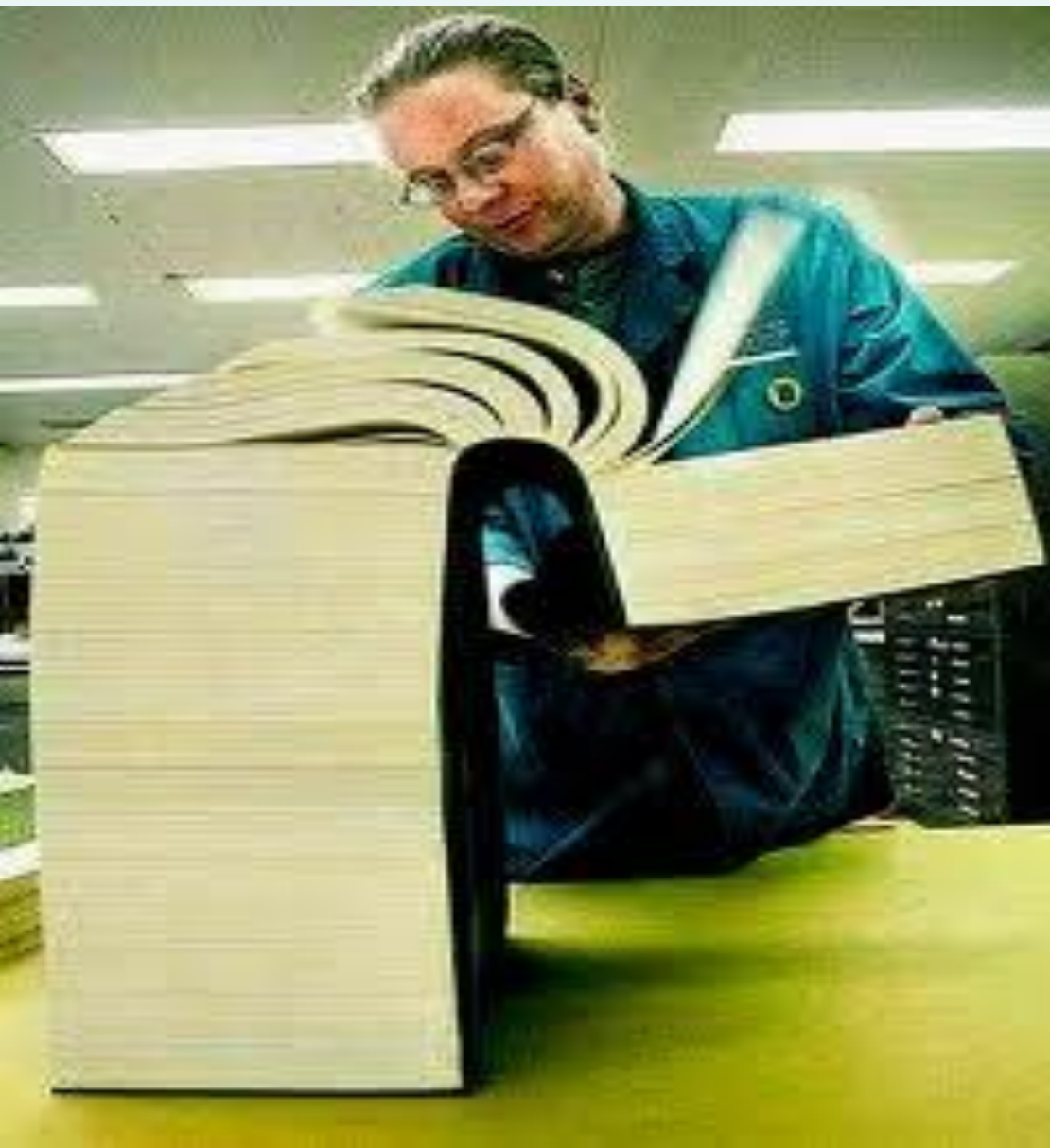
- 1. General inspection approach & some statistics**
- 2. Demolition Wastes** (been a real problem over past years)



1. General Inspection Approach & Some Statistics

1st . . . We get a couple or few of these





So we can pack
our copies of the
permit and checklist
to the sites inspected.



But. . . we try to realize. . . among other things. . .an operator often ALSO has to be the following part time . . .

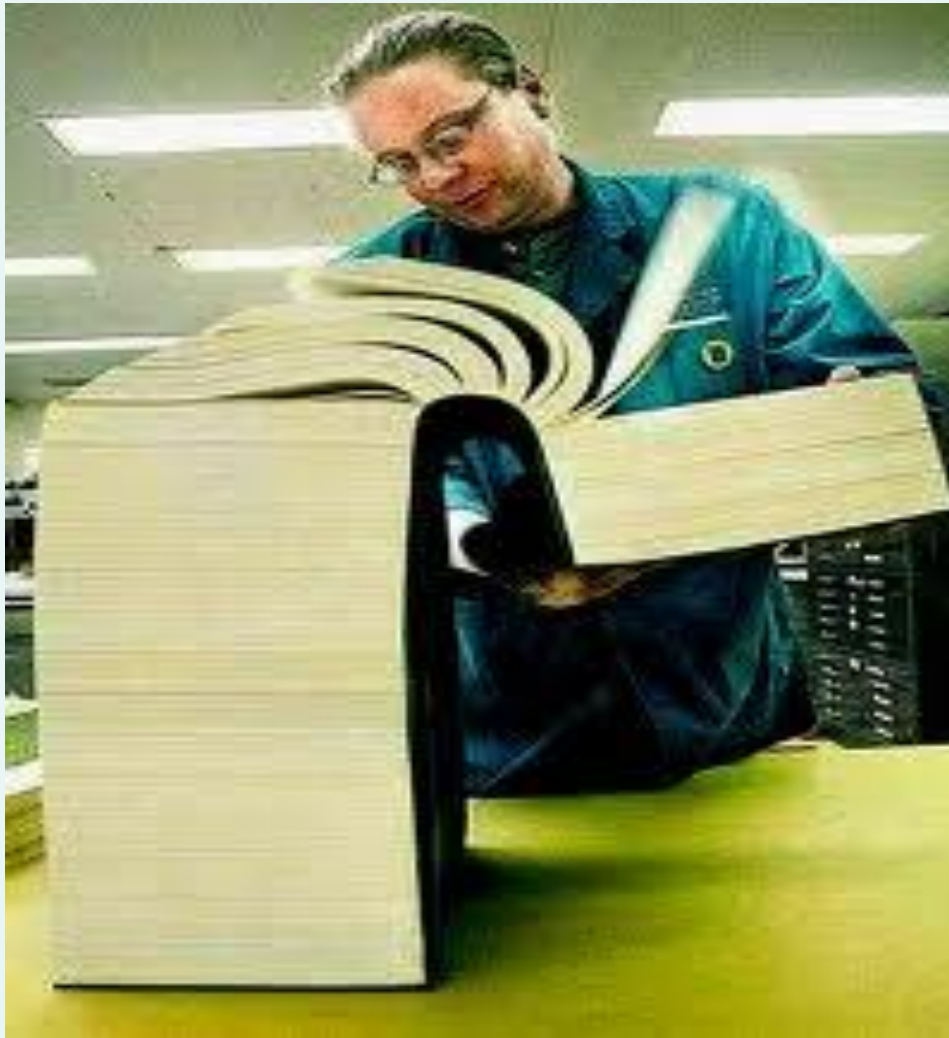
1. part time lawyer/regulator expert

2. part time civil engineer

3. part time mechanical engineer

. . . . probably others depending on the “problem of the day”

1. a lawyer/regulatory expert ?



2. a civil engineer ?

(site operator could show up one morning to culvert looking like this & needs temp fix NOW)



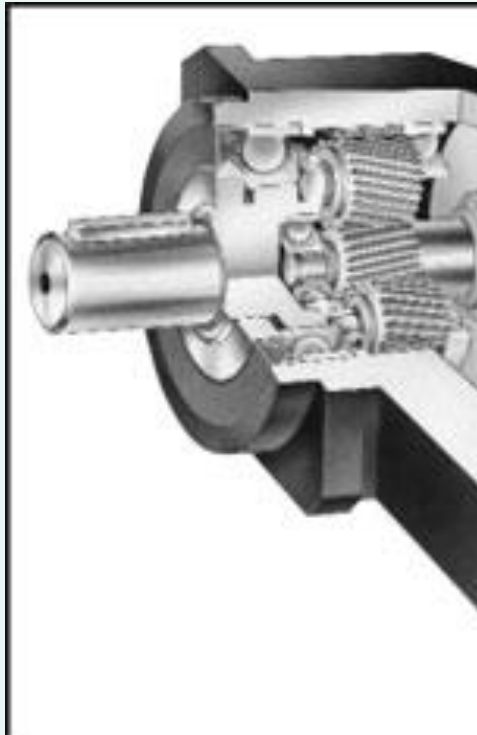
2. a civil engineer

(or maybe not quite so bad but need some field engineering work-arounds . . . NOW)



3. a mechanical engineer

(some of the heavy equipment at landfills can be pretty complex)





All (or most all) Requirements May Simply Boil Down to . . .

Eliminate or absolutely minimize the following conditions:

1. Health/injuries impacts to landfill site employees and public (if this can't be done. . . may as well stop now and go home because without healthy operators nothing happens)

Public health or nuisance concerns such as odors, litter, dust, disease vectors (birds, etc.)

Blowing up disposal site buildings/structures with landfill gas

2. Contamination to surface and groundwater

3. Excessive/unnecessary costs of operations and closure (including DIVERSION to recycle, etc.)



Except for No. 1 (**Injuries or health impacts** to landfill site employees)

... can obsessing with **perfection** sometimes lead to ...

PERFECT being the enemy of . . . **GOOD** ???



Many think **PERFECT** can be the enemy of **GOOD**.

SHWD has managed to reduce regulations by over 10 - 20 %and still working. . .

“pulling the weeds” (in a well fertilized garden ??)

(striving not to sacrifice environmental protections)



THISNOT THIS



THISNOT THIS



Used oil filters properly drained before disposal
or crushing and recycle



Used oil filters haphazardly draining "out back".

NOT THISTHIS



Without Dust Suppression



With Dust Suppression



A Pollutant Compliance Threshold Idea NOT to Use

LD50 Concept

acetaminophen = 2000 mg/kg

(Tylenol)

(about a gram/lb body wt.

or say little over a cupfull for 170 lb person)

benzene = 2000 mg/kg

(FMC CCl₄ example)



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Basic SHWD I&C Statistics. . . .

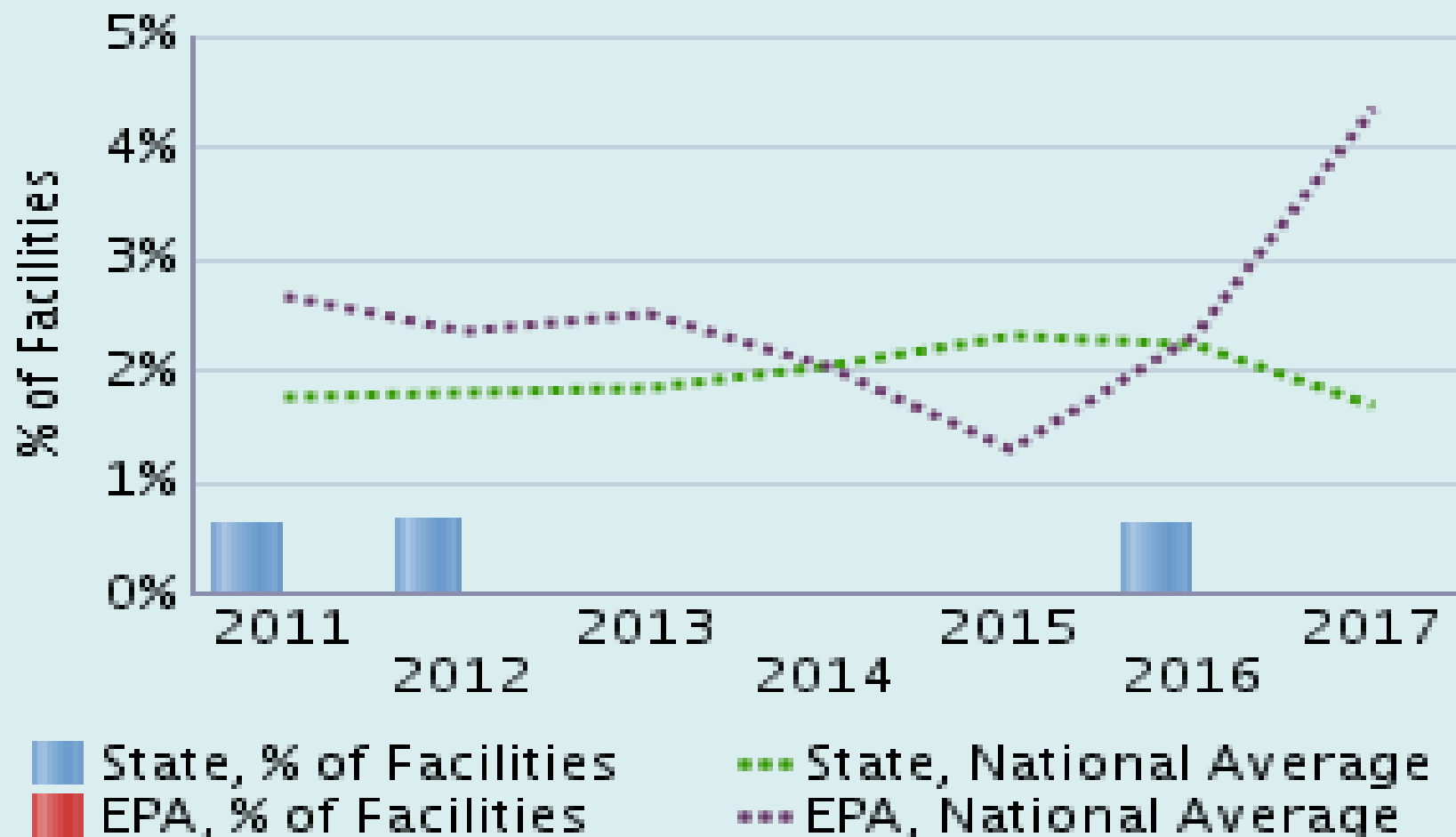
Depending on year, weather, staff changes, etc.

I&C conducts in the range of 250 – 300 inspection each year



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% of Facilities with comprehensive inspections in which SNC was determined





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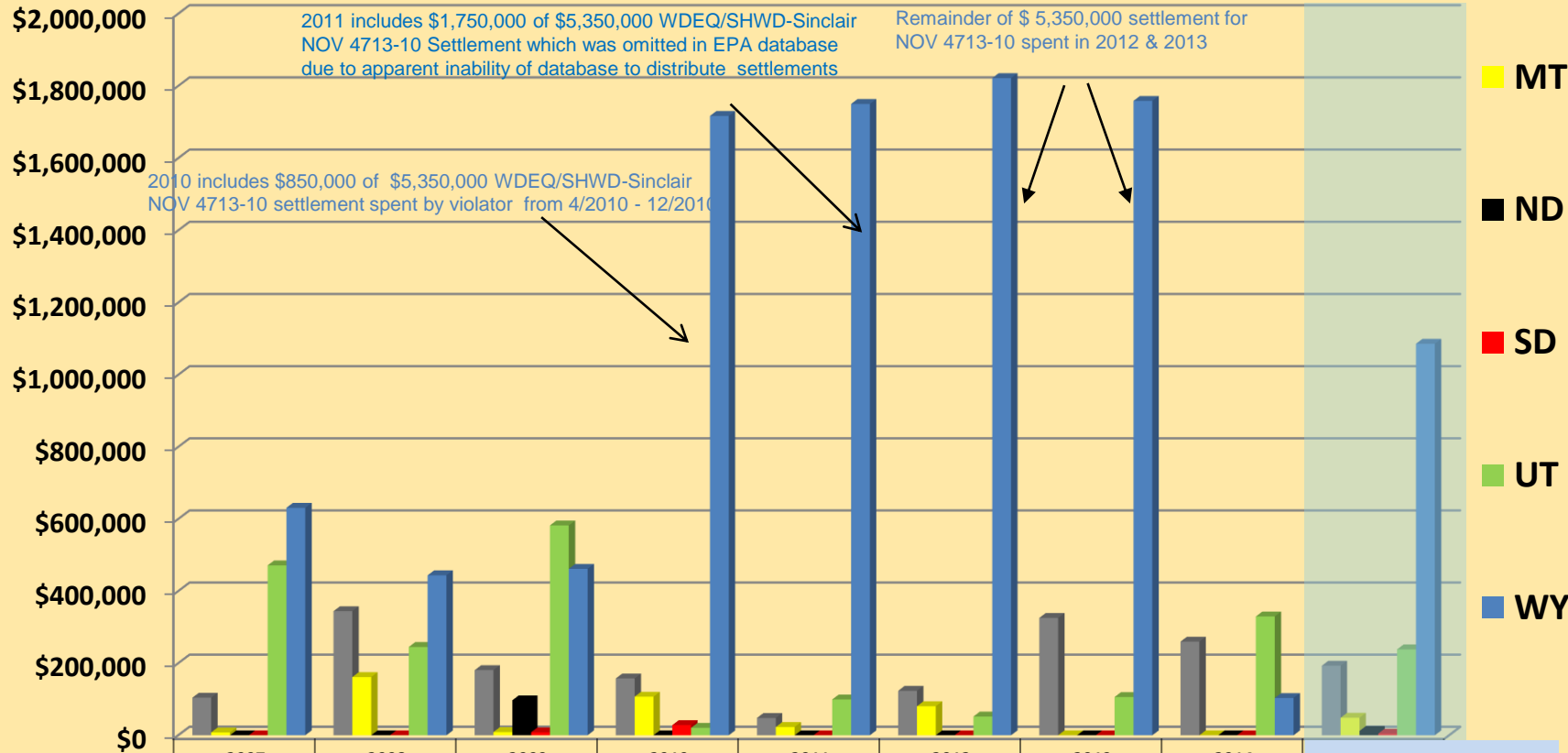
(including the gifts that keep on giving)



Comparisons of RCRA Penalty Settlement Values for Region VIII States

(Sources: EPA RCRAinfo/OTIS /ECHO Database Entries)

CO
MT
ND
SD
UT
WY



	2007	2008	2009	2010	2011	2012	2013	2014	AVG 2007 - 2014 YTD
CO	\$104,326	\$344,278	\$180,698	\$157,539	\$48,017	\$123,311	\$325,550	\$259,744	\$192,933
MT	\$7,850	\$161,469	\$9,000	\$107,000	\$23,000	\$80,600	\$0	\$0	\$48,615
ND	\$0	\$0	\$97,000	\$0	\$0	\$0	\$0	\$0	\$12,125
SD	\$0	\$0	\$8,195	\$28,369	\$0	\$0	\$0	\$0	\$4,571
UT	\$471,202	\$244,976	\$582,057	\$20,697	\$99,301	\$51,909	\$106,098	\$329,587	\$238,228
WY	\$631,000	\$443,781	\$461,656	\$1,716,778	\$1,750,000	\$1,821,600	\$1,758,359	\$103,359	\$1,085,817



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2. SHWD Demolition Waste Problem



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Do I have the right to demolish my own house or commercial building

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION

**Yes. . . with a few
sensible precautions
for your neighbors.**





SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION

Some of the reasons SHWD can get picky about waste screening on next few slides. . . .





SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION

These rules are to identify & resolve potential hazards such as asbestos in attic insulation and/or in other places including. . .

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION

... possible asbestos in ceiling textures ...



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION

Possible asbestos
in siding.



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Many homes can also have lead paint but this can normally be disposed with the demolition debris.

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Penalty in CA can go as high as \$ 70,000 per violation per day !!

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Penalty in CA can go as high as \$ 70,000 per violation per day !!

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Mercury in or from meters, pressure sensors/controllers or other sources

SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



Found this wonderful stuff in one building to be demolished. . . toxic arsenic with bonus toxic lead.



Avoiding “Catastrophic” Contamination

- **END**









SENSIBLE PRECAUTIONS FOR BUILDING DEMOLITION



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