### MDEStat Meeting

May 13, 2008



### **Definition**

A violator is in **Significant Non-Compliance (SNC)** if the violation(s) meets any of the following criteria:

- exceeds SNC thresholds established by a corresponding federal program;
- has caused actual, or has the potential to cause adverse impact to public health or the environment;
- represents willful, chronic or recalcitrant behavior;
- substantially deviates from the terms of a permit, order, settlement agreement, or from statutory or regulatory requirements; or
- is not corrected within 60 days following the issuance of a Notice of Violation, Site Complaint or Inspection Report by the Department.

### Table 1: Types of Radiation Machines Regulated by MDE

Facility Type	Registered X-ray Tubes	Annual Effective Dose Equivalent(s), in mrem/year	Inspection Frequency	FY07 Initial Compliance Rate
1. high energy & particle accelerators	3 facilities, 3 certified tubes		annual	63%*
2. medical (therapy) accelerators	41 facilities, 60 certified tubes		annual	63%*
3. hospitals (ex. CT scanners, general purpose machines, bone density, fluoroscopic machines)	61 facilities, 1155 certified tubes	CTscan (head and body) = 150 Fluoroscopic = 300	biennial	63%*
4. physicians: chiropractic, MD, GP, podiatric	1275 facilities, 1811 certified tubes	39	biennial	63%*
5. ndustrial (ex. cabinet radiography, scanners, spectrographic)	241 facilities, 464 certified tubes		triennial	63%*
6. Dental	2674 facilities, 9149 tubes	2	triennial	48%
7. Veterinary	431 facilities, 538 tubes		triennial	34%
8. mammography (mqsa)	131 facilities, 206 tubes	10	annual	62%

The definition of effective dose equivalent is a value used to express the health risk from radiation exposure to a tissue or tissues in terms of an equivalent whole body exposure. For example, during a chest X-ray, only the chest is exposed (the skin exposure is about 50 mR). One would "weight" the organs in the chest for their biological sensitivity to radiation and come up with a whole-body equivalent dose (about 6 mrem). This means that the dose to the chest from a chest X-ray is an equivalent risk to the whole body receiving 6 mrem.

<sup>\* 63%</sup> is an aggregate compliance rate for these five types, because they are tracked together by RMD.

## Table 2: Radiation Machines Division FY07 and FY08 Compliance Data

	FY07	FY08 Q1	FY08 Q2	FY08 Q3
No. of facility registrations, permits/licenses in effect	4,833	4,843	4,855	4,852
No. of sites inspected	1,917	390	331	413
coverage rate	38%	8%	7%	8%
Number of sites inspected with significant violations	980	229	152	177
No. of enforcement actions excluding compliance assistance	5	2	0	4
Amount of penalties obtained	\$30,700	\$12,000	\$0	\$20,000

### Table 3: Asbestos FY07 and FY08 Compliance Data

	FY07	FY08 Q1	FY08 Q2	FY08 Q3
Number of of asbestos project notifications received	3,227	812	816	744
Number of sites inspected	814	260	131	136
Coverage rate	25%	32%	16%	18%
Number of sites inspected with significant violations	5	0	0	0
Number of enforcement actions excluding compliance assistance	3	0	2	2
Amount of penalties obtained	\$750	\$2,250	\$2,250	\$2,250

## Table 4: Asbestos Inspection Coverage Rates in FY07

NESHAP Projects	Non-NESHAP Projects	All Projects
2.100	1 1 4 2	2.240
2,198	1,142	3,340
709	272	981
33%	24%	29%
	2,198 709	2,198     1,142       709     272

# Attachment A/Table 5: Asbestos Violations by Type, FY05 to FY07

Type of Violation	Number in FY05	Number in FY06	Number in FY07
Asbestos signs	1	О	О
Asbestos storage	О	О	1
Asbestos not in plastic bags	2	0	0
Dropping asbestos	1	0	О
Failure to notify	8	0	8
Failure to re-notify	5	0	0
Failure to wet	4	2	3
Failure to send waste manifests	2	0	O
Failure to secure waste	0	1 1	O
Failure to submit air samples	2	i ö	Ö
Failure to begin work on date notified	1	1 0	0
Failure to label bags	1	1 1	0
Failure to label bags Failure to notify of a demo	7	0	2
Failure to pay proper fee	1	0	0
Failure to pay proper ree Failure to use surfactant	4	0	0
	1	2	0
Failure to segregate waste	1		_
Failure to properly wear respirator		0	0
Failure to remove asbestos before demo	1	0	2
Failure to take reasonable precautions	0	2	0
Hoods down	7	0	2
Improper respirator use	О	О	1
Improper waste transportation	О	О	4
Interim storage	О	1	О
Isolation of asbestos	О	1	О
Maintain records	О	О	1
More than 20 cubic yds at site	О	1	О
No Airs or waste manifest	О	1	0
No danger signs	2	0	1
No labels	O	0	1
No photo ID cards	2	5	2
No project notification sign	1	2	0
No protective clothing	О	2	0
No plastic on walls/floors	2	0	1
No 3 stage decon	1	1	1
No hoods	O	2	1
No training	0	1 1	O
No respiratory program	0	<u> i</u>	0
Remove moveable objects	2	0	0
Reasonable precautions	0	<del>                                     </del>	4
Throwing asbestos to floor	1	0	0
Unlabeled bags	1 1	0	0
Unlicensed contractor	2	2	1
Unwrapped structural members	0	1	0
Visible debris	0	3	0
Work practices	0	1 1	0
Worker protection	1	1	0
Total Violations	66	35	36
Enforcement Report Data for Comparison			
Total Notifications Received	3,273	3,201	3,277
Total Inspections, Audits, and Spot Checks	1,267	1,217	1,008
Coverage Rate	29%	29%	25%
Total Significant Violations	39	15	5
Total Penalties	\$75,000	\$15,000	\$750

#### Table 6: School Asbestos Inspections, FY06-08

	FY06	FY07	FY08
	Actual	Actual	Estimate
Number of schools inspected for Asbestos Hazard Emergency Response Act (AHERA)	55	90	75

## Attachment B/Table 7: FY08 Asbestos Oversight Committee Budget Request Detail Description

PRIORITY	DEPARTMENT	FACILITY	PROJECT	AMOUNT ASBESTOS	ESTIMATED COST	DESCRIPTION	Running Total
		Annapolis Bldgs & Grounds	Lowe House of				
ŀ	Department of Anne Arundel County, Leg District			120,000		Ceiling Tiles	
1	General Services	30	Building	40,000	\$800,000.00	VAT	\$800,000.00
	Labor, Licensing	1100 Eutaw Street;	Outer wall areas				
2	& Regulation	Baltimore City, Leg. District 44	of floors 1,2, &3	2,238	\$55,950.00	Spray-on	\$855,950.00
		UMBC;	Admin Sub				
ŀ	University	Baltimore County, Leg. District	Basement Hot			Thermal	
3	Systems of MD	12A	water tank		\$25,000.00	Insulation	\$880,950.00
ŀ		University of MD College Park;					
_	University	Prince George's County, Leg.	Computer &			Ceiling Tiles &	
4	Systems of MD	District 21	Space Sciences	various amts.	\$80,000.00	TSI - pipes	\$960,950.00
ŀ		University of MD College Park;	E			O-III B	
5	University Systems of MD	Prince George's County, Leg. District 21	Engineering Labs Building	, maria da amata	\$70,000.00	Ceiling Tiles &	£1 030 050 0
3	Systems of MD	University of MD College Park;	Building	various amts.	\$70,000.00	151 - pipes	\$1,030,950.00
ŀ	University	Prince George's County, Leg.				TSI - pipe ,	
6	Systems of MD	District 21	Mathematics	various amts.	\$12,000.00	cement board	\$1,042,950.00
		University of MD College Park;	amemanes	tanous arms.	\$12,000.00	Ceiling tiles, TSI	ψ.,o,o
ŀ	University	Prince George's County, Leg.				- pipe , cement	
7	Systems of MD	District 21	Reckord Armory	various amts.	\$14,000.00		\$1,056,950.00
	University	University of Baltimore;					
8	Systems of MD	Baltimore City, Leg. District 40	Academic Center	8,200	\$75,000.00	VAT	\$1,131,950.00
	University	University of Baltimore;					
9	Systems of MD	Baltimore City, Leg. District 40	Academic Center	900	\$21,000.00	Spray-on	\$1,152,950.00
	University	Coppin State University;	Parlett Moore				
10	Systems of MD	Baltimore City, Leg. District 40	Library		\$45,000.00	TSI	\$1,197,950.00
	University	Coppin State University;	Parlett Moore		_		
11	Systems of MD	Baltimore City, Leg. District 40	Library	13,500	\$200,000.00	VAT & Mastic	\$1,397,950.00
	Health & Mental	Springfield Hospital Center;		4286 VAT-	<b>*** *** ** ** ** ** ** *</b>		<b></b>
12	Hygiene	Carroll County, Leg. District 9B	Vocation Rehab	314 Ln Ft TSI	\$11,155.00	VAI & ISI	\$1,409,105.00
13	Maryland State Police	Forestville Complex;		5,599	\$27 OOE OO	VAT & Mastic	\$1,437,100.00
13	University	University of Baltimore;		5,599	\$27,993.00	VAT & Mastic	\$1,437,100.00
14	Systems of MD	Baltimore City, Leg. District 40	Academic Center	8,200	\$75,000.00	VAT	\$1,512,100.00
	Systems of MB	Workforce & Technology Center	14 AHU	8,200	\$73,000.00	Thermal	\$1,512,100.00
15	Education	Baltimore City, Leg. District 3A	Penthouses	15,800	\$316,000.00		\$1,828,100.00
			Energy Research	,	, ,		. ,===,:=0.00
ŀ		University of MD College Park;	& Health &				
ŀ	University	Prince George's County, Leg.	Human			Ceiling Tiles &	
16	Systems of MD	District 21	Performance	various amts.	\$15,000.00	TSI - pipes	\$1,843,100.00
ı		University of MD College Park;					
ŀ	University	Prince George's County, Leg.				TSI - pipe &	
17	Systems of MD	District 21	Physics Building	various amts.	\$35,000.00	duct	\$1,878,100.00
		Annapolis Bldgs & Grounds					
	l	Anne Arundel County, Leg District	l			Ceiling Tiles &	
18	General Services	30	Shaw House	3000 70	\$16,400.00	ISI - Pipe	\$1,894,500.00
ŀ		Frederick Campus	Benson				
40	Maryland School for the Deaf	Frederick County, Leg District 03A	Gymnasium & Veditz Bldg	1600 15685	\$105 500 00	LVAT.	\$2,000,000,00
19	loi trie Deai	USA	veditz blug	1000 15685	\$105,500.00	IVAI	\$2,000,000.00

### Attachment C: ARMA Special Funds Table 8: Clean Air Fund

	FY05	FY06	FY07
Initial Fund Balance	642,923.55	693,614.74	379,034.89
Revenues			
Construction permit fees	636,616.66	500,949.34	527,300.00
Operating permit fees	451,105.63	492,285.64	451,282.45
Title V permit fees	3,744,440.64	3,485,458.67	3,596,051.48
Asbestos licence fees	76,875.00	79,875.00	70,625.00
Asbestos training application review fees	18,425.00	20,350.00	20,650.00
Air penalties	324,273.32	357,392.32	334,905.36
Asbestos penalties	80,850.00	33,000.00	(17,250.00)
Total Revenues in FY	5,332,586.25	4,969,310.97	4,983,564.29
Total Revenues Available including Carry Forward	5,975,509.80	5,662,925.71	5,362,599.18
Expenditures			
ARMA salaries and fringe	3,584,095	3,631,507.59	3,480,957.51
ARMA operating costs	1,164,784	921,942.45	949,175.59
MDE non-ARMA direct expenditures	36,055.12	26,979.19	36,379.40
Total Direct Expenditures	4,784,933.93	4,580,429.23	4,466,512.50
Indirect	556,322.63	756,686.91	617,272.03
Total Expenditures net encumbrances	5,341,256.56	5,337,116.14	5,083,784.53
Encumbrances			
Outstanding Encumbrances	467,836.13	414,610.81	250 50 1 11
Prior Year Encumbrances, Cancellations & ID	527,200.63	467,836.13	379,704.41 414,610.81
Net Encumbrance Changes	59,364.50	53,225.32	34,906.40
Year-End Fund Balance	693,617.74	379,034.89	313,721.05

### Attachment C: ARMA Special Funds Table 9: State Radiation Control Fund

<b>Purpose:</b> This fund is used for activities related	to identifying, moni	toring and regulating ai	r pollution, including	
program development of these activities. The first	st authorized fee wa	ns in 1988		
Sources: fees and penalties				
Cap: no cap				
сар. по сар				
Table 4: Maryland Radiation Control I	Fund FY05-07 Rev	enue and Expenditur	re Summaries	
4.5	MAA DOE A lusis			
AR	MA RCF Analysis FY 05 Actuals	FY 06 Actuals	FY 07 Actual	
	F1 05 Actuals	F1 08 Actuals	F1 07 Actual	
Mammography Registration Fees	19,700.00	21,300.00	25,245.00	
Veterinary X-Ray Facilities	43,868.96	59,222.30	52,537.66	
Dental X-Ray Facilities Fees	529,931.10	595,226.70	685,292.20	
RAM License Fee	506,632.13	605,141.25	579,997.39	
Sealed Source & Device Fees	30,250.00	28,000.00	28,000.00	
General License Fees	4,100.00	7,900.00	11,200.00	
Rad Ctrl - Reciprocity Fees	49,300.00	50,950.00	66,500.00	
Non-Dental X-Ray Registration Fees	20,270.00	17,815.00	21,090.00	
Dental X-Ray Registration Fees	26,010.60	24,190.00	21,280.00	
X-Ray Certification Fees	316,265.02	354,550.30	356,525.60	
Radiation Machine Penalties	79,773.76	73,194.08	79,716.90	
Radioactive Mat Penalties	19,836.00	33,719.00	80,500.00	
Radiation Control Revenues				
	1,626,101.57	1,837,489.63	1,927,384.75	
Radiation Machine Penalties shown in Enf. Report		28,460.00	30,700.00	
Radioactive Mat Penalties showin in Enf. Report		34,128.00	20,900.00	
Expanditures for PHP & Others				
Expenditures for RHP & Others RHP	1,251,604.38	1 455 122 99	1 757 224 64	
Director's Office	1,251,604.38	1,455,133.88 131,196.36	1,757,234.64 151,816.37	
Other at MDE (PSC, AG's, etc)	5,097.74	488.68	25,678.80	
Subtotal	1,259,435.24	1,586,818.92	1,934,729.81	
Indirect	166,497.34	262,142.49	267,379.66	
Total	1,425,932.58	1,848,961.41	2,202,109.47	
Revenue Available to Fund Balance	200,168.99	(11,471.78)	(274,724.72)	
Fund Balance at Year End	545,579.92	534,108.04	259,382.94	
	2 .2,2. 3.02	22.,.30.01		
GF Available to RHP	396,331.00	46,053.34	-	

### Table 10: Title V Permitting Summary

	3/28/08	5/8/08
facilities needing Title V permit but not having one	10	10
facilities with expired Title V permits	14	13
facilities whose permits are within six months of expiration but have not submitted a renewal application	10	8

### Table 11: ARMA Vacancy Summary

	12/3/07	1/8/08	2/21/08	4/8/08	5/8/08
Total positions vacant	13	19	16	19	18
Vacancies with exceptions approved by DBM	7	4	2	5	6
Positions vacant more than 4 months	10	11	9	11	15
Positions vacant more than 6 months	6	9	7	9	9

## Attachment D/Table 12: ARMA VACANCIES as of 5/8/08

PIN	Program/ Division	Vacancy Date	Class/ Grade	Exceptions to OB	Excep. To DBM	Excep. Apprvd by DBM	MS 22 to OHR	MS 22 Apprvd by OHR	Interv. Quests to OHR	Interview Questions Recvd & Approved by OFP	Announ- cement Posted/ Closed	Notes
018492	Planning/ RGGI	04/18/07	Administrator III/18 (Class was changed)	01/08/08			09/26/07 resub. 12/07/07	<b>??</b>	<mark>??</mark>		opened on 3 45 day turna	udy has been re- k/25/08 (Class Unit has around), Several mtgs al resolution – Code
C7030	Planning/ SIP	05/16/07	Nat. Res. Plnr. (previous class PHE I)/13	09/11/07	09/25/07	2/19/08	09/26/07	10/10/07	01/15/08	R1/17/08 A1/17/08		9
C7039	Planning/ Climate Change	06/12/07	Administrator III/18	06/20/07	06/26/07	07/08/07	07/05/07	08/21/07	??		P10/23/07 C12/04/07 New date: P01/15/08 C01/30/08	****Pilot study has been re-opened on 3/25/08 (Class Unit has 45 day turnaround) Several mtgs held, no final resolution – Code 17
C7041	Planning/ Admin. Serv.	06/12/07	Administrative Aide/11	01/07/08			01/08/08	3/7/08	3/28/08	R 4/3/08 A 4/3/08		10, 12, 14
C7042	Mobile/ Admin. Serv.	06/12/07	Office Secretary II/9	09/26/07			08/24/07	08/28/07	10/10/07	R 10/12/07 A 10/12/07		10, 12, 14
018370	Planning/ Spec. Prog.	07/15/07	Administrator II/17 (Class was changed)	09/26/07			09/26/07 resub. 12/11/07	<mark>??</mark>	<mark>??</mark>		opened on 3 45 day turna	udy has been re- 1/25/08 (Class Unit has around) Several mtgs al resolution – Code
074063	Planning SIP	07/15/07	PH Engineer IV/18	09/26/07			09/26/07	10/01/07	02/1/08	R02/1/08 A02/1/08		10, 12, 14
063992	Compliance/ Field Serv.	09/30/07	Sanitarian II Registered/12	10/25/07			1/22/08	02/08/08	2/10/08	R 2/12/08 A 2/12/08		10, 12, 14

## Attachment D/Table 12: ARMA VACANCIES as of 5/8/08

PIN	Program/ Division	Vacancy Date	Classification	Exceptions to OB	Excep. To DBM	Excep. Apprvd by DBM	MS 22 to OHR	MS 22 Apprvd by OHR	Interv. Quests to OHR	Interview Questions Recvd & Approved by OFP	Announ- cement Posted/ Closed	Comments
077329	Air Monitoring/ Data Mgmt.	10/24/07	Environmental Spec. II/13 3/25/08 class approved as NRP II/14	2/19/08			2/6/08	3/27/08	4/20/08	R 4/22/08 A?		10, 12, 14, 16
018238	Planning/Reg. Development	11/27/07	PHE IV/18	2/25/08			2/14/08	2/29/08	2/1/08	R 3/3//08 A 3/5/08		10, 12, 14
074053	Compliance/ Process Compliance	12/31/07	PH Engineer I/13	01/7/08	3/5/08	3/19/08	12/04/07	01/16/08	01/22/08	R 01/22/08 A 01/23/08	P 3/26/08 C 5/2/08	3
065116	Director's Office	01/02/08	Administrative Aide/11	12/31/07	4/7/08		12/31/07	01/16/08	01/07/08	R 01/17/08 A 01/17/08		10
C2005	RHP/ Machines	01/04/08	Health Physicist Trainee/13	2/25/08			12/20/07	01/16/08	01/11/08	R 01/17/08 A 01/17/08		10
066367	RHP Machines	01/14/08	Environmental Program Mgr. I/18	3/28/08	4/17/08	5/5/08	4/20/08		NA	NA		Contractual Conversion 10, 12
025695	Permits/ Chemical	1/30/08	PHE IV/17	2/25/08	4/17/08	5/6/08	2/25/08	2/29/08	2/29/08	R 3/3/08 A 3/5/08		10
016632	Compliance/ Asbestos	3/1/08	PHE 1/13 (Class was changed)	<mark>??</mark>			4/24/08		EDC 5/25/08	R 4/24/08		2, 13, 16
063986	AG's Office	3/14/08	Asst. Attorney VI/22			3/28/08						Recruitment being handled by AG's Office – Announcement posted
068356	Air Monitoring/ Modeling	4/1/08	Meteorologist Senior/18									2

#### **Vacancy Key Codes:**

Yellow highlighting: date seems late or item seems overdue.

EDC: Estimated Date of Completion DNR: Did not Record P: Posted C: Closed

R: Received A: Approved

Codes: 1-Budget/funding holds, 2-Admin. has not responded to Notice of Vacancy letter sent by HRC within 10 working days, 3-Testing or developing test for position specific requirements, 4-Testing or developing test to produce new eligibility list, 5-Position was advertised, but received no qualified applicants, 6-Insufficient applicant continue recruitment, 7-Selection made, 8-Appointment pending, 9-Applicant declined position, 10-Office of Budget did not submit hiring exception to DBM within 15 days of receipt, 11-DBM did not approve hiring exception within 30 days of receipt, 12-Admin. did not submit MS-22 within 30 days of vacancy, 13-Admin. did not submit hiring exception within 30 days of vacancy, 14-Admin did not submit interview questions within 30 days of vacancy, 15-OHR did not approve MS-22 within 45 days of receipt, 16-OFP did not approve interview questions within 10 days of receipt, 17-Hold pending organizational decisions, 18 key codes don't apply, 19 in process of interviewing