

## Memo

Date: July 10, 2000  
To: Distribution  
From: Peter Cirnigliaro  
Subject: Performance Indicators For C-A Department For The First Quarter Of CY00

This Performance Indicator Report reflects the performance of the Collider–Accelerator Department and its precursor.

For Q1 CY00, the collective-dose, 4.2 person-rem, is shown in the attached tabulation. The department ALARA dose goal for CY00 is 21.5 person-rem.

There were two DOE reportable Occurrences during Q1 CY00: 1) “Plume Defined For E20 Catcher Above Drinking Water Standard,” one final corrective action is pending, and 2) “Near Miss Electric Shock in the B5 Beam Line,” corrective actions are closed. Details on these occurrences are located at <http://www.rhichome/AGS/Accel/SND/occurrences.htm>.

There were 3 Recordable Injury / Illness cases reported for Q1 CY00, excluding sports related cases. The Lost Work Case Rate declined to 1.65 per 100 FTE.

Approximately 100 cubic feet of radioactive waste is awaiting disposal by Waste Management, and over 1200 cubic feet have been shipped.

An increased frequency (2 per week versus 1) of Tier 1 Inspections is reflected in the higher number of deficiencies reported in Table 2 for Q1 CY00.

The percent of training requirements completed decreased from end of CY 1999 (80% complete) to end of 1st quarter 2000 (73% complete). While the number of requirements decreased from 5236 to 4530, the total incomplete increased from 1036 to 1233. The increase in the number of incomplete training requirements is being addressed by the following:

- Assuring that completed training records are entered into BTMS.
- Working with supervisors to assure that requirements listed in BTMS for their staff are appropriate and deleting requirements that are not.
- Identifying valid incomplete requirements and working with supervisors to schedule completion.

As of this writing, the above strategy has increased the % complete to 81%, and the department is striving for the BSA contract target of 95% by October 1, 2000.

TABLE 1, C-A DEPARTMENT PERFORMANCE INDICATORS

	1991	1992	1993	1994	1995	1996	1997	1998	1999	1-1-00 to 3-31-00
Whole-Body Collective Dose (person-rem)	39	25	27	48	82	85	39	43	12.2	<b>4.2</b>
Skin and Clothing Contaminations	0	0	0	0	0	0	0	1	0	<b>0</b>
Internal Contamination	0	0	0	0	4	0	0	0	0	<b>0</b>
Radioactive/Hazardous Materials Overexposures	0	0	0	0	0	0	0	0	0	<b>0</b>
Lost Work Day Case Rate (# per 100 FTEs)	4.0	2.9	2.2	1.5	2.1	1.2	1.2	3.4	2.2	<b>1.65</b>
1. Cases	16	11	8	5	7	4	4	12	8	<b>2</b>
2. Total Hours Worked (1000s)	807	773	741	651	674	666	663	700	741	<b>242</b>
Recordable Injury/Illness Rate (# per 100 FTEs)	6.0	5.4	4.1	4.9	4.2	2.4	3.3	4.8	3.0	<b>2.48</b>
1. Cases	24	21	15	16	14	8	11	17	11	<b>3</b>
Unplanned Safety Function Actuations	0	1	3	1	0	0	0	0	0	<b>0</b>
Violations of Operating Procedures	0	0	0	3	1	0	0	0	0	<b>0</b>
Unplanned Shutdowns	0	0	0	0	0	0	0*	0	0	<b>0</b>
Unusual Occurrences	3	0	2	1	0	0	0	0	1	<b>0</b>
Off-Normal Occurrences	7	4	8	6	5	4	3	4	0	<b>2</b>
Occurrences With Open Corrective Actions	3	1	2	1	1	0	1	1	0	<b>1</b>
Environmental Incidents	6	2	4	3	1	1	0	1	1	<b>1</b>
Solid Low-Level Waste Shipped										
1. Radioactive Waste (cu-ft)	3004	6354	2089	1742	2543	7018	6642	1494	624	<b>1248</b>
2. Hazardous Waste (cu-ft)**	4.3	16	6.0	47	26	24	51	14.5	16.1	<b>58.7</b>
3. Mixed Waste (cu-ft)**	25	4	140	39	6.8	38	117	0	18.75	<b>0</b>
4. Industrial Waste (cu-ft)**	-	-	-	-	-	-	-	-	179.4	<b>55.8</b>

\*A three-day stand-down of BNL in June 1997 per order of Secretary of Energy. Initiating event was not related C-A.

\*\* Assumes 64 lbs./ft<sup>3</sup>.

TABLE 2, C-A OSHA-TYPE DEFICIENCIES FOUND DURING TIER 1 INSPECTIONS

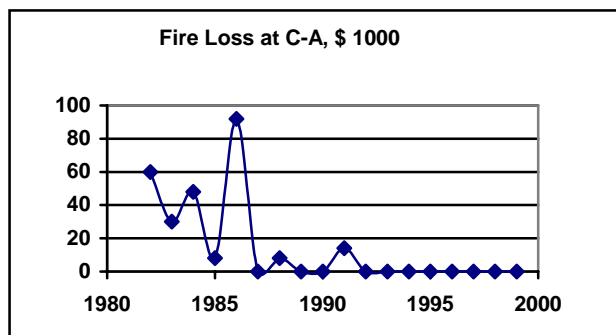
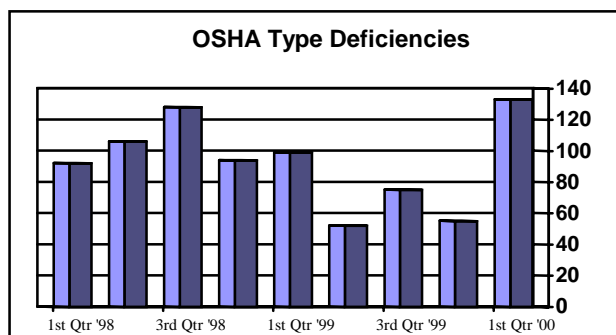
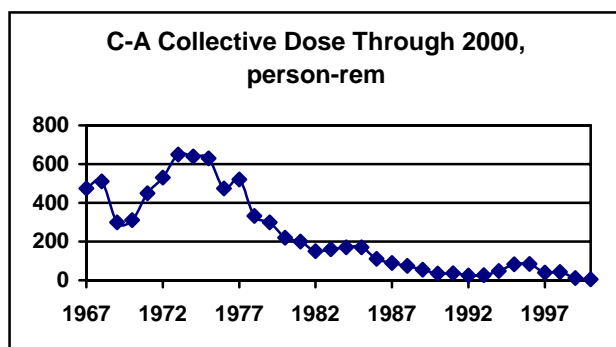
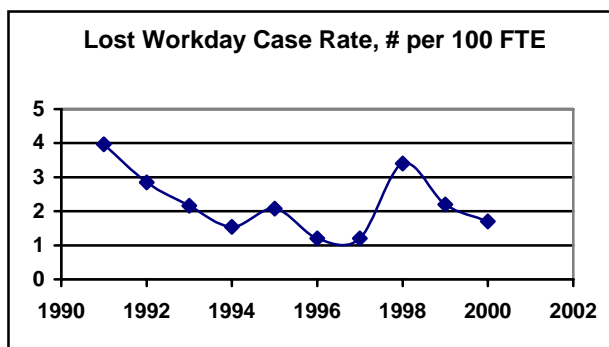
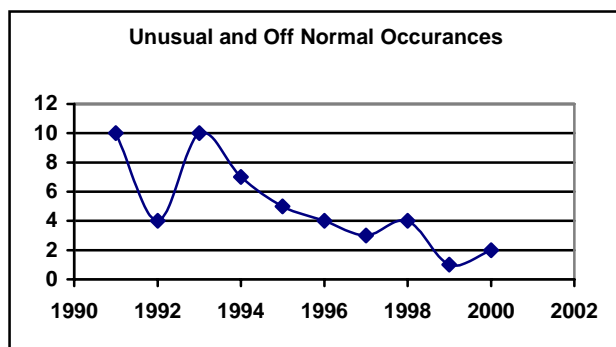
OSH Category	Definition of Category	Number of Deficiencies for 1998	Number of Deficiencies For 1999	Number of Deficiencies For 1-1-00 to 3-31-00
General Safety	Inadequate lighting, inadequate aisle-ways, trip hazards in walkway, load ratings not posted, missing floor or ceiling tiles, broken hardware on doors, windows or machines, exposed building insulation, overdue inspection on cranes, hoists and elevators, lack of toe-boards or improper railings.	154	89	46
Electrical Safety	Inadequate breaker panel labels, exposed conductors, missing grounds, GFCI not used where needed, knockouts missing on breaker boxes and disconnects, blocked breaker boxes or blocked disconnects.	82	60	29
Housekeeping	Poorly organized areas, excessive fire loading from boxes, plastic and packing materials or storage on top of cabinets.	37	22	12
Chemical Safety	Improper gas-cylinder storage, improperly labeled or unlabeled hazardous materials, improper storage of hazardous materials.	36	34	17
Fire Protection / Life Safety	Excessive storage of flammables, blocked exits, missing or non-functioning exit sign, damaged or broken fire protection / fire detection systems, or overdue extinguisher inspections.	73	38	8
Working Environment	Evidence of smoking or eating in work areas where prohibited, inadequate lighting or ventilation, heat stress, high noise and no posting or ear protection where required.	0	0	0
Radiation Safety	Survey instruments out of calibration, radiation barriers or other controls in poor condition or poorly maintained posting.	1	6	3
Personnel Protection	Broken machine guards, not wearing personal protective equipment when required; for example, lack of safety glasses.	31	25	17
Unsafe Practices	Using broken or damaged tools or ladders, parking in no-parking areas, going the wrong way down one-way streets, not wearing a TLD badge or dosimeter when required, climbing without fall protection, failure to tie down ladders, or using cable tray for climbing.	0	1	0
Outside & Grounds	Overgrown walkways, dilapidated or poorly maintained walkways and improper storage outdoors.	4	2	1
Other	Leaking containers or piping, improper air emissions, unlabeled sinks, unlabeled containers, improperly controlled satellite areas for waste.	1	4	0

TABLE 3, TROUBLE REPORTS FOR  
FIRST QUARTER CY00

Total Reports Issued This Year	78
Total Reports Closed	40
Reports Open Greater Than 90 Days	38

TABLE 4,  
COMPLETION PERCENTAGE OF REQUIRED TRAINING FOR C-A EMPLOYEES

Time Period	Number of Requirements	Total Incomplete	Percent of Required Training Complete
Q4 CY 99	5236	1036	80
<b>Q1 CY 00</b>	<b>4530</b>	<b>1233</b>	<b>73</b>

Selected Graphs of Performance Indicators

Distribution:

C-A Supervisors  
ALARA Committee  
RSC  
ASSRC  
ESRC

Brog, K.  
Etkin, A.  
Hauser, J.  
Karol, R.  
Kelley, P.  
Kirk, T.  
Layendecker, S.  
Lessard, E.  
Lowenstein, D.  
McNerney, A.  
Ozaki, S.  
Pile, P.  
Roser, T.  
Sandberg, J.  
Schlender, M.  
Sheridan, T.  
Stiegler, L.  
Tuozzolo, J.  
Weng, W.