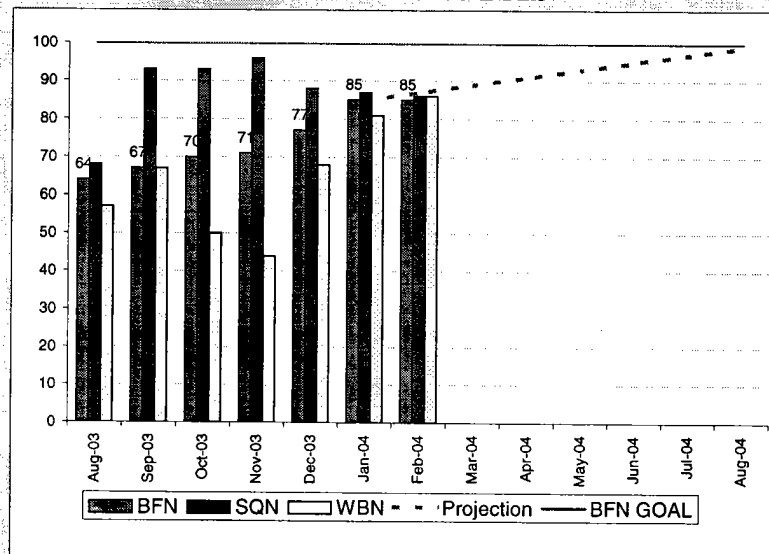


# BFN FISCAL YEAR 2004 FOCUS AREA

## INDUSTRIAL SAFETY

February-04

INDUSTRIAL SAFETY INDEX



### DEFINITION:

The Industrial Safety Index is based on a compilation of indicators for tolerance for industrial safety issues measured against specific goals. These indicators are converted into an index with a maximum of 1.0

Sponsor: M. Skaggs  
Contact: C. Isaacs

IMPROVEMENT ACTION PLAN	OWNER	DUE DATE
Electrical Safety/Plant Work Practices	J. Halverson	On Going
TVA Safety & Health Manual Training (Tracking in CSMRT)	D. Green	10/1/04
Material Handling module added to the Dynamic Learning Center	C. Isaacs	Complete

# TVAN FISCAL YEAR 2004 FOCUS AREA INDUSTRIAL SAFETY PERFORMANCE INDEX

February-04

Indicator / Measure	Unit	Goal Value	Threshold Value	Index points	BFN Performance	BFN Value	Owners	SQN Performance	SQN Value	Owners	WBN Performance	WBN Value	Owners
<b>Challenges</b>													
1 Lost time accidents (TVA only)	Current FY Lost Time Injury Rate for 1st 12 months	Zero	Zero	0.15	0	0.15	C. Isaacs	0.00	0.15	G. Poe	0	0.15	E. Hudgins
2 Recordable Injuries (TVA only)	Current FY Recordable Injury Rate for last 12 months	Less than 50% of TVAN Goal	Less than TVAN Goal (0.55)	0.15	0.11	0.15	C. Isaacs	0.32	0.13	G. Poe	0.32	0.12	E. Hudgins
3 Industrial Safety Near Miss PERs	Near miss industrial safety PERs per month	Zero per month	Less than 3 per month	0.10	0	0.10	C. Isaacs	0	0.10	G. Poe	0	0.10	E. Hudgins
4 First Aid Rate (TVA only)	Current First Aid Injury Rate for last 12 months	< 4.0	> 5.0	0.15	2.12	0.15	C. Isaacs	4.71	0.05	G. Poe	4.69	0.05	E. Hudgins
5 Interlocking Safety Audits	Percent of selected population performing audits per month	> 95% performing one interlocking audit per month	> 80% performing one interlocking audit per month	0.10	> 100%	0.10	M. Skaggs	100%	0.10	D. Kulisek	> 100%	0.10	L. Bryant
6 Industrial Safety Work Orders – Age	Average age and oldest industrial safety work order	Average age < 12 weeks old with none > 6 months	Average age < 6 months with none > one cycle old.	0.10	13 weeks	0.09	D. Matheny	8.72 weeks	0.10	D. Clift	13 wk avg	0.09	K. Parker
7 Age of Industrial Safety PERs (not including first aid injury or trend PERs)	Average age of open industrial safety PERs	Average age less than 6 weeks	Average age greater than 6 months	0.10	18 weeks	0.04	S. Armstrong	7.25 Weeks	0.095	J. Hamilton	< 6 wk	0.10	J. Laughlin
8 Safety Suggestions	Average age of open industrial safety suggestions	Average age less than 6 weeks	Average age greater than 6 months	0.10	5.8 Months	0.015	R. V. White	3.7 Months	0.085	D. Johnson	< 6 wk	0.10	B. Johnson
9 COO Safety Performance Index	completed 18120's with unsafe act and conditions identified	80%	70%	0.05	100%	0.05	C. Isaacs	100%	0.05	G. Poe	100%	0.05	E. Hudgins
<b>Overall Tolerance Index</b>				<b>1.00</b>		<b>0.85</b>			<b>0.86</b>			<b>0.86</b>	

**Browns Ferry Nuclear Plant**  
**Central Safety Management Review Team (CSMRT) Meeting FY 2004**

*POSC Conference Room*  
*April 12, 2004 Monday, 10:00 a.m.*

**AGENDA  
FY 2004**

1. Recognition and Introduction of Visitors
2. Action items from previous meeting
  - FR Daily Wear Update (Steve Brown)(Due date Extended to April 2, 2004)
  - MMDP 11 (Scaffolding Revision) (Lynn Smith)
  - TVA Safety Manual Training (Dan Sanchez)
  - Confined space training for Pinkerton supervisors (David Ussery)
  - Security use of over head lights on TVA property (David Ussery)
3. Engineering Industrial Safety DCNs (Joe Burton)
4. Industrial Safety PERs/Work Orders (Steve Armstrong/Randy Steele)
5. Safety Inspection and Observation Summary (Pete Olson)
6. Department Safety Program Stewardship:
  - Injury / Incident Experience
  - Safety Training Issues
  - EIP Performance
  - Current Safety Actions & Issues
7. Subcommittee Reports -

OPS	MAINT/MODS	RAD/CHEM	Outage
Site Support/Engineering/ Licensing	Training	Nuclear Assurance	Pinkerton
Unit 1-Recovery	Stone & Webster	Bechtel	

  - Health and Safety Committee – (R.V. White/Charlie Canida)
  - Program and Activities – (Glenn Henry)
  - Rules and Procedures – (Phil Chadwell)
  - Worker's Compensation/Hearing Loss Claims ADHOC – (Kathy Isom)
8. Site Safety Performance (Chad Isaacs)
  - Industrial Safety Site Package Report
  - Industrial Safety Intolerance Package Report
  - Monthly Accident Analysis Report
9. New Business
  - U3C11 Industrial Safety Performance (Chad Isaacs)
  - Fall Protection Requirement for Flat Bed Trucks (Chad Isaacs)
  - TCM Industrial Safety Requirements (Chad Isaacs)
  - Crane Operating Procedures CRC (Dan Sabchez)
  - Revision 4, TVA Safety and Health Manual (Chad Isaacs)
  - Confined Space training and monitor training (Chad Isaacs)
  - Crane Flagging Requirements in MMDP-2 (Frank Noblitt)
  - PSC Safety: Fundamentals of Industrial Hygiene Training (Chad Isaacs)
10. Site Vice President / Plant Manager's Comments



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*It's everyone's business*

# TVA BROWNS FERRY

## INDUSTRIAL SAFETY PERFORMANCE

### FY 2004

**GOALS:**      **Rec. Rate = 0.55**

**LT Rate = 0.00**

**All Injury Rate (AIR) = 1.15**

Rec. or LT Rate = No. Rec. or LT X 200,000 / Total Manhours Worked

All Injury Rate = LT + MT + OCI + Fatalities X 200,000 / Total Manhours Worked

Month	Mo. Rec.	YTD Rec.	Mo. Rate	YTD Rate	Mo. LT	YTD LT	Mo. Rate	YTD Rate	Mo. MnHrs.	YTD MnHrs.	Site Safe Manhours	Days LLTA	AIR Rate
OCT	0	0	0.00	0.00	0	0	0.00	0.00	130,095	130,095	2,814,983	584	0.00
NOV	0	0	0.00	0.00	0	0	0.00	0.00	148,831	278,926	2,963,814	614	0.00
DEC	0	0	0.00	0.00	0	0	0.00	0.00	148,577	427,503	3,112,391	645	0.00
JAN	0	0	0.00	0.00	0	0	0.00	0.00	120,201	547,703	3,232,591	676	0.00
FEB	0	0	0.00	0.00	0	0	0.00	0.00	142,543	690,246	3,375,134	705	0.00
MAR													
APR													
MAY													
JUN													
JUL													
AUG													
SEPT													

The Recordable Injuries occurring in Fiscal Year 2003 are:

*13,631,797 SafeWork Hours @ 2368 days*

*Owner: Chad A. Isaacs - 7839 / 14872*

**4a**

# TVA BROWNS FERRY

## INDUSTRIAL SAFETY PERFORMANCE

### FY2003

**GOALS:**      **Rec. Rate = 0.55**

**LT Rate = 0.00**

**All Injury Rate (AIR) = 1.30**

Rec. or LT Rate = No. Rec. or LT X 200,000 / Total Manhours Worked

All Injury Rate = LT + MT + OCI + Fatalities X 200,000 / Total Manhours Worked

Month	Mo. Rec.	YTD Rec.	Mo. Rate	YTD Rate	Mo. LT	YTD LT	Mo. Rate	YTD Rate	Mo. MnHrs.	YTD MnHrs.	Site Safe Manhours	Days LLTA	AIR Rate
OCT	0	0	0.00	0.00	0	0	0.00	0.00	142,168	142,168	1,051,893	219	0.00
NOV	2	2	3.03	1.46	0	0	0.00	0.00	131,859	274,027	1,183,752	249	1.46
DEC	0	2	0.00	0.95	0	0	0.00	0.00	146,191	420,217	1,329,942	280	0.95
JAN	0	2	0.00	0.75	0	0	0.00	0.00	116,443	536,660	1,446,385	311	0.75
FEB	0	2	0.00	0.59	0	0	0.00	0.00	141,860	678,520	1,588,245	339	0.59
MAR	0	2	0.00	0.44	0	0	0.00	0.00	227,234	905,754	1,815,479	370	0.66
APR	0	2	0.00	0.38	0	0	0.00	0.00	134,206	1,039,959	1,949,684	400	0.58
MAY	0	2	0.00	0.34	0	0	0.00	0.00	132,499	1,172,459	2,082,184	431	0.68
JUN	0	2	0.00	0.30	0	0	0.00	0.00	175,052	1,347,511	2,257,236	461	0.74
JUL	0	2	0.00	0.27	0	0	0.00	0.00	125,227	1,472,738	2,382,763	492	0.68
AUG	0	2	0.00	0.25	0	0	0.00	0.00	136,283	1,609,021	2,518,746	523	0.62
SEPT	1	3	1.20	0.34	0	0	0.00	0.00	166,142	1,775,163	2,684,888	553	1.35

#### The Recordable Injuries occurring in Fiscal Year 2003 are:

**13,631,797 SafeWork Hours @ 2368 days**

1. 11/4/02 - Boilermaker - Lowering a ladder into the waste collector filter area and strained the employees back.
2. 11/19/02 - Electrician - Walking up stairs of the electrical shop, tripped on the last step and strained the employees back
3. 9/22/03 - I&C Tech. - Walking down the stairs in the maintenance building, missed judged the last step and twisted ankle.

**Owner: Chad A. Isaacs - 7839 / 14872**

**4a**

# TVA BROWNS FERRY

## INDUSTRIAL SAFETY PERFORMANCE

### FY2002

**GOALS:** Rec. Rate = 0.55

LT Rate = 0.00

All Injury Rate (AIR) = 1.30

Rec. or LT Rate = No. Rec. or LT X 200,000 / Total Manhours Worked

All Injury Rate = LT + MT + OCl + Fatalities X 200,000 / Total Manhours Worked

Month	Mo. Rec.	YTD Rec.	Mo. Rate	YTD Rate	Mo. LT	YTD LT	Mo. Rate	YTD Rate	Mo. MnHrs.	YTD MnHrs.	Site Safe Manhours	Days LLTA	AIR Rate
OCT	0	0	0.00	0.00	0	0	0.00	0.00	134,537	134,537	12,918,301	2,222	0.00
NOV	0	0	0.00	0.00	0	0	0.00	0.00	124,230	258,767	13,042,531	2,252	0.77
DEC	0	0	0.00	0.00	0	0	0.00	0.00	160,630	419,397	13,203,161	2,283	0.48
JAN	1	1	1.66	0.37	0	0	0.00	0.00	120,814	540,211	13,323,975	2,314	0.74
FEB	0	1	0.00	0.30	0	0	0.00	0.00	135,804	676,015	13,459,779	2,342	0.89
MAR	3	4	2.93	0.91	3	3	2.93	0.68	205,098	881,113	33,080	5	1.36
APR	0	4	0.00	0.76	0	3	0.00	0.57	174,313	1,055,426	207,393	35	1.14
MAY	0	4	0.00	0.67	0	3	0.00	0.51	132,176	1,187,602	339,569	66	1.01
JUN	0	4	0.00	0.60	0	3	0.00	0.45	150,742	1,338,344	490,311	96	1.34
JUL	0	4	0.00	0.55	0	3	0.00	0.41	120,995	1,459,339	611,306	127	1.23
AUG	0	4	0.00	0.50	0	3	0.00	0.38	139,333	1,598,672	750,639	158	1.13
SEPT	0	4	0.00	0.46	0	3	0.00	0.34	159,086	1,757,758	909,725	188	1.02

**The Recordable Injuries occurring in Fiscal Year 2002 are:** 03/26/2002 13,631,797 SafeWork Hours @ 2368 days

1. 01-08-02 - OPS Trainer - sitting in chair in classroom - went to adjust position - back of chair did not restrain - grabbed desk - injured elbow - Off-Site Medical Treatment - LATE REPORT (3-7-02)
2. 03-26-02 - Electrician - Attempting to install grounds on 4Kv Unit Board 3B - an ARC FLASH occurred - Burns - Medical Treatment - Lost-Time
3. 03-26-02 - Electrician - Assisting in installing grounds on 4Kv Unit Board 3B - an ARC FLASH occurred - Burns - Medical Treatment - Lost-Time
4. 03-26-02 - Electrician - Assisting in installing grounds on 4Kv Unit Board 3B - an ARC FLASH occurred - Burns - Medical Treatment - Lost-Time

Owner: Chad A. Isaacs - 7839 / 14872

4a

# TVA BROWNS FERRY

## INDUSTRIAL SAFETY PERFORMANCE

### FY2001

**GOALS:**    **Rec. Rate = 0.55**

**LT Rate = 0.00**

**All Injury Rate (AIR) = 1.97**

Rec. or LT Rate = No. Rec. or LT X 200,000 / Total Manhours Worked

All Injury Rate = LT + MT + OCI + Fatalities X 200,000 / Total Manhours Worked

Month	Mo. Rec.	YTD Rec.	Mo. Rate	YTD Rate	Mo. LT	YTD LT	Mo. Rate	YTD Rate	Mo. MnHrs.	YTD MnHrs.	Site Safe Manhours	Days LLTA	AIR Rate
OCT	0	0	0.00	0.00	0	0	0.00	0.00	132,080	132,080	11,110,747	1,857	0.00
NOV	1	1	1.64	0.79	0	0	0.00	0.00	122,117	254,197	11,232,864	1,887	0.79
DEC	0	1	0.00	0.49	0	0	0.00	0.00	149,851	404,048	11,382,715	1,918	0.49
JAN	0	1	0.00	0.38	0	0	0.00	0.00	128,834	532,882	11,511,549	1,949	0.38
FEB	0	1	0.00	0.30	0	0	0.00	0.00	139,131	672,013	11,650,680	1,977	0.30
MAR	1	2	<b>0.94</b>	0.45	0	0	0.00	0.00	213,612	885,625	11,864,292	2,008	0.45
APR	2	4	<b>2.16</b>	<b>0.75</b>	0	0	0.00	0.00	185,192	1,070,817	12,049,484	2,038	0.75
MAY	1	5	<b>1.47</b>	<b>0.83</b>	0	0	0.00	0.00	136,140	1,206,957	12,185,624	2,069	0.83
JUN	1	6	<b>1.23</b>	<b>0.88</b>	0	0	0.00	0.00	162,570	1,369,527	12,348,194	2,099	0.88
JUL	2	8	<b>3.22</b>	<b>1.07</b>	0	0	0.00	0.00	124,284	1,493,811	12,472,478	2,130	1.07
AUG	0	8	<b>0.00</b>	<b>0.98</b>	0	0	0.00	0.00	142,522	1,636,333	12,615,000	2,161	0.98
SEPT	0	8	<b>0.00</b>	<b>0.89</b>	0	0	0.00	0.00	168,764	1,805,097	12,783,764	2,191	0.89

#### The Recordable Injuries occurring in Fiscal Year 2001 are:

1. 11-28-00 - HP Tech - turned and twisted ankle - causing an avulsion fracture (tendon strips a little bone away) of the ankle - medical treatment
2. 03-20-01 - AUO -Assisting in the transferring of fuel oil Unit 3 DG Bldg. - valve wrench slipped off - struck head - laceration to Left eyebrow - sutures
3. 04-03-01 - Laborer - Cutting rubber floor matting on hands and knees - while cutting towards himself - knife slipped - Laceration thigh - Sutures
4. 04-15-01 - Steamfitter - Welding 1/2" valve congested area - went to exit brushed against hot weld - burn to arm - 2nd Degree
5. 05-30-01 - Machinist - exiting truck closed door on Right Index finger - laceration - 10 sutures
6. 06-01-01 - Steamfitter - attempting to open utility knife - it slipped protruded forward struck palm at base of thumb - laceration - 3 sutures
7. 07-11-01 - Steamfitter - holding a backup wrench to remove stud bolts - 3/4" torque wrench engaged - moved wrench & pinched finger - 7 sutures
8. 07-18-01 - Labor Foreman - descending permanent plant ladder - scrapped back of hand on part of toe-board - Laceration - 5 Sutures

Owner: Robert L. Barnes - 7839 / 14872

4a

# TVA BROWNS FERRY

## INDUSTRIAL SAFETY PERFORMANCE

### FY2000

Rec. or LT Rate = No. Rec. or LT X 200,000 / Total Manhours Worked

All Injury Rate = LT + MT + OCI + Fatalities X 200,000 / Total Manhours Worked

Month	Mo. Rec.	YTD Rec.	Mo. Rate	YTD Rate	Mo. LT	YTD LT	Mo. Rate	YTD Rate	Mo. MnHrs.	YTD MnHrs.	Site Safe Manhours	Days LLTA	AIR Rate
OCT	0	0	0.00	0.00	0	0	0.00	0.00	196,210	196,210	9,312,546	1,491	0.00
NOV	1	1	1.59	0.62	0	0	0.00	0.00	125,776	321,986	9,438,322	1,521	0.62
DEC	0	1	0.00	0.44	0	0	0.00	0.00	132,317	454,303	9,570,639	1,552	1.32
JAN	2	3	2.89	1.01	0	0	0.00	0.00	138,387	592,690	9,709,026	1,583	2.36
FEB	1	4	1.40	1.09	0	0	0.00	0.00	142,875	735,565	10,037,115	1,612	2.45
MAR	0	4	0.00	0.87	0	0	0.00	0.00	185,214	920,779	10,037,115	1,643	2.17
APR	0	4	0.00	0.72	0	0	0.00	0.00	196,787	1,117,566	10,233,902	1,673	2.15
MAY	1	5	1.35	0.79	0	0	0.00	0.00	148,205	1,265,771	10,382,107	1,704	2.21
JUN	0	5	0.00	0.70	0	0	0.00	0.00	172,815	1,438,586	10,554,922	1,734	2.50
JUL	0	5	0.00	0.64	0	0	0.00	0.00	119,610	1,558,196	10,674,532	1,765	2.44
AUG	1	6	1.44	0.71	0	0	0.00	0.00	139,201	1,697,397	10,813,733	1,796	2.36
SEPT	0	6	0.00	0.64	0	0	0.00	0.00	164,934	1,862,331	10,978,667	1,826	2.15

#### The Recordable Injuries occurring in Fiscal Year 2000 are:

- 11-22-99 - Mech. PDM - was performing predictive monitoring when he stepped on the side of a pipe support & twisted ankle - Medical Treatment
- 01-07-00 - Electrician - while transporting LPCI MG set motor on cart it tilted pinching hand between motor & cart - Fracture finger - sutures
- 01-12-00 - AUO - was exiting from behind a pump - reached up & grabbed pipe insulation for support - banding lacerated thumb - sutures
- 02-14-00 - I&C Engineer - struck head on pipe support fell back and hit head on hard hat lacerating top of head - sutures
- 05-03-00 - HP Technician - caught right ring finger on AC Unit while disassembling U3 DW Control Point - laceration - sutures
- 08-05-00 - AUO - performing SLC Valve verification SR, stepping down from tank pad caught Right hand on retaining strap - laceration - sutures



**TENNESSEE VALLEY AUTHORITY**

 BROWNS FERRY NUCLEAR PLANT  
 FY 1999

Report No.09BFN99

# Monthly Accident Analysis

Rec. Rate Goal = 0.31 LT.Rate Goal = 0.00


**keepsafe**
*It's everyone's business*

SITE SAFE MANHOURS = 9,116,336 1,460 DAYS

September 1999

All Injury Rate (AIR) = 1.42 AIR GOAL = 2.00

SITE DEPARTMENT	AVG.# EMPLOYEES	HOURS WORKED MONTH FYTD	MH SINCE LAST LT	FIRST AID CASES MONTH FYTD	RECORDABLES MONTH FYTD	REC. RATE MONTH FYTD	LOST TIME CASES MONTH FYTD	LOST TIME RATE MONTH FYTD	DATE LLTA	OCI Charges MONTH FYTD
OPERATIONS	0	39,929	424,682	1,767,501	2 13	0 1	0.00 0.47	0 0	0.00 0.00	10/01/95 1 2
MAINTENANCE	0	58,335	668,433	8,692,157	1 27	0 2	0.00 0.60	0 0	0.00 0.00	07/28/89 0 3
RAD/CHEM	0	21,852	237,059	2,823,924	1 4	0 1	0.00 0.84	0 0	0.00 0.00	0 1
SECURITY	0	1,408	16,056	513,692	0 0	0 0	0.00 0.00	0 0	0.00 0.00	09/01/95 0 0
RECOVERY	(adjusted Hrs.)	32	937	696,927	0 0	0 0	0.00 0.00	0 0	0.00 0.00	02/13/91 0 0
MATERIALS	Transferred To Corp.	1	2	1,399,681	0 1	0 0	0.00 0.00	0 0	0.00 0.00	06/27/90 0 1
VP STAFF	0	588	5,962	353,337	0 0	0 0	0.00 0.00	0 0	0.00 0.00	03/15/91 0 0
SITE SUPPORT	0	3,534	36,345	1,347,901	0 0	0 0	0.00 0.00	0 0	0.00 0.00	0 1
PROJ.MNGMNT.	0	1,080	9,832	619,000	0 0	0 0	0.00 0.00	0 0	0.00 0.00	0 0
PLNT. MNGR.	0	919	7,967	842,072	0 0	0 0	0.00 0.00	0 0	0.00 0.00	11/30/88 0 0
OUTAGE MNGMNT.	0	5,753	59,574	435,157	0 1	0 0	0.00 0.00	0 0	0.00 0.00	0 0
HUMAN RES.	0	1,982	21,782	212,240	0 0	0 0	0.00 0.00	0 0	0.00 0.00	0 0
FINANCIAL SER.	0	1,810	22,462	294,041	0 0	0 0	0.00 0.00	0 0	0.00 0.00	0 0
SITE ENGINEERING	0	24,740	268,143	5,421,851	0 3	0 1	0.00 0.75	0 0	0.00 0.00	04/04/89 0 0
TRNG. BRANCH	0	8,193	86,331	1,409,908	0 0	0 0	0.00 0.00	0 0	0.00 0.00	10/01/86 0 1
BUS. & WORKPERF.	0	4,808	47,906	131,247	1 1	0 0	0.00 0.00	0 0	0.00 0.00	01/00/00 0 0
Nuclear Assurance	0	3,451	36,903	2,154,672	0 0	0 0	0.00 0.00	0 0	0.00 0.00	04/29/88 0 0
Site Licensing	0	2,522	28,145	54,901	0 0	0 0	0.00 0.00	0 0	0.00 0.00	10/01/97 0 0
TOTAL - MONTH	0	180,937			5	0	0.00	0	0.00	1
TOTAL - YTD			1,978,521		50	5	0.51	0	0.00	9

 Recordable Rate =  $\frac{\text{No. Recordables X 200,000}}{\text{Total Manhours Worked}}$ 

 Lost Time Rate =  $\frac{\text{No. Lost Times X 200,000}}{\text{Total Manhours Worked}}$ 

 Corp. All Injury Rate =  $\frac{\text{LT + MT + OCI + Fatalities X 200,000}}{\text{Total Hours Worked}}$ 

 OCI = Other Compensable  
 Injury - Outside Cost