

TABLE OF CONTENTS

1	<u>SAFETY & HEALTH POLICY</u>	32
1.1	SAFETY POLICY	33
1.2	PROGRAM OBJECTIVES.....	34
2	<u>RESPONSIBILITY</u>	35
2.1	EXECUTIVE MANAGEMENT	36
2.2	COMPLIANCE	36
2.3	SAFETY COORDINATOR RESPONSIBILITY	36
2.4	SUPERVISOR'S SAFETY RESPONSIBILITY.....	37
2.5	EMPLOYEE RESPONSIBILITIES	38
3	<u>DISCIPLINARY POLICY</u>	39
3.1	INTRODUCTION	40
3.2	PURPOSE	40
3.3	RESPONSIBILITIES.....	40
3.4	REQUIREMENTS.....	40
3.5	CIRCUMSTANCES LEADING TO DISCIPLINARY ACTION	41
3.6	PROCEDURE:.....	41
3.7	SUPERVISION SANCTIONS:	42
3.8	SUMMARY.....	42
3.9	SUPERVISORS' DISCIPLINARY ACTION	42
4	<u>SAFETY ORIENTATION</u>	43
4.1	NEW EMPLOYEE ORIENTATION.....	44
4.2	NEW EMPLOYEE CHECKLIST INSTRUCTIONS.....	44
4.3	EMPLOYEE SAFETY ORIENTATION GUIDELINE	44
4.4	SAFETY POLICY	44
4.5	EMPLOYEE RESPONSIBILITIES FOR SAFETY.....	44
4.6	EMPLOYEE SAFETY ORIENTATION GUIDELINE	45
4.7	EMPLOYMENT DOCUMENTS.....	47
4.8	ORIENTATION CHECKLIST FOR NEW EMPLOYEES	48
4.9	SAFETY & HEALTH PROGRAM	48
4.10	EMPLOYEE ACKNOWLEDGEMENT FORM	49
4.11	EMPLOYEE RECOGNITION.....	50
5	<u>ACCIDENT/LOSS REPORTING PROCEDURES</u>	51
5.1	PURPOSE	52
5.2	OBJECTIVES.....	52
5.3	PROCEDURE.....	52

5.4	SERIOUS EMERGENCY REPORTING	53
5.5	HANDLING NON-SERIOUS ACCIDENTS	53
5.6	FIRST AID TREATMENT	54
5.7	PROPERTY/EQUIPMENT DAMAGE	54
5.8	VEHICLE ACCIDENT REPORTING	54
5.9	CITIZEN/PUBLIC ACCIDENTS (NON-AUTO)	54
5.10	ACCIDENT INVESTIGATION REPORT	54
5.11	RECORDKEEPING.....	55
5.12	EMPLOYEE INJURIES.....	55
5.13	VEHICLE, PROPERTY DAMAGE, AND PUBLIC LIABILITY ACCIDENT REPORTS	55
6	<u>ACCIDENT INVESTIGATION</u>	56
6.1	ACCIDENT / INJURY INVESTIGATION	57
6.2	EMPLOYEE ACCIDENTS	57
6.3	DEFINITIONS	58
6.4	CHECK THE SCENE.....	58
6.5	WRITE IT DOWN.....	58
6.6	COLLECT THE EVIDENCE	58
6.7	INTERVIEW WITNESS.....	58
6.8	INTERVIEW THE VICTIM.....	58
6.9	WEIGH THE EVIDENCE	59
7	<u>HAZARD IDENTIFICATION & ASSESSMENT</u>	61
7.1	PURPOSE	62
7.2	KEY RESPONSIBILITIES	62
7.3	HAZARD AND RISK IDENTIFICATION	62
7.4	REVIEW OF HAZARD ASSESSMENT	63
7.5	RISK ASSESSMENT	63
7.6	YOUR COMPANY NAME HERE RISK ASSESSMENT MATRIX	64
7.7	RISK CONTROLS/METHODS TO ENSURE IDENTIFIED HAZARDS ARE ADDRESSED AND MITIGATED	64
7.8	EMERGENCY CONTROL OF HAZARDS	65
7.9	CERTIFICATION OF HAZARD ASSESSMENT	65
7.10	JOB SAFETY ANALYSIS (JSA)	65
7.11	SITE SPECIFIC HSE PLAN (SSSP)	65
7.12	REVIEW PROCESS	65
7.13	WORKSITE HAZARD ASSESSMENT FORM	66
7.14	JOB SAFETY ANALYSIS FORM	67
8	<u>EMERGENCY ACTION PLAN.....</u>	69
8.1	PURPOSE	70
8.2	EMERGENCY RESPONSE PLANNING, ISSUING AND ANNUAL REVIEW GUIDELINES	70
8.3	REVIEWING THE EMERGENCY ACTION PLAN WITH EMPLOYEES.....	70
8.4	PROCEDURE.....	71
8.5	PLANNING FOR EMERGENCIES:	71

8.6	GENERAL EMERGENCY PROCEDURE GUIDELINES	71
8.7	REVIEWING THE EMERGENCY ACTION PLAN WITH EMPLOYEES	71
8.8	PROCEDURES FOR EMERGENCY EVACUATION PLANNING	72
8.9	POTENTIAL EMERGENCIES	72
8.10	GUIDANCE PROCEDURES FOR POTENTIAL EMERGENCIES	72
8.11	EMERGENCY ACTION PLAN	73
8.12	ALARM SYSTEM	74
8.13	COMMUNICATIONS	74
8.14	FIRE EMERGENCY, EXPLOSION, OR CHEMICAL SPILL	74
8.15	SUPERVISOR'S RESPONSIBILITIES	74
8.16	EMERGENCY COORDINATOR'S RESPONSIBILITIES	74
8.17	EMERGENCY CONTINGENCY PLAN	75
8.18	EMERGENCY RESPONSE PROGRAM MANAGEMENT	75
8.19	DUTIES.....	76
9	<u>EMPLOYEE SUGGESTIONS.....</u>	80
9.1	INTRODUCTION	81
9.2	PURPOSE	81
9.3	PROCEDURE.....	81
10	<u>FIRST AID</u>	82
10.1	PURPOSE	83
10.2	SCOPE.....	83
10.3	RESPONSIBILITIES.....	83
10.4	PLANNING	83
10.5	MEDICAL RESPONSE	83
10.6	SUPPLIES AND EQUIPMENT	84
10.7	TRANSPORTATION	84
10.8	TRAINING	85
11	<u>FIRE PREVENTION</u>	86
11.1	PURPOSE	87
11.2	SCOPE.....	87
11.3	RESPONSIBILITIES.....	87
11.4	GENERAL REQUIREMENTS	87
11.5	PROCEDURE.....	88
11.6	LABELING OF FIRE EXTINGUISHERS.....	88
11.7	MAINTENANCE	88
11.8	INSPECTION, MAINTENANCE AND TESTING	89
11.9	FLAMMABLE AND COMBUSTIBLE LIQUID AND MATERIALS	89
11.10	SCRAP RECEPTACLE - TYPE, LOCATION AND USE	90
11.11	TYPE	90
11.12	FIRE AND EXPLOSION HAZARDS	90
11.13	FIRE AND EXPLOSION PREVENTION	90

11.14	SPECIFIC HAZARDS	90
11.15	TRAINING AND EDUCATION.....	91
11.16	TRAINING DOCUMENTATION	91
11.17	SITE EMERGENCY TELEPHONE LIST	92
12	<u>OSHA REFERENCES</u>	94
12.1	OSHA REPORTS AND SPECIAL REQUIREMENTS.....	95
12.2	SPECIAL OSHA REQUIREMENTS.....	95
12.3	POSTING REQUIREMENTS.....	96
12.4	OTHER SUGGESTED POSTINGS	96
12.5	STATES WITH APPROVED PLANS.....	97
12.6	OSHA/STATE CONSULTATION PROJECT DIRECTORY	99
13	<u>ABRASIVE BLASTING</u>	116
13.1	GENERAL SAFETY.....	117
13.2	SCOPE.....	117
13.3	PROCEDURE.....	117
13.4	GENERAL	117
13.5	EQUIPMENT HANDLING	117
13.6	AIR COMPRESSORS	117
13.7	BLAST POT	118
13.8	HOSES AND CONNECTORS	118
13.9	NOZZLES AND REMOTE CONTROLS	118
13.10	OPERATOR SIGNALS	119
13.11	RESPIRATOR USE.....	119
13.12	ENVIRONMENTAL CONTROLS	119
13.13	PERSONAL PROTECTIVE EQUIPMENT	119
13.14	DUST HAZARDS	122
13.15	EXAMPLES OF THE TYPES OF ABRASIVES USED IN BLASTING OPERATIONS	123
13.16	EXAMPLES OF COATINGS REMOVED IN BLASTING OPERATIONS	124
13.17	HOUSEKEEPING.....	124
13.18	BLAST CLEANING ENCLOSURES	124
13.19	BLAST CLEANING ENCLOSURES AND RECOMMENDED AIR VELOCITIES.....	125
13.20	SPECIFIC OPERATING REQUIREMENTS.....	126
13.21	BLASTING CABINETS.....	126
13.22	BLAST CLEANING ROOMS	127
13.23	AIR BLASTING	127
13.24	BLAST CLEANING NOZZLES.....	127
13.25	INSPECTION AND MAINTENANCE.....	127
14	<u>AERIAL LIFT SAFETY</u>	132
14.1	INTRODUCTION	133
14.2	HAZARDS	133
14.3	GENERAL DISCUSSION	134

14.4	MAINTENANCE	134
14.5	OPERATIONS.....	134
14.6	BEFORE OPERATION.....	135
14.7	WORKPLACE INSPECTIONS	135
14.8	PRESTART INSPECTION	135
14.9	OPERATION	136
14.10	RESPONSIBILITIES.....	136
14.11	WORK SUPERVISORS	137
14.12	HAZARDS CONTROL DEPARTMENT	138
14.13	DOCUMENTATION	138
14.14	TRAINING	138
14.15	FACILITY POINTS OF CONTACT	138
14.16	WORK SMART STANDARDS	139
14.17	OTHER REQUIREMENTS	139
14.18	APPENDIX A	140
14.19	APPENDIX B - PLATFORM LIFT EQUIPMENT INSPECTION CHECKLIST.....	140
14.20	APPENDIX C.....	142
14.21	APPENDIX D	143
14.22	APPENDIX E.....	144
14.23	APPENDIX F - OPERATOR WARNINGS AND INSTRUCTIONS.....	145
14.24	APPENDIX G	147
15	<u>ARC FLASH PROTECTION POLICY.....</u>	148
15.1	PROTECTING YOU AND YOUR WORKERS	149
15.2	DEFINITIONS	149
15.3	PROTECTION AGAINST ARC FLASH	149
15.4	ARC FLASH HAZARD ASSESSMENT	153
15.5	DETERMINE ELECTRICAL ARC FLASH HAZARD BOUNDARY	154
15.6	CREATING A SAFE WORK ZONE	159
15.7	PERSONAL PROTECTIVE EQUIPMENT	159
15.8	CARE AND MAINTENANCE OF PPE.....	164
15.9	OTHER HIGH VOLTAGE REQUIREMENTS	165
16	<u>ASBESTOS</u>	166
16.1	POLICY.....	167
16.2	DEFINITION.....	167
16.3	REACTIONS	167
16.4	SAFETY PRECAUTIONS	167
17	<u>ASSURED EQUIPMENT GROUNDING</u>	169
17.1	PURPOSE	170
17.2	DEFINITIONS.....	170
17.3	RESPONSIBILITIES.....	170
17.4	PROCEDURES AND GUIDELINES TO ELIMINATE INJURIES	170

18	<u>BACKHOE AND LOADER SAFETY.....</u>	173
18.1	SCOPE.....	174
18.2	BEFORE USING THE MACHINE	174
18.3	PRE-OPERATIONS CHECKLIST	174
18.4	INSPECTING THE LOADER	175
18.5	OPERATING THE LOADER.....	175
18.6	OPERATING THE BACKHOE	176
18.7	SAFE STOPPING PROCEDURE	176
18.8	SKID LOADER SAFETY.....	176
18.9	GENERAL SAFETY.....	176
18.10	ENTRY.....	177
18.11	OPERATION	177
18.12	EXIT	177
18.13	MAINTENANCE	177
19	<u>BEHAVIOR BASED SAFETY.....</u>	179
19.1	PURPOSE	180
19.2	SCOPE.....	180
19.3	REQUIREMENTS	180
19.4	RESPONSIBILITIES.....	182
19.5	TRAINING	183
20	<u>BENZENE AWARENESS</u>	185
20.1	PURPOSE:	186
20.2	SCOPE.....	186
20.3	GENERAL	186
20.4	DEFINITIONS.....	187
20.5	PROCEDURE.....	187
20.6	REGULATED AREAS.....	187
20.7	METHODS OF COMPLIANCE	187
20.8	PERMISSIBLE EXPOSURE LIMITS (PELS).....	187
20.9	EXPOSURE MONITORING	187
20.10	COMPLIANCE PROGRAMS	188
20.11	PERSONAL PROTECTIVE EQUIPMENT	188
20.12	RESPIRATORY PROTECTION	189
20.13	PROTECTIVE CLOTHING	189
20.14	MEDICAL SURVEILLANCE	189
20.15	COMMUNICATION OF HAZARDS	190
20.16	RECORD KEEPING	190
20.17	OBSERVATION OF MONITORING.....	190
21	<u>BLOODBORNE PATHOGENS</u>	194
21.1	PURPOSE	195

21.2	SCOPE	195
21.3	KEY RESPONSIBILITIES	195
21.4	PROCEDURE	195
21.5	EXPOSURE DETERMINATION	196
21.6	METHODS OF COMPLIANCE	196
21.7	PERSONAL PROTECTIVE EQUIPMENT	197
21.8	HOUSEKEEPING	197
21.9	POST-EXPOSURE AND FOLLOW UP	198
21.10	RECORD KEEPING	198
21.11	VACCINATION DECLINATION FORM	200
21.12	POST-EXPOSURE EVALUATION AND FOLLOW-UP CHECKLIST	201
22	<u>CHEMICAL DIP TANKS.....</u>	202
22.1	DIPPING AND COATING OPERATIONS.....	203
22.2	INTRODUCTION/OVERVIEW	203
22.3	USE OF DIP TANKS	203
22.4	TYPICAL DIP TANK OPERATIONS.....	203
22.5	OSHA REGULATIONS	203
22.6	IDENTIFYING HAZARDS.....	203
22.7	ROUTES OF ENTRY	204
22.8	PHYSICAL HAZARDS.....	204
22.9	PROTECTION AGAINST HAZARDS	204
22.10	MECHANICAL VENTILATION	205
22.11	RECIRCULATING EXHAUST AIR	205
22.12	PERSONAL PROTECTIVE EQUIPMENT	205
22.13	EMERGENCY PROCEDURES	206
22.14	EMERGENCY PREPAREDNESS	207
22.15	SAFE WORK PRACTICES	207
22.16	CLEANING A DIP TANK	207
22.17	FLAMMABLE AND COMBUSTIBLE LIQUIDS.....	207
22.18	FIRE PROTECTION.....	208
22.19	CONTROL IGNITION SOURCES	208
22.20	OTHER SAFE PRACTICES	208
22.21	SPECIFIC DIPPING AND COATING OPERATIONS.....	209
23	<u>COLD WEATHER AND STRESS.....</u>	214
23.1	SCOPE.....	215
23.2	RESPONSIBILITIES.....	215
23.3	COLD TEMPERATURE PROCEDURES	215
23.4	HEALTH EFFECTS OF COLD STRESS	215
23.5	HAZARD ASSESSMENT	215
23.6	FACILITIES	216
23.7	CLOTHING, PPE AND SUPPLIES	216
23.8	PREVENTATIVE CONTROLS	217
23.9	TRAINING	217
23.10	HEALTH EFFECTS	217

23.11	FIRST AID TRAINING	218
24	<u>COMBUSTIBLE DUST</u>	219
24.1	DEFINITION OF DUST	220
24.2	DEFINITION OF COMBUSTIBLE DUST (NFPA 654).....	220
24.3	DUST IDENTIFIED IN THE NEP	220
24.4	ASSEMBLE A REVIEW TEAM.	221
24.5	CONFIRM COMBUSTIBLE DUST HAZARD CONTROLS ARE IN PLACE.	221
24.6	MATERIALS USED AND PAST INCIDENTS	221
24.7	DUST CONTROL MEASURES	222
24.8	MINIMIZE ESCAPE OF DUST FROM PROCESS EQUIPMENT OR VENTILATION SYSTEMS	222
24.9	IGNITION CONTROL MEASURES	223
24.10	PREVENTION MEASURES	223
24.11	DAMAGE CONTROL MEASURES	224
24.12	PROTECTION MEASURES	224
24.13	PROTECTION MEASURES—PHYSICAL	224
25	<u>CONCRETE SAFETY</u>	225
25.1	POLICY AND SCOPE.....	226
25.2	PERSONAL PROTECTIVE EQUIPMENT	226
25.3	GENERAL EQUIPMENT.....	228
25.4	FORMS AND SHORING.....	228
25.5	PRE-STRESSED AND POST-STRESSED CONCRETE OPERATIONS.....	229
25.6	MASONRY WORK	229
25.7	BRICKS AND MASONRY BLOCKS	229
25.8	LADDERS AND SCAFFOLDING	229
25.9	GENERAL REQUIREMENTS FOR CONCRETE & MASONRY OPERATIONS.....	229
26	<u>CONFINED SPACE</u>	231
26.1	INTRODUCTION	232
26.2	PURPOSE	232
26.3	DEFINITIONS	232
26.4	SCOPE.....	232
26.5	HAZARDS	233
26.6	GENERAL (PERSONAL GUIDELINES)	233
26.7	PROCEDURES FOR CONFINED SPACE ENTRY	233
26.8	RESPONSIBILITIES.....	233
26.9	PRE-ENTRY.....	235
26.10	ISSUANCE/REVIEWING OF PERMIT.....	237
26.11	TERMINATION AND CLOSING OR CANCELLING OF PERMITS.....	237
26.12	PRECAUTIONS.....	237
26.13	MULTIPLE EMPLOYER PROCEDURE	240
26.14	EMERGENCY AND RESCUE.	240
26.15	PERMIT-REQUIRED CONFINED SPACE RESCUE:	241

26.16	NON-ENTRY RESCUE	241
26.17	TRAINING	242
26.18	SUMMARY.....	242
26.19	SAFETY WATCH INSTRUCTIONS.....	243
26.20	REQUIREMENTS OF THE SAFETY WATCH	243
27	<u>CONVEYOR SAFETY</u>	<u>244</u>
27.1	GENERAL.....	245
27.2	PRECAUTIONS FOR OPERATING PERSONNEL.....	245
27.3	PRECAUTIONS FOR MAINTENANCE PERSONNEL	245
27.4	BASIC CONVEYOR MAINTENANCE	246
27.5	CONVEYOR MAINTENANCE CHECKLIST.....	246
27.6	PREVENTIVE MAINTENANCE	247
27.7	PREVENTIVE MAINTENANCE CHECKLISTS.....	247
27.8	INSPECTION CHECKLISTS.....	247
27.9	CLEANING AND LUBRICATING CHECKLISTS	247
27.10	ROUTINE PREVENTIVE MAINTENANCE CHECKLISTS	247
27.11	PREVENTIVE MAINTENANCE - LIMITED USE	248
27.12	DAILY.....	248
27.13	WEEKLY.....	248
27.14	MONTHLY	248
27.15	QUARTERLY	249
27.16	SEMIANNUALLY	249
27.17	LUBRICATION	250
27.18	BELT CONVEYOR INSPECTIONS.....	250
27.19	SIMPLE TECHNIQUES FOR PREVENTING DRIVE BELT ALIGNMENT PROBLEMS	250
27.20	MEASURING MISALIGNMENT	252
27.21	QUANTIFYING MISALIGNMENT	252
27.22	TIPS FOR ALIGNING DRIVES	253
27.23	PARALLEL ALIGNMENT.....	253
27.24	ANGULAR ALIGNMENT	253
27.25	CHAIN CONVEYOR INSPECTIONS.....	254
27.26	CHAIN	254
27.27	SPROCKETS	254
27.28	TRACKS AND TROUGHS	254
28	<u>CRANE SAFETY</u>	<u>255</u>
28.1	PURPOSE	256
28.2	SCOPE	256
28.3	KEY RESPONSIBILITIES	256
28.4	EMPLOYEES	256
28.5	PROCEDURE.....	256
28.6	OPERATOR QUALIFICATION	258
28.7	LOAD CHART.....	258
28.8	MODIFYING EQUIPMENT.....	258
28.9	PRIOR TO LIFTING.....	258

28.10	MARKING BOUNDARIES.....	259
28.11	OVERHEAD POWER LINES.....	259
28.12	ASSEMBLING/DISASSEMBLING EQUIPMENT.....	260
28.13	HANDLING THE LOAD	260
28.14	SIZE OF LOAD	260
28.15	ATTACHING THE LOAD	260
28.16	LOAD LIFTING MANUAL.....	260
28.17	SAFE LIFTING.....	261
28.18	LOG BOOK PROCEDURE	261
28.19	INSPECTIONS.....	262
28.20	NEW EQUIPMENT.....	262
28.21	DAILY.....	262
28.22	MONTHLY	263
28.23	YEARLY	263
28.24	RIGGING	263
28.25	RIGGING BREAKING STRENGTH AND LOAD RATING.....	263
28.26	RIGGING INSPECTION AND REJECTION CRITERIA.....	264
28.27	SLINGS	264
28.28	HOOKS	264
28.29	OPERATIONAL PROCEDURES	265
28.30	RIGGING A LOAD.....	265
28.31	SIGNALING	266
28.32	TRAINING:.....	266
28.33	SLING INSPECTION FORM	267
29	<u>CRYSTALLINE SILICA EXPOSURE CONTROL</u>	268
29.1	INTRODUCTION	269
29.2	HEALTH HAZARDS ASSOCIATED WITH SILICA EXPOSURE	269
29.3	SILICA EXPOSURES AT YOUR COMPANY NAME HERE.....	269
29.4	STATEMENT OF PURPOSE	270
29.5	RESPONSIBILITIES.....	270
29.6	EXPOSURE LIMITS	271
29.7	RISK IDENTIFICATION	271
29.8	RISK ASSESSMENT	271
29.9	RISK CONTROL	272
29.10	EDUCATION AND TRAINING.....	274
29.11	SAFE WORK PROCEDURES	275
29.12	DOCUMENTATION	276
30	<u>DRUG AND ALCOHOL FREE WORKPLACE</u>	278
30.1	PURPOSE	279
30.2	SCOPE.....	279
30.3	GENERAL PROVISIONS.....	279
30.4	EMPLOYEE ASSISTANCE PROGRAM.....	279
30.5	PROGRAM REQUIREMENTS (MINIMUM).....	279
30.6	PRE-EMPLOYMENT.....	279

30.7	REASONABLE SUSPICION	279
30.8	RANDOM TESTING	280
30.9	POST ACCIDENT TESTING	280
30.10	ABSTINENCE MONITORING.....	280
30.11	ALCOHOL	280
30.12	LEGAL DRUGS.....	280
30.13	ILLEGAL DRUGS	280
30.14	DISCIPLINARY ACTION	280
30.15	CUSTOMER OR OWNER REQUIREMENTS.....	281
30.16	SEARCHES	281
30.17	SCOPE AND PROCESS.....	281
30.18	PROCEDURES FOR HANDLING SEIZED PROPERTY	281
30.19	DISPOSITION OF UNCOOPERATIVE EMPLOYEES.....	282
30.20	VOLUNTARY REHABILITATION	282
30.21	CONTRACT PERSONNEL	282
30.22	EMPLOYEE'S REPORTING REQUIREMENTS - LEGAL DRUGS	282
30.23	DEFINITIONS	282
30.24	PROCEDURES	283
30.25	EDUCATION AND TRAINING.....	283
30.26	NOTIFICATION	283
30.27	TYPES OF DRUG TESTING	283
30.28	PRE-EMPLOYMENT TESTING	283
30.29	UNFIT CONDITION.....	284
30.30	INCIDENT ON DUTY	284
30.31	REASONABLE SUSPICION TESTING	285
30.32	RANDOM TESTING	285
30.33	POST ACCIDENT TESTING	286
30.34	ABSTINENCE MONITORING.....	286
30.35	ALCOHOL AND DRUG SCREENING FOR SAFETY SENSITIVE JOBS	286
30.36	PROHIBITED DRUGS	286
30.37	FEDERAL DRUG SCREEN LIMITS FOR ILLICIT DRUGS	287
30.38	CUSTOMER REQUIREMENTS.....	287
30.39	POSITIVE TEST RESULTS OR REFUSAL TO TEST	287
30.40	RE-EMPLOYMENT	288
30.41	EMPLOYEE ASSISTANCE PROGRAM	288
30.42	THE TESTING FOR DRUGS.....	288
30.43	DRUG TESTING LABORATORY	288
30.44	RECORDKEEPING.....	289
30.45	RETENTION OF SAMPLES	289
30.46	RETESTING.....	289
30.47	MEDICAL REVIEW OFFICER	290
30.48	ACKNOWLEDGEMENT OF DRUG & ALCOHOL PREVENTION PROGRAM.....	291
31	<u>ELECTRICAL SAFETY</u>	292
31.1	PURPOSE	293
31.2	SCOPE	293
31.3	DEFINITIONS	293
31.4	RESPONSIBILITIES	295

31.5	SAFE WORK PRACTICES	295
31.6	INSPECTIONS.....	295
31.7	REPAIRS.....	295
31.8	EXTENSION CORDS	296
31.9	OUTLETS	296
31.10	MULTIPLE OUTLET BOXES	296
31.11	DOUBLE INSULATED TOOLS.....	296
31.12	SWITCHES, CIRCUIT BREAKERS, AND DISCONNECTS.....	297
31.13	LADDERS & PORTABLE LADDERS	297
31.14	ENERGIZED AND OVERHEAD HIGH VOLTAGE POWER LINES & EQUIPMENT	297
31.15	CONFINED OR ENCLOSED WORK SPACES	297
31.16	ENCLOSURES, BREAKER PANELS, AND DISTRIBUTION ROOMS.....	297
31.17	LOCK OUT/TAG OUT	298
31.18	CONTRACTORS	298
31.19	FIRE EXTINGUISHERS	298
31.20	ELECTRIC SHOCK-CPR	298
31.21	ELECTRIC WELDERS.....	298
31.22	EQUIPMENT GROUNDING.....	299
31.23	ASSURED GROUNDING	299
31.24	GROUND FAULT CIRCUIT INTERRUPTERS	299
31.25	TRAINING.....	299
31.26	PERSONAL PROTECTIVE EQUIPMENT & SAFEGUARDS FOR PERSONNEL PROTECTION	300
32	<u>ELECTRICAL LOCKOUT/TAGOUT.....</u>	301
32.1	PURPOSE	302
32.2	SCOPE	302
32.3	DEFINITIONS	302
32.4	KEY RESPONSIBILITIES	303
32.5	PROCEDURE	303
32.6	DEVICES.....	303
32.7	SPECIFIC ENERGY CONTROL PROCEDURES.....	304
32.8	SPECIFIC SEQUENCE FOR APPLICATION OF ENERGY CONTROL	304
32.9	PREPARATION FOR SHUTDOWN	304
32.10	3. MACHINE OR EQUIPMENT SHUTDOWN	304
32.11	MACHINE OR EQUIPMENT ISOLATION	304
32.12	5. LOCKOUT/TAGOUT DEVICES AND APPLICATION	304
32.13	STORED ENERGY AND THE POSSIBILITY OF REACCUMULATION	305
32.14	VERIFICATION OF ISOLATION	305
32.15	PROCEDURES FOR HANDLING MULTIPLE GROUPS OF WORKERS INVOLVED IN A GROUP LOCKOUT.....	305
32.16	RELEASE FROM LOCKOUT/TAGOUT.....	306
32.17	REMOVAL OF LOCKS.....	306
32.18	CONTRACTORS	307
32.19	PERIODIC INSPECTIONS OF THE ENERGY CONTROL PROCEDURE.....	307
32.20	EMPLOYEE TRAINING	307
32.21	RETRAINING.....	308
32.22	TRAINING DOCUMENTATION.....	308
32.23	SPECIFIC EQUIPMENT LOCKOUT PROCEDURES	309
32.24	SAMPLE TAG	310

32.25	ISOLATION LOG.....	311
32.26	ANNUAL AUDIT OF THE CONTROL OF HAZARDOUS ENERGY PROGRAM	312
<u>33</u>	<u>ERGONOMICS AND CUMULATIVE TRAUMA DISORDERS</u>	<u>313</u>
33.1	INTENDED USE OF PROGRAM	314
33.2	POLICY	314
33.3	RESPONSIBILITIES	314
33.4	PROGRAM COMPONENTS.....	315
33.5	MSD REPORTING PROCEDURES	315
33.6	HAZARD ANALYSIS	316
33.7	HAZARD CONTROL	316
33.8	ENGINEERING CONTROLS	317
33.9	WORK PRACTICE CONTROLS	317
33.10	COMPUTER/TYPING COMFORT.....	317
33.11	POSTURE AND POSITIONING	317
33.12	WORK ENVIRONMENT.....	318
33.13	EYE CARE	318
33.14	ADMINISTRATIVE CONTROLS.....	319
33.15	TRAINING.....	320
33.16	PROGRAM EVALUATION	320
33.17	RECORDKEEPING	320
33.18	GUIDE TO OFFICE ERGONOMICS.....	322
<u>34</u>	<u>EXCAVATION, TRENCHING, AND SHORING</u>	<u>323</u>
34.1	PURPOSE	324
34.2	SCOPE	324
34.3	DEFINITIONS	324
34.4	KEY RESPONSIBILITIES	325
34.5	PROCEDURE.....	325
34.6	UTILITIES AND PRE-WORK SITE INSPECTION	326
34.7	PROTECTION OF THE PUBLIC.....	326
34.8	PROTECTION AGAINST FALLS.....	326
34.9	PROTECTION OF WORKERS IN EXCAVATIONS.....	326
34.10	PERSONAL PROTECTIVE EQUIPMENT	327
34.11	PROTECTION FROM HAZARDS ASSOCIATED WITH WATER ACCUMULATION.....	328
34.12	STABILITY OF ADJACENT STRUCTURES.....	328
34.13	SOIL TYPES	329
34.14	DAILY INSPECTION.....	330
34.15	TRAINING.....	330
<u>35</u>	<u>FALL PROTECTION PLAN</u>	<u>331</u>
35.1	PURPOSE	332
35.2	SCOPE.....	332
35.3	DEFINITIONS	332

35.4	RESPONSIBILITIES.....	336
35.5	PROCEDURE.....	336
35.6	MINIMUM STANDARDS.....	337
35.7	STOPPING A FALL	338
35.8	PROTECTION FROM FALLING OBJECTS.....	338
35.9	PORTABLE LADDERS	339
35.10	FALL PROTECTION PLAN.....	340
35.11	CONTROLLED ACCESS ZONES	340
35.12	SAFETY MONITORING SYSTEM.....	341
35.13	INCIDENT INVESTIGATIONS	341
35.14	TRAINING	341
36	<u>FOOD SERVICE INDUSTRY.....</u>	342
36.1	PURPOSE	343
36.2	PERSONAL HYGIENE	343
36.3	HAND WASHING	343
36.4	GENERAL SAFETY GUIDELINES	344
36.5	EXITS AND ENTRANCES, FLOORS, AISLES, AND PLATFORMS	345
36.6	HAND TRUCK SAFETY.....	345
36.7	STOCK HANDLING	345
36.8	PREVENTION OF BURNS	346
36.9	SLIPS, TRIPS AND FALLS	346
36.10	KNIFE SAFETY.....	347
36.11	FRYERS	348
36.12	MACHINE SAFETY.....	348
36.13	SLICING MACHINES	348
36.14	MIXING MACHINES	349
36.15	LOCKOUT/TAGOUT	351
36.16	FIRE PREVENTION	352
36.17	CLEANING AND SANITIZING	353
36.18	STEAM CLEANING	354
36.19	PRECAUTIONS FOR STEAM CLEANING	354
36.20	TRAINING	354
37	<u>GAS CYLINDERS AND COMPRESSED GASES</u>	356
37.1	PURPOSE:	357
37.2	SCOPE	357
37.3	KEY RESPONSIBILITIES	357
37.4	PROCEDURE	357
37.5	CYLINDER IDENTIFICATION	357
37.6	HANDLING.....	357
37.7	STORING	357
37.8	USE	358
37.9	INSPECTION OF COMPRESSED GAS CYLINDERS	358
37.10	LEAKING CYLINDERS.....	359
37.11	TRANSPORTATION	359

37.12	EMPTY CYLINDER MARKING	359
37.13	ENGINEERING CONTROLS	359
37.14	SAFETY RULES	359
37.15	COMPRESSED GAS CYLINDER MAINTENANCE FORM	361
37.16	COMPRESSED GAS CYLINDER INSPECTION FORM.....	362
38	<u>HAND AND PORTABLE POWER TOOLS</u>	<u>363</u>
38.1	POLICY.....	364
38.2	AUTHORITY AND RESPONSIBILITY.....	364
38.3	GENERAL SAFETY PRECAUTIONS	364
38.4	HAND TOOLS.....	365
38.5	POWER TOOLS	365
38.6	GUARDS	366
38.7	SAFETY SWITCHES	366
38.8	ELECTRIC TOOLS	367
38.9	POWERED ABRASIVE WHEEL TOOLS.....	367
38.10	PNEUMATIC TOOLS	367
38.11	POWDER-ACTUATED TOOLS	368
38.12	HYDRAULIC POWER TOOLS.....	368
38.13	ERGONOMICS	369
38.14	HAND AND PORTABLE TOOL INFORMATION SHEET	369
38.15	PERSONAL PROTECTIVE EQUIPMENT	369
39	<u>HAZARD COMMUNICATION / GHS.....</u>	<u>370</u>
39.1	PURPOSE	371
39.2	INTRODUCTION.....	371
39.3	SCOPE	371
39.4	RESPONSIBILITIES	371
39.5	PROCEDURE.....	372
39.6	PICTOGRAMS AND HAZARDS.....	374
39.7	EXAMPLE LABEL.....	374
39.8	MULTI-EMPLOYER JOB SITES AND/OR MULTI WORK SITE	375
39.9	TRAINING	375
39.10	IMPLEMENTATION REQUIREMENT	376
40	<u>HAZARDOUS WASTE MANAGEMENT</u>	<u>377</u>
40.1	TITLE AND PURPOSE	378
40.2	SITE COORDINATOR	378
40.3	STORAGE OF HAZARDOUS SUBSTANCE	378
40.4	HAZARDOUS WASTES DISPOSAL PROCEDURES AND REGULATIONS	378
40.5	DISCLOSURE PROCEDURE FOR EMERGENCY RESPONDERS AND EMERGENCY.....	379
40.6	RESPONSE PLAN FOR HAZARDOUS SPILLS.....	379
40.7	HAZARDOUS CHEMICAL (PRODUCT) INVENTORY.....	380
40.8	LIST OF APPROVED VENDORS	381

40.9	HAZARDOUS WASTE EVACUATION PLAN.....	382
40.10	SIGNAL TO BE USED	382
40.11	EVACUATION SHUTDOWN.....	382
40.12	EMPLOYEE ACCOUNTING	382
40.13	RESCUE AND MEDICAL DUTIES.....	382
40.15	REPORTING RELEASES OF HAZARDOUS WASTE AND EMERGENCIES.....	383
41	<u>HAZARDOUS SPILL PREVENTION & RESPONSE.....</u>	384
41.1	PURPOSE	385
41.2	SCOPE	385
41.3	REQUIREMENTS	385
41.4	OIL SPILL HISTORY	389
41.5	FACILITY INSPECTIONS	391
41.6	MAINTENANCE INSPECTIONS.....	392
41.7	EMPLOYEE TRAINING	393
41.8	RECORD KEEPING OF INCIDENTAL SPILLS	394
41.9	APPENDICES.....	394
42	<u>HEARING CONSERVATION</u>	396
42.1	PURPOSE	397
42.2	SCOPE	397
42.3	DEFINITIONS	397
42.4	KEY RESPONSIBILITIES	397
42.5	PROCEDURE.....	397
42.6	HEARING CONSERVATION PROGRAM	397
42.7	MONITORING PROCEDURES TO BE USED WHEN EXPOSURE LIMITS EXCEED THE ESTABLISHED LEVEL	398
42.8	SURVEYS	398
42.9	SOUND LEVEL SURVEYS	398
42.10	EXPOSURE SURVEYS:.....	398
42.11	SIGNAGE	399
42.12	AUDIOMETRIC TESTING	399
42.13	BASELINE TESTING GUIDELINES.....	399
42.14	ANNUAL TESTING GUIDELINES.....	399
42.15	STEPS THAT ARE TAKEN WHEN STANDARD THRESHOLD SHIFT OCCURS	399
42.16	REQUIRED RECORDKEEPING	399
42.17	HEARING PROTECTION DEVICES.....	400
42.18	TRAINING	400
43	<u>HEAT STRESS/ILLNESS PREVENTION PLAN.....</u>	401
43.1	PURPOSE	402
43.2	OBJECTIVES.....	402
43.3	DEFINITIONS.....	402
43.4	REQUIREMENTS	403
43.5	PROVISION OF WATER.....	403

43.6	ACCESS TO SHADE	403
43.7	CONTROL MEASURES	403
43.8	TRAINING	404
43.9	OSHA QUICK CARD – PROTECT YOURSELF HEAT STRESS	405
44	<u>HEAVY EQUIPMENT</u>	407
44.1	PURPOSE	408
44.2	KEY RESPONSIBILITIES	408
44.3	PROCEDURE	408
44.4	INSPECTION	408
44.5	DEFECTIVE EQUIPMENT.....	409
44.6	SAFE OPERATING REQUIREMENTS	409
44.7	HEAVY EQUIPMENT GENERAL SAFE PRACTICES	410
44.8	ROCK CRUSHERS.	412
44.9	ROCK CRUSHERS PART II.....	412
44.10	ROCK DRILLING OPERATIONS.	413
44.11	SAFETY PRECAUTIONS WHEN TRANSPORTING EMPLOYEES USING MACHINERY AND/OR EQUIPMENT	414
44.12	MAINTENANCE.....	415
44.13	TRAINING.....	415
44.14	RECORDS	416
44.15	DOCUMENTATION	416
45	<u>HIGH PRESSURE WATER (HYDRO) JETTING SYSTEMS IN CONSTRUCTION.....</u>	417
45.1	SCOPE.....	418
45.2	PURPOSE	418
45.3	RELATED DOCUMENTS	418
45.4	DEFINITIONS	419
45.5	GENERAL PRINCIPLES	421
45.6	PERSONAL PROTECTIVE CLOTHING	421
45.7	HEAD PROTECTION	421
45.8	EYE PROTECTION.....	422
45.9	BODY PROTECTION	422
45.10	HAND PROTECTION	422
45.11	FOOT PROTECTION.....	422
45.12	HEARING PROTECTION	422
45.13	RESPIRATORY PROTECTION	422
45.14	TRAINING	422
45.15	REFRESHER TRAINING	423
45.16	OPERATIONAL PROCEDURE	424
45.17	PLANNING	424
45.18	WORK AREAS	424
45.19	HOSES	425
45.20	FITTINGS	425
45.21	NOZZLES	425
45.22	PRE-FLUSHING.....	425
45.23	ELECTRICAL EQUIPMENT.....	425

45.24	JETTING OPERATION	425
45.25	SYSTEM PRESSURIZATION.....	426
45.26	REACTION FORCE	427
45.27	HAND GUN OPERATIONS	427
45.28	8.6.6 LANCING AND PIPE CLEANING	428
45.29	WORK STOPPAGE.....	428
45.30	INCIDENTS AND ACCIDENTS.....	429
45.31	COMMUNICATION	429
45.32	INSPECTION CARE AND MAINTENANCE.....	430
45.33	GENERAL	430
45.34	MAINTENANCE	430
45.35	PUMP UNIT	430
45.36	FILTERS AND STRAINERS	430
45.37	HOSE ASSEMBLIES.....	430
45.38	RE-END HOSE ASSEMBLIES.....	431
45.39	SERVICING	432
45.40	REPAIRS.....	432
45.41	TOOLS	432
45.42	COMPATIBILITY.....	432
45.43	MAINTENANCE RECORD	432
45.44	PERMANENT CLEANING AREAS	433
46	<u>JOB SAFETY ANALYSIS</u>	435
46.1	GENERAL.....	436
46.2	RESPONSIBILITIES	436
46.3	DOCUMENTS.....	437
46.4	A SAFE OPERATING PROCEDURE CONSISTS OF:.....	437
46.5	JSA PROCESS	437
46.6	SELECT THE JOB TO BE ANALYZED:.....	437
46.7	CONDUCTING THE JOB SAFETY ANALYSIS.....	438
46.8	BREAKING DOWN THE JOB	438
46.9	IDENTIFY HAZARDS	438
46.10	RECOMMENDING SAFE PROCEDURES AND PROTECTION.....	439
46.11	REVISING THE JOB SAFETY ANALYSIS	439
47	<u>LADDERS & STAIRWAYS</u>	442
47.1	GENERAL REQUIREMENTS	443
47.2	KEY RESPONSIBILITIES	443
47.3	PROCEDURE.....	443
47.4	INSPECTION	443
47.5	CARE.....	444
47.6	LADDER SAFE WORK PRACTICES	444
47.7	STAIRWAYS.....	445
47.8	STAIRRAILS AND HANDRAILS	445
47.9	LADDERS.....	446
47.10	PORTABLE LADDERS	447

47.11	FIXED LADDERS	447
47.12	CAGES FOR FIXED LADDERS	448
47.13	WELLS FOR FIXED LADDERS.....	448
47.14	SAFETY DEVICES AND RELATED SUPPORT SYSTEMS FOR FIXED LADDERS.....	448
47.15	MOUNTING LADDER SAFETY DEVICES FOR FIXED LADDERS	449
47.16	USE OF ALL LADDERS	449
47.17	STRUCTURAL DEFECTS.....	450
47.18	GLOSSARY.....	450
48	<u>LANDSCAPING / GARDENING SAFETY</u>	451
48.1	MATERIAL HANDLING AND BACK SAFETY	452
48.2	WOOD CHIPPER AND SHREDDER SAFETY.....	452
48.3	HEDGE TRIMMER SAFETY	453
48.4	POSTHOLE DIGGER SAFETY	453
48.5	HAND-HELD POSTHOLE DIGGER SAFETY	454
48.6	TRACTOR-MOUNTED POSTHOLE DIGGER SAFETY	454
48.7	SAFE OPERATING PROCEDURES FOR GARDEN TRACTORS.....	454
48.8	GARDEN TRACTORS WITH ROTARY MOWER ATTACHMENT	455
48.9	FRONT-END LOADER SAFETY.....	455
48.10	ROTARY TILLER SAFETY	456
48.11	GRASS TRIMMER AND BRUSH CUTTER SAFETY PROCEDURES	456
48.12	LANDSCAPING/LAWN MAINTENANCE WORK.....	457
48.13	OPERATING RIDING LAWN MOWERS	458
48.14	PULLING LOADS SAFELY	458
48.15	TRIMMING TREES SAFELY	458
49	<u>LASER SAFETY</u>	460
49.1	INTRODUCTION	461
49.2	MANUAL ORGANIZATION.....	461
49.3	SAFETY PRECAUTIONS FOR CLASS 3 AND 4 LASERS.....	461
49.4	CLASS 3 (EYE AND SPECULAR REFLECTION HAZARD).....	461
49.5	CLASS 4 (FIRE, EYE AND SKIN HAZARD, DIFFUSE REFLECTION HAZARD).....	462
49.6	LASER INVENTORY FORM	463
49.7	SECTION 1 : LASER SAFETY PROGRAM	464
49.8	INDIVIDUAL LASER USERS.....	464
49.9	PRINCIPAL INVESTIGATORS	464
49.10	LASER SAFETY COMMITTEE (LSC).....	464
49.11	LASER SAFETY OFFICER (LSO)	464
49.12	ENVIRONMENTAL HEALTH AND SAFETY (EH&S)	465
49.13	PURCHASING.....	465
49.14	MEDICAL SURVEILLANCE	465
49.15	SECTION 2: CLASSIFICATION AND CONTROL	466
49.16	HAZARD CLASSIFICATION	466
49.17	THE FOUR LASER HAZARD CLASSES, ALONG WITH THEIR SUBDIVISIONS, ARE:.....	466
49.18	LASER HAZARD CLASSES.....	467
49.19	MAXIMUM PERMISSIBLE EXPOSURE	467

49.20	NOMINAL HAZARD ZONE (NHZ).....	468
49.21	LASER HAZARD CONTROL MEASURES.....	468
49.22	CONTROL MEASURES FOR THE LASER HAZARD CLASSES	469
49.23	ENGINEERING CONTROLS	470
49.24	ADMINISTRATIVE CONTROLS.....	471
49.25	DEVELOPMENTAL GUIDELINES FOR A LASER SAFETY PROCEDURE.....	472
49.26	BEAM ALIGNMENT	472
49.27	NON-BEAM HAZARD CONSIDERATIONS	473
49.28	TRAINING.....	473
49.29	AUTHORIZED OPERATING PERSONNEL LIST	474
49.30	SERVICE PERSONNEL TRAINING.....	474
49.31	INDOOR LASER CONTROLLED AREA.....	474
49.32	WARNING SIGNS AND LABELS	474
49.33	PERSONAL PROTECTIVE EQUIPMENT	475
49.34	FACTORS COMMON TO LASER ACCIDENTS	477
49.35	SECTION 3: NON-BEAM HAZARDS	477
49.36	ELECTRICAL.....	477
49.37	GENERAL GUIDELINES ON ELECTRICAL SAFETY	478
49.38	CAPACITORS	479
49.39	EXPLOSION	479
49.40	FIRE	479
49.41	OPTICAL RADIATION (OTHER THAN LASER BEAM)	479
49.42	IONIZING RADIATION	479
49.43	GAS SAFETY	480
49.44	DYES AND SOLUTIONS	480
49.45	PRECAUTIONS FOR HANDLING DYES/SOLVENTS.....	482
49.46	ADDITIONAL PRECAUTIONS FOR DYE WORK WITH MODERATE ("M") CONTROLS	483
49.47	ADDITIONAL PRECAUTIONS FOR DYE WORK WITH STRICT ("S") CONTROLS	484
49.48	OTHER CONSIDERATIONS	485
50	<u>LAUNDRY AND DRY CLEANING</u>	486
50.1	MARKING MACHINE	487
50.2	WASHING MACHINES.....	487
50.3	EXTRACTORS	487
50.4	POWER WRINGER	488
50.5	DRYING TUMBLER, END LOADING	488
50.6	SHAKER (CLOTHES TUMBLER, BATCH TYPE)	488
50.7	DRYING BOX OR CABINETS	488
50.8	IRONER (FLATWORK TYPE)	488
50.9	IRONER (BODY TYPE)	489
50.10	IRONER (ROTARY-BODY TYPE)	489
50.11	IRONER (PRESS TYPE).....	489
50.12	BOILERS AND PRESSURE VESSELS	489
50.13	OPERATING RULES	489
51	<u>LEAD AWARENESS.....</u>	490

51.1	PURPOSE	491
51.2	SCOPE.....	491
51.3	RESPONSIBILITIES.....	491
51.4	PROCEDURE.....	491
51.5	TRAINING	493
52	<u>MACHINE GUARDING.....</u>	494
52.1	GUIDELINES FOR MACHINE SAFEGUARDING.....	495
52.2	TYPES AND POINTS OF HAZARDOUS MACHINE OPERATIONS.....	495
52.3	SAFEGUARDING REQUIREMENTS	495
52.4	TYPES OF MACHINE SAFEGUARDS	495
52.5	COMMON ELEMENTS FOR SAFEGUARDING ALL MACHINES.....	496
52.6	INVOLVING THE EMPLOYEE	496
52.7	CONDUCTING THE JOB HAZARD ANALYSIS	496
52.8	BREAKING DOWN THE JOB	496
52.9	IDENTIFYING HAZARDS	497
52.10	RECOMMENDING SAFE PROCEDURES AND PROTECTION.....	497
52.11	REVISING THE JOB HAZARD ANALYSIS	499
52.12	COOPERATION AND ASSISTANCE	499
52.13	TRAINING.....	500
52.14	STANDARDS THAT ARE COMMON	501
52.15	SPECIFIC REQUIREMENTS FOR WOODWORKING MACHINES	502
52.16	OVERVIEW	502
52.17	STANDARDS	502
52.18	SPECIFIC REQUIREMENTS FOR METAL WORKING MACHINES.....	504
52.19	STANDARDS	504
52.20	METHODS OF MACHINE SAFEGUARDING	505
52.21	DEVICES.....	506
52.22	SAFEGUARDING BY LOCATION/DISTANCE.....	508
53	<u>MANUAL LIFTING</u>	510
53.1	PURPOSE	511
53.2	KEY RESPONSIBILITIES	511
53.3	WORKSITE MANAGER	511
53.4	EMPLOYEES	512
53.5	PROCEDURE	512
53.6	HANDLING HEAVY OR AWKWARD LOADS.....	513
53.7	INCIDENTS AND INJURIES.....	513
53.8	REVIEW & UPDATING LIFTING AND HANDLING LOADS PROGRAM	514
53.9	TRAINING	514
54	<u>OVERHEAD CRANES</u>	520
54.1	TRAINING	521
54.2	PERSONAL PROTECTIVE EQUIPMENT	522

54.3	GENERAL CONDUCT OF OPERATORS	522
54.4	DOS AND DON'TS	524
55	<u>PERSONAL PROTECTIVE EQUIPMENT</u>	526
55.1	PURPOSE	527
55.2	SCOPE	527
55.3	KEY RESPONSIBILITIES	527
55.4	PROCEDURE	528
55.5	EYE PROTECTION.....	528
55.6	FACE SHIELDS	529
55.7	HEAD PROTECTION	529
55.8	HEARING PROTECTION	529
55.9	HAND PROTECTION	530
55.10	FOOT PROTECTION	531
55.11	FALL PROTECTION	531
55.12	ELECTRICAL PROTECTION.....	531
55.13	WORKSITE HAZARD ASSESSMENT	531
55.14	MONITORING.....	532
55.15	TRAINING.....	532
55.16	RETRAINING.....	532
55.17	DOCUMENTATION	532
56	<u>PESTICIDES.....</u>	533
56.1	GENERAL PESTICIDE USE.....	534
56.2	PESTICIDE HANDLING	534
56.3	STORAGE (FIXED SITE)	534
56.4	STORAGE (MOBILE SITES: TRUCKS).....	535
56.5	DIGGING, TRENCHING	535
56.6	DUSTING FOR PESTS	536
56.7	ROUTINE MAINTANANCE	536
56.8	REFUELING ENGINE	537
56.9	AEROSOL FOGGING	537
56.10	AEROSOL CRACK & CREVICE APPLICATIONS	537
56.11	PESTICIDE PARTICLES OR VAPORS IN THE AIR	537
56.12	PESTICIDE APPLICATIONS	538
56.13	MIXING/LOADING.....	539
56.14	TRANSPORT FROM JOBSITE TO JOBSITE	539
56.15	PESTICIDE APPLICATION	539
56.16	TREATMENT WITH PESTICIDES.....	541
56.17	UNSANITARY CONDITIONS	541
57	<u>PRINTING INDUSTRY SAFETY</u>	543
57.1	GENERAL RULES - FOR ALL AREAS	544
57.2	EXTENSION CORDS	544

57.3	USE OF POWER EQUIPMENT	544
57.4	USE OF HAND TOOLS	544
57.5	FIRE SAFETY.....	544
57.6	LIFTING PROCEDURES.....	545
57.7	LAYOUT/PRE-PRESS PERSONNEL	545
57.8	OFFICE SAFETY - VIDEO DISPLAY TERMINALS.....	545
57.9	MANUAL PAPER CUTTER.....	545
57.10	CAMERA OPERATIONS - VERTICAL CAMERA.....	545
57.11	FILM/PROOF PROCESSING.....	546
57.12	CONTACTING/DUPLICATING	546
57.13	51.12 PLATE MAKING.....	546
57.14	LAMINATOR.....	546
57.15	PRINTING PERSONNEL – GENERAL RULES	546
57.16	CHEMICAL HANDLING.....	547
57.17	WEB PRESS	547
57.18	OFFSET PRESS OPERATIONS.....	547
57.19	PRESS AREA HOUSEKEEPING	547
57.20	PRESS CLEANING	547
57.21	SILK SCREEN PRINTING - GENERAL RULES	548
57.22	SCREEN CLEANING/REUSE.....	548
57.23	THERMOGRAPHY.....	548
57.24	BINDERY PERSONNEL – GENERAL RULES	548
57.25	PAPER JOGGER	548
57.26	CUTTER.....	548
57.27	SADDLE BINDER	549
57.28	BUCKLE FOLDER	549
57.29	HAND STITCHER.....	549
57.30	PAPER DRILL	549
57.31	SHRINK WRAP MACHINE	549
57.32	PAPER STAGING/WAREHOUSE PERSONNEL	549
57.33	GENERAL WAREHOUSE SAFETY.....	549
57.34	UNPACKING MATERIALS	549
57.35	PACKING MERCHANDISE	549
57.36	FORKLIFTS - PRE-USE INSPECTION	550
57.37	STARTING THE FORKLIFT	550
57.38	PICKING UP A LOAD	550
57.39	PUTTING A LOAD DOWN	550
57.40	STACKING ONE LOAD ON TOP OF ANOTHER.....	550
57.41	FORKLIFT SAFETY RULES.....	551
57.42	PALLET JACKS	551
57.43	HAND TRUCKS.....	551
57.44	DRUM HANDLING	552
58	<u>PUNCH PRESS SAFETY GUIDE.....</u>	553
58.1	METHODS OF SAFEGUARDING THE POINT OF OPERATION	554
58.2	GENERAL REQUIREMENT.....	554
58.3	POINT OF OPERATION GUARDS	554
58.4	POINT OF OPERATION DEVICES.....	555

58.5	PRESENCE SENSING DEVICE	555
58.6	PULL-OUT	556
58.7	INSPECTION AND MAINTENANCE RECORDS	557
58.8	MODIFICATION	557
58.9	TRAINING OF MAINTENANCE PERSONNEL.....	557
58.10	EMPLOYMENT OF MINORS	557
58.11	INSTRUCTION TO OPERATORS	557
58.12	WORK AREA.....	557
58.13	OVERLOADING.....	558
58.14	REPORT OF INJURIES TO EMPLOYEES OPEPATING POWER PRESSES	558
59	<u>RADIO FREQUENCY</u>	<u>1</u>
59.1	PURPOSE	2
59.2	DEFINITIONS	2
59.3	HEALTH HAZARDS OF RF RADIATION	2
59.4	INITIAL ENVIRONMENTAL EVALUATION AND EXPOSURE ASSESSMENTS.....	2
59.5	PROTECTION FROM RADIO FREQUENCY EXPOSURE	2
59.6	TRAINING.....	3
60	<u>RESPIRATORY PROTECTION PROGRAM.....</u>	<u>4</u>
60.1	PURPOSE	5
60.2	SCOPE	5
60.3	RESPIRATORY PROGRAM ADMINISTRATOR.....	5
60.4	MEDICAL REQUIREMENTS	6
60.5	MEDICAL EVALUATION PROCEDURES	6
60.6	SUPPLEMENTAL INFORMATION FOR THE PLHCP	6
60.7	MEDICAL DETERMINATION	7
60.8	ADDITIONAL MEDICAL EVALUATIONS.....	7
60.9	WORK SITE PROCEDURES	7
60.10	RESPIRATOR SELECTION CRITERIA.....	8
60.11	HAZARD IDENTIFICATION	8
60.12	CHARACTERISTICS OF HAZARDOUS OPERATION OR PROCESS.....	8
60.13	GASEOUS CONTAMINANTS	8
60.14	PARTICULATE CONTAMINANTS.....	8
60.15	SELECTION OF RESPIRATOR	9
60.16	CONCENTRATION AND TYPE OF CONTAMINANT	9
60.17	LOCATION OF HAZARDOUS AREA	9
60.18	WORKER ACTIVITY	9
60.19	TYPES OF RESPIRATORS	9
60.20	BRAND AND MODELS.....	10
60.21	ESTIMATE OF EXPOSURES AND CONTAMINANT INFORMATION	10
60.22	RESPIRATOR FIT TESTING	10
60.23	USER SEAL CHECK	12
60.24	POSITIVE PRESSURE CHECK.....	12
60.25	NEGATIVE PRESSURE CHECK	12
60.26	TEST EXERCISES	13

60.27	QUALITATIVE FIT TEST (QLFT) PROTOCOLS	14
60.28	QUANTITATIVE FIT TEST (QNFT) PROTOCOLS	15
60.29	PORTACOUNT FIT TEST REQUIREMENTS	16
60.30	PORTACOUNT TEST INSTRUMENT	16
60.31	USE, MAINTENANCE AND CARE OF RESPIRATORS	16
60.32	VOLUNTARY USE.....	18
60.33	WORKPLACE MONITORING.....	19
60.34	RECORDKEEPING	19
60.35	PROGRAM EVALUATION	19
60.36	TRAINING.....	20
60.37	RETRAINING.....	20
60.38	YOUR COMPANY NAME HERE QUALITATIVE RESPIRATORY FIT TEST RECORD SHEET.....	21
61	<u>RIGGING & MATERIALS HANDLING.....</u>	22
61.1	PURPOSE	23
61.2	SCOPE.....	23
61.3	KEY RESPONSIBILITIES	23
61.4	PROCEDURE.....	23
61.5	RIGGING TOOLS AND DEVICES	24
61.6	JACKS	24
61.7	JACKS – INSPECTION.....	25
61.8	BLOCKING AND CRIBBING.....	25
61.9	ROLLERS	26
61.10	INCLINED PLANES.....	26
61.11	LEVER-OPERATED HOISTS OR COME-ALONGS.....	27
61.12	CHAIN HOISTS	27
61.13	CHAIN HOIST – SAFETY PRECAUTIONS	28
61.14	GRIP ACTION HOISTS OR TIRFORS	28
61.15	ELECTRIC WIRE ROPE HOISTS, ELECTRIC CHAIN HOISTS, PENDANT CRANES	28
61.16	WINCHES	30
61.17	ANCHORAGE POINTS.....	30
61.18	LOAD ON STRUCTURE.....	30
61.19	BEAMS	30
61.20	BEAM CLAMPS	30
61.21	SLINGS	31
61.22	WELDED LUGS.....	31
61.23	TRAINING AND EDUCATION.....	31
62	<u>SAFETY/INCENTIVE PROGRAM</u>	32
62.1	WHY HAVE A SAFETY/INCENTIVE PROGRAM?.....	33
62.2	SALESPEOPLE RESPOND TO INCENTIVES	33
62.3	INCENTIVES ARE THE ENGINE TO A SAFETY PROGRAM	33
62.4	TEAMWORK WORKS TO REDUCE INJURIES	33
62.5	COMPONENTS OF YOUR SAFETY/INCENTIVE PROGRAM	33
62.6	WHO PARTICIPATES IN THE PROGRAM?	34
62.7	BEFORE YOU BEGIN YOUR PROGRAM	35

62.8	BEGINNING YOUR PROGRAM	36
62.9	RUNNING THE MONTHLY AWARDS RAFFLE	36
62.10	TIPS AND HELPFUL HINTS.....	37
63	<u>SANDBLASTING SAFETY & SILICA EXPOSURE</u>	40
63.1	INSPECTION PROCEDURES	41
63.2	ABRASIVE MATERIAL TOXICITY	41
63.3	SILICOSIS IS CATEGORIZED INTO THREE TYPES:	41
63.4	HAZARDS OF STATIC ELECTRICITY AND EXPLOSIVE MIXTURES	41
63.5	SETUP PROCEDURES.....	42
63.6	SHUT DOWN PROCEDURES	42
63.8	PERSONAL HYGIENE	43
63.9	PRECAUTIONS AND SPECIAL SITUATIONS	43
63.10	HOSES	43
63.11	DEAD MAN SWITCHES/VALVES.....	43
63.12	ELECTRIC EQUIPMENT	43
63.13	BREATHING AIR FILTERS.....	44
63.14	HOSE AND COUPLINGS	44
63.15	SANDBLASTING IN CONFINED SPACES	44
63.16	MODIFICATION OF SANDBLASTING EQUIPMENT	44
63.17	RESPIRATORY PROTECTION EQUIPMENT GUIDELINES.....	44
63.18	TRAINING	45
63.19	TESTING AND CERTIFICATION	45
64	<u>SCAFFOLDING SAFETY</u>	46
64.1	PURPOSE	47
64.2	SCOPE	47
64.3	DEFINITIONS	47
64.4	KEY RESPONSIBILITIES	48
64.5	PROCEDURE	48
64.6	INSPECTIONS.....	49
64.7	MANDATORY SIGNS AND TAGS FOR DEFECTS FOUND	49
64.8	MODIFICATIONS	49
64.9	TRAINING REQUIREMENTS.....	49
64.10	HAZARDS ASSOCIATED WITH THE USE OF SCAFFOLDS	50
64.11	DUTIES OF A COMPETENT PERSON ASSEMBLING/DISASSEMBLING SCAFFOLDING	50
65	<u>SLIPS, TRIPS & FALLS</u>	53
65.2	HIGHER RISK AREAS.....	54
65.3	INSPECTIONS.....	54
65.4	HAZARD CONTROL MEASURES.....	55
65.5	5.3 SLIP-RESISTANT FOOTWEAR.....	56
65.6	FLOOR MAINTENANCE PROCEDURES	57
65.7	TRAINING	57

65.8	GENERAL HOUSEKEEPING / SAFE WORK PRACTICES.....	57
65.9	FLOOR MAINTENANCE PROCEDURES	57
65.10	RECORDKEEPING.....	57
65.11	SLIP, TRIP AND FALL HAZARDS –CHECKLIST.....	57
65.12	OTHERS	58
65.13	BUILDING PERIMETER / STAIRWAYS/SPECIAL AREAS.....	58
65.14	DESIGN GUIDLINES.....	58
65.15	HANDRAILS.....	58
65.16	STAIRWAYS.....	59
65.17	RAMPS	59
65.18	LOADING DOCK.....	59
65.19	LIGHTING.....	59
66	<u>SHORT SERVICE EMPLOYEE PROGRAM</u>	60
66.1	PURPOSE	61
66.2	IMPORTANCE.....	61
66.3	SCOPE.....	61
66.4	DEFINITIONS	61
66.5	RESPONSIBILITIES.....	61
66.6	SUPERVISOR RESPONSIBILITIES	62
66.7	MENTOR RESPONSIBILITIES	62
66.8	SHORT SERVICE EMPLOYEE RESPONSIBILITIES	62
66.9	HSE COORDINATOR RESPONSIBILITIES	63
66.10	ORIENTATION.....	63
66.11	TRAINING.....	63
66.12	IDENTIFICATION SYSTEM	64
66.13	DOCUMENTATION	64
66.14	SSE QUALITY ASSESSMENT AND CONTROL	64
67	<u>TRAFFIC CONTROL FLAGGER PROCEDURES</u>	68
67.1	GENERAL REQUIREMENTS	69
67.2	FLAGGING POSITION	69
67.3	EQUIPMENT.....	69
67.4	SINGLE FLAGGER	70
67.5	TWO FLAGGERS	70
67.6	FLAGGER PROCEDURES	71
68	<u>TUBERCULOSIS EXPOSURE CONTROL PLAN</u>	72
68.1	PURPOSE	73
68.2	PROCEDURE.....	73
68.3	TB SURVEILLANCE	74
68.4	MEDICAL EVALUATION AND PREVENTIVE THERAPY.....	75
68.5	FOLLOW-UP EVALUATION.....	75
68.6	REQUIREMENTS SPECIFICALLY APPLICABLE TO TB SKIN TESTING	75

68.7	METHODS OF EXPOSURE CONTROL.....	75
68.8	TRAINING	77
68.9	RECORDKEEPING	78
68.10	INITIAL EXPOSURE INCIDENT FOLLOW-UP RECORD	79
68.11	EXOSURE INCIDENT LOG	80
68.12	LOG OF HEALTH CARE PROFESSIONAL'S REVIEW.....	81
68.13	LOG OF ISOLATION ROOM, ENCLOSURE AND UNITS TESTING	82
68.14	TUBERCULOSIS SKIN TEST	83
69	<u>VEHICLES - INDUSTRIAL TRUCKS (FORKLIFTS)</u>	84
69.1	PURPOSE	85
69.2	SCOPE	85
69.3	DEFINITIONS	85
69.4	KEY RESPONSIBILITIES	85
69.5	PROCEDURE.....	85
69.6	SAFETY GUARDS	86
69.7	TRAINING.....	86
69.8	CERTIFICATION	87
69.9	OPERATIONS.....	87
69.10	TRAVELING	88
69.11	LOADING.....	88
69.12	OPERATION OF THE TRUCK	88
69.13	MAINTENANCE AND INSPECTION OF FORKLIFTS	89
70	<u>VEHICLES - MAINTENANCE</u>	90
70.1	GENERAL	91
70.2	MECHANICAL HOIST/LIFTS.....	91
70.3	JACKS	91
70.4	OPERATION AND MAINTENANCE:.....	91
70.5	TIRE REPAIRS (MULTI-PIECE AND SINGLE PIECE RIM WHEELS).....	92
70.6	EMPLOYEE TRAINING:	92
70.7	TIRE SERVICING EQUIPMENT	92
70.8	WHEEL COMPONENT ACCEPTABILITY	93
70.9	CONTROLLING MOVING VEHICLES/TRAFFIC	93
71	<u>VEHICLES - DRIVING SAFETY</u>	94
71.1	PURPOSE	95
71.2	KEY RESPONSIBILITIES	95
71.3	VEHICLE AND TRANSPORTATION RELATED	95
71.4	DRIVING SAFETY	95
71.5	EMPLOYEES DRIVING VEHICLES ARE REQUIRED TO FOLLOW SAFE DRIVING PRACTICES:	96
71.6	DRIVERS ARE TO BE PREPARED BEFORE LEAVING:.....	96
71.7	VEHICLE REQUIREMENTS.....	96
71.8	TRANSPORTATION	97

71.9	TRAFFIC CONTROL.....	97
71.10	ATV VEHICLES	98
72	<u>VEHICLES - FLEET</u>	99
72.1	RESPONSIBILITIES	100
72.2	VEHICLE OPERATOR RESPONSIBILITIES.....	101
72.3	DRIVER SELECTION	102
72.4	ACCIDENT INVESTIGATION	104
72.5	VEHICLE ACCIDENT REVIEW	105
72.6	DEFENSIVE DRIVING POLICY.....	108
72.7	DEFENSIVE DRIVING PROCEDURES.....	108
72.8	FOG	109
72.9	RAIN.....	109
72.10	ICE.....	110
72.11	NIGHT DRIVING.	111
73	<u>WELDING SAFETY PROGRAM</u>	112
73.1	PURPOSE	113
73.2	SCOPE	113
73.3	DEFINITIONS	113
73.4	KEY RESPONSIBILITIES	113
73.5	PROCEDURE	113
73.6	FIRE PREVENTION MEASURES.....	114
73.7	CONFINED SPACE	115
73.8	FUMES, GASES AND DUST	116
73.9	PERSONAL PROTECTION.....	116
73.10	CLEANING COMPOUNDS	117
73.11	CYLINDERS.....	117
73.12	ARC WELDING AND CUTTING	118
73.13	RESISTANCE WELDING.....	119
73.14	TRANSMISSION PIPELINE.....	119
73.15	OXYGEN FUEL GAS WELDING AND CUTTING:	119
73.16	FIRE WATCH REQUIREMENTS	120
73.17	FIRST AID EQUIPMENT	120
73.18	TRAINING.....	120
74	<u>WORKING NEAR WATER</u>	121
74.1	PURPOSE	122
74.2	SCOPE.....	122
74.3	PROCEDURE.....	122
74.4	SLIPS, TRIPS AND FALLS	124
74.5	MACHINERY AND EQUIPMENT HAZARDS	125
74.6	HOISTS, CRANES AND DERRICKS.....	125
74.7	FIRE HAZARDS.....	126

74.8	TRAINING	127
75	<u>WORKPLACE SECURITY PROGRAM.....</u>	128
75.1	SECURITY OFFICERS	129
75.2	TRAFFIC CONTROL.....	129
75.3	ENFORCEMENT	129
76	<u>WORKPLACE VIOLENCE PREVENTION PLAN.....</u>	134
76.1	POLICY	135
76.2	PURPOSE	135
76.3	DEFINITIONS	135
76.4	RESPONSIBILITY	136
76.5	COMPLIANCE	136
76.6	COMMUNICATION	136
76.7	HAZARD ASSESSMENT.....	137
76.8	HAZARD CORRECTION	138
76.9	TRAINING AND INSTRUCTION	140
76.10	RECORDKEEPING.....	140
76.11	INCIDENT REPORT FORM	142
77	<u>WORKPLACE VISITORS</u>	143
77.1	GENERAL REQUIREMENTS	144
77.2	DEFINITIONS	144
77.3	RESPONSIBILITY FOR POLICY AND PROCEDURES.....	144
77.4	METHOD/PRACTICE	145
77.5	PERSONAL PROTECTIVE EQUIPMENT (PPE).....	145
77.6	SAMPLE VISITORS POLICY	145
77.7	SAMPLE POINTS TO COVER	146