

# **Zebulon**

## **Contractor Safety Manual**

## Contents

<b>SECTION 1: Introduction</b>	<b>8</b>
1-1 Safety Manual Purpose and Scope	8
1-2 How This Manual Is Organized	8
1-3 General Information	8
1-4 Safety Policy	9
1-5 Goals and Objectives	9
<b>SECTION 2: Definitions and Acronyms</b>	<b>11</b>
2-1 General Information	11
2-2 Definitions	11
2-3 Acronyms	13
<b>SECTION 3: Safety Program Administration</b>	<b>14</b>
3-1 General Information	14
3-2 Safety Program Administration	14
3-3 Contractor Duties and Responsibilities	15
3-4 Subcontractor Duties and Responsibilities	17
3-5 Employee Duties and Responsibilities	17
3-6 Disciplinary Action	18
3-7 Reservation of Rights	18
3-8 GSK Representative's Responsibilities	18
<b>SECTION 4: Reporting an Emergency</b>	<b>20</b>
4-1 General Information	20
4-2 Definitions	20
4-3 Emergency Reporting Procedures	20
4-4 Accidents Involving Serious Injury or Death	20
4-5 Fire or Smoke	21
4-6 Chemical or Hazardous Material Spill	21
4-7 Property Damage	21
4-8 Severe Weather	22
4-9 Bomb Threat	22
4-10 Evacuation	22
4-11 Transportation	23
4-12 Employee Injury and Illness Status	23
4-13 Reporting of Non-Referred Medical Treatment	23
<b>SECTION 5: Investigation and Reporting</b>	<b>24</b>
5-1 General Information	24
5-2 Accident and Incident Investigation	24
5-3 Reporting Safety Performance	25
<b>SECTION 6: Safety Orientation and Training</b>	<b>26</b>
6-1 General Information	26

6-2	Safety Meetings, Records, and Minutes.....	26
6-3	Personal Contacts .....	26
6-4	Specific Instruction .....	26
6-5	Promotional Material.....	27
6-6	Job Safety Analysis .....	27
6-7	Orientation and Refresher Training .....	28
6-8	Contractor Self-Certification .....	29
<b>SECTION 7:</b>	<b>Inspection and Auditing .....</b>	<b>30</b>
7-1	General Information.....	30
7-2	Inspection and Auditing Procedures.....	30
<b>SECTION 8:</b>	<b>OSHA Regulations .....</b>	<b>32</b>
8-1	General Information.....	32
8-2	OSHA Publications.....	32
8-3	OSHA Regulations .....	32
<b>SECTION 9:</b>	<b>Hazard Communication Program .....</b>	<b>34</b>
9-1	General Information.....	34
9-2	Hazardous Materials List.....	34
9-3	Safety Data Sheets.....	35
9-4	Container Labels .....	35
9-5	Hazard Communications .....	35
<b>SECTION 10:</b>	<b>Alcohol and Drug Abuse and Tobacco Policies .....</b>	<b>38</b>
10-1	Alcohol and Drug Abuse Policy .....	38
10-2	Drug Testing .....	38
10-3	Alcohol Screening.....	39
10-4	Consequences.....	39
10-5	Enforcement .....	40
10-6	Tobacco Policy .....	40
<b>SECTION 11:</b>	<b>Security Program .....</b>	<b>41</b>
11-1	General Information.....	41
11-2	Use of GlaxoSmithKline Facilities .....	41
11-3	Harassment .....	41
11-4	Contractor Identification Badges .....	41
11-5	Deliveries.....	42
11-6	Site Security .....	42
11-7	Contractor Responsibilities.....	42
11-8	Security for Contractors Working Inside Occupied Facilities .....	43
11-9	Firearms .....	44
11-10	Cameras .....	44
<b>SECTION 12:</b>	<b>Safety Procedures and Permitting .....</b>	<b>45</b>
12-1	General Information.....	45
12-2	Safety Procedures .....	45
12-3	Site Procedures and Permits.....	45
12-4	Waiver of Safety Procedures.....	45

<b>SECTION 13: Housekeeping .....</b>	<b>47</b>
13-1 General Information.....	47
13-2 Definitions.....	47
13-3 Housekeeping Procedures.....	47
<b>SECTION 14: Personal Protective Equipment.....</b>	<b>48</b>
14-1 General Information.....	48
14-2 Definitions.....	48
14-3 Head, Eye, and Face Protection .....	48
14-4 Respiratory Protection.....	49
14-5 Hearing Protection.....	49
14-6 Fall Protection.....	49
14-7 Footwear.....	50
14-8 Hand and Skin Protection.....	50
14-9 Welding, Cutting, and Burning.....	51
14-10 Additional Personal Protective Equipment.....	51
14-11 Safe Lift Program.....	51
<b>SECTION 15: Environmental Issues.....</b>	<b>52</b>
15-1 Hazardous Waste Management.....	52
15-2 Spill Prevention and Control.....	52
15-3 Notification of a Spill or Release to the Environment.....	53
15-4 Discharges to Storm Water Conveyance Systems .....	53
15-5 Erosion Control.....	54
15-6 Excavation Activities in Environmentally Restricted Areas .....	54
15-7 Open Burning .....	54
15-8 Disposal of Waste in Sanitary Sewers .....	54
15-9 Asbestos.....	54
15-10 Training.....	54
15-11 Recycling.....	55
<b>SECTION 16: Electrical Safety .....</b>	<b>56</b>
16-1 General Information.....	56
16-2 Definitions.....	56
16-3 Electrical Safety Procedures .....	56
<b>SECTION 17: Lockout and Tagging.....</b>	<b>58</b>
17-1 General Information.....	58
17-2 Lockout and Tagging Procedures .....	58
17-3 New Equipment and Facilities Prior to Turnover .....	59
17-4 Existing Equipment and Facilities.....	60
17-5 Shop Equipment.....	60
17-6 Locks and Multi-Lock Devices.....	60
<b>SECTION 18: Protecting Employees and the Public.....</b>	<b>61</b>
18-1 Exterior Protection Procedures .....	61
18-2 Interior Protection Procedures.....	62
18-3 Pressure Testing of Pipework .....	62

---

18-4 Access to Good Manufacturing Practice (GMP) Areas .....	62
<b>SECTION 19: Small Tools.....</b>	<b>63</b>
19-1 General Information.....	63
19-2 Power, Air, and Hand Tools .....	63
19-3 Powder-Actuated Tools .....	64
<b>SECTION 20: Gas Cylinders, Welding, Cutting, and Burning .....</b>	<b>66</b>
20-1 General Information.....	66
20-2 Permits .....	66
20-3 Handling and Storage of Cylinders.....	66
20-4 Welding, Cutting, and Burning Operations.....	67
<b>SECTION 21: Ladders.....</b>	<b>69</b>
21-1 Manufactured Ladders.....	69
21-2 Ladder Training Requirements.....	70
<b>SECTION 22: Scaffolds.....</b>	<b>71</b>
22-1 Definitions.....	71
22-2 Scaffold Design and Erection .....	71
22-3 Use of Scaffolds .....	72
22-4 Scaffold Tags.....	72
22-5 Scissors Lifts and Man Lifts.....	72
<b>SECTION 23: Fire Prevention and Protection.....</b>	<b>73</b>
23-1 Fire Prevention and Protection Procedures .....	73
23-2 Temporary Fuel Tanks .....	74
<b>SECTION 24: Work Area Conditions .....</b>	<b>75</b>
24-1 General Information.....	75
24-2 Drinking Water.....	75
24-3 Toilets and Washing Facilities and Break Areas.....	75
24-4 Lighting .....	76
24-5 Material Use and Waste Management.....	76
24-6 Dust and Erosion Control .....	76
<b>SECTION 25: Special Equipment.....</b>	<b>78</b>
25-1 Lasers.....	78
25-2 Radioactive Sources.....	78
<b>SECTION 26: Motor Vehicles and Heavy Equipment.....</b>	<b>79</b>
26-1 Motor Vehicle and Heavy Equipment Procedures .....	79
26-2 Loading Dock Vehicle Safety .....	80
26-3 Fleet Services.....	80
<b>SECTION 27: Powered Industrial Trucks .....</b>	<b>81</b>
27-1 General Information.....	81
27-2 Powered Industrial Truck Procedures .....	81
<b>SECTION 28: Transporting Hazardous Materials .....</b>	<b>82</b>

28-1	General Information.....	82
28-2	References .....	82
28-3	Transportation Procedures.....	82
<b>SECTION 29:</b>	<b>Confined Space Entry.....</b>	<b>83</b>
29-1	Confined Space Entry Procedures.....	83
29-2	Confined Space Monitoring .....	83
29-3	Working in Confined Spaces.....	83
<b>SECTION 30:</b>	<b>Floor, Roof, and Wall Openings .....</b>	<b>85</b>
30-1	Floor, Roof, and Wall Opening Procedures .....	85
30-2	Stair Railings .....	86
30-3	Floor Opening Covers .....	86
30-4	Stairs.....	86
30-5	Runways and Openings .....	86
<b>SECTION 31:</b>	<b>Lifting Equipment, Cranes and Rigging.....</b>	<b>87</b>
31-1	General Information.....	87
31-2	References .....	87
31-3	Mobile Crane Set Up .....	87
31-4	Recordkeeping .....	88
31-5	Operator Qualifications and Operating Procedures .....	88
31-6	Maintenance .....	88
31-7	Rigging Requirements .....	89
31-8	Emergency Plan .....	89
31-9	Work Platforms Suspended from Cranes.....	89
<b>SECTION 32:</b>	<b>Excavation and Trenches.....</b>	<b>90</b>
32-1	General Information.....	90
32-2	Definitions.....	90
32-3	Excavation Permit.....	90
32-4	Protection Design .....	91
32-5	Protection Installation .....	91
32-6	Special Precautions.....	91
32-7	Inspections .....	92
32-8	Completion of Work.....	92
32-9	Drilling Operations.....	92
<b>SECTION 33:</b>	<b>Concrete and Formwork.....</b>	<b>93</b>
33-1	General Information.....	93
33-2	Definitions.....	93
33-3	Concrete and Formwork Procedures .....	93
<b>SECTION 34:</b>	<b>Steel Erection.....</b>	<b>94</b>
34-1	Definitions.....	94
<b>SECTION 35:</b>	<b>Roadway Work.....</b>	<b>95</b>
35-1	General Information.....	95

---

<b>SECTION 36: Blasting</b> .....	<b>95</b>
36-1 General Information.....	95
<b>SECTION 37: DEA Regulated Areas</b> .....	<b>96</b>
37-1 General Information.....	96
37-2 Work Requirements.....	96
37-3 De-classifying a DEA Compliant Space .....	96
<b>SECTION 38: Corporate Integrity Agreement (CIA)</b> .....	<b>97</b>
38-1 General Information.....	97
<b>Appendix A: Safety Related Forms</b> .....	<b>98</b>
<b>Appendix B: Telephone Contact Numbers</b> .....	<b>100</b>
<b>Appendix C: References</b> .....	<b>101</b>
<b>Appendix D: Monthly Inspection Color Code Chart</b> .....	<b>102</b>

## **SECTION 1: Introduction**

### **1-1 Safety Manual Purpose and Scope**

- 1-1.1 The Zebulon Contractor Safety Manual contains policies and procedures applicable to all contractors and contract employees regarding environment health & safety responsibilities on GlaxoSmithKline premises & for work performed for GSK.
- 1-1.2 Contractors should review with their employees the sections of this manual that are appropriate to the work to be performed. Work in non-public areas such as construction sites, production sites, or confined spaces increases an employee's exposure to safety and environmental risk, therefore most or all of the sections in the manual will apply. Employees working in offices and other public areas have less exposure to safety concerns, environmental issues, and health risks, so fewer sections of the manual will apply.
- 1-1.3 This manual does not replace existing site procedures or operational specifications. Approved, site-specific procedures must be followed where applicable.
- 1-1.4 This manual does not relieve contractors of their responsibility for environment, health & safety compliance under law, code, ordinance, or statute.
- 1-1.5 If more than one rule applies (including all site procedures and contract company procedures), contractors should follow the more strict rule.

### **1-2 How This Manual Is Organized**

- 1-2.1 Section 2 of this manual provides definitions and acronyms that are used throughout the manual.
- 1-2.2 Sections 3 through 11 contain administrative information such as reporting procedures, safety inspection and auditing, security procedures, and the alcohol and drug abuse policy.
- 1-2.3 Sections 12 through 38 consist of detailed safety procedures that describe the requirements for GSK contractors and contract employees.
- 1-2.4 Appendix A contains safety-related forms that are referenced in various sections of the manual and used to support the safety program.
- 1-2.5 Appendix B is a list of telephone contact numbers.
- 1-2.6 Appendix C is a list of site-specific references.
- 1-2.7 Appendix D contains the Monthly Inspection Color Code Chart, which is referenced throughout the manual.

### **1-3 General Information**

- 1-3.1 Throughout this manual, reference to a contractor means the contractor's company and the companies of their subcontractors, consultants, vendors, and suppliers. Reference to contractor's management means personnel responsible for managing, supervising, or directing contract activities and employees. Reference to an employee or contract employee means the contractor's employees,



---

and employees of subcontractors, consultants, vendors, and suppliers. For more information, refer to Section 2, Definitions and Acronyms.

- 1-3.2 Non-compliance with safety or environmental requirements is treated the same as non-compliance with any contract provision, and may result in work stoppage or employee removal from the premises. Willful or repeated non-compliance may result in contractor dismissal and contract termination.
- 1-3.3 The Zebulon Contractor Safety Manual is an important part of the GSK safety program and will be issued with the contract documents. Contractors must ensure that their employees, subcontractors, consultants, vendors, suppliers, and visitors comply with the provisions of this manual while on GSK premises.
- 1-3.4 Compliance with federal, state, and local codes or regulations established in the interest of safety is required by law and by contract. The Zebulon Contractor Safety Manual is a supplementary document to governmental rules, codes, and regulations having jurisdiction, and does not negate, abrogate, or minimize any provisions of these rules, codes, and regulations. It is intended to supplement and enforce the individual program of the contractor and to coordinate the overall safety effort. Contractors are responsible for the safety and health of their employees, subcontractors, consultants, vendors, suppliers, and visitors while on GSK premises.
- 1-3.5 Safety will not be sacrificed for production. Safety is considered an integral part of quality control, cost reduction, and job efficiency. Managers and supervisors are accountable for the safety performance demonstrated by their employees.
- 1-3.6 The Zebulon Contractor Safety Manual is reviewed annually. Updates/revisions are made when deemed necessary by the Zebulon Contractor Safety Manual Committee.
- 1-3.7 Bound, printed copies of the Zebulon Contractor Safety Manual can be obtained from the Zebulon Environment, Health & Safety department.

## 1-4 Safety Policy

- 1-4.1 It is the policy of GSK to provide a safe place to work. Contractors working at GSK facilities must conduct their work using good safety practices.
- 1-4.2 Contractor's managers and supervisors are responsible for preventing incidents or conditions that could lead to injuries, illness, or fatalities. The ultimate success of the safety program depends on the cooperation of every employee. The contractor's management must ensure that safety rules and procedures are enforced and that effective training and education programs are employed. Work must be performed safely to protect employees, visitors, the public, adjacent property, and the environment.

## 1-5 Goals and Objectives

- 1-5.1 The goals of the safety program are listed below:
  - to eliminate accidents and work related illnesses at GSK facilities
  - to achieve zero fatalities, zero permanent disabling injuries, and zero lost work day cases
  - to achieve zero Occupational Safety and Health Administration (OSHA) recordables
  - to eliminate releases to the environment and prevent environmental harm

- 
- 1-5.2 The main objective of the safety program is to assist contractors with their responsibility to control the exposures and prevent the incidents that may cause injuries, illness, fatalities, equipment damage, fire, and damage or destruction of property at GSK.

## **GlaxoSmithKline Contractor Environment, Health, and Safety Policy**

GlaxoSmithKline is committed to meeting its environment, health & safety responsibilities related to contractors, contract services, and contract employees. To this end the Corporation will:

- Provide a safe and healthful workplace on GlaxoSmithKline facilities.
- Provide information and education to contractors and contract employees to enable them to work in a safe, healthful, and environmentally responsible manner.
- Minimize the negative impact of contractor and contract activities on the environment.
- Provide appropriate emergency response services for contractors, contract activities, and contract employees.
- Comply with environment, health & safety laws and regulations regarding contractors, contract activities, and contract employees.
- Communicate requirements and expectations to contractors and contract employees regarding environment, health & safety performance on GlaxoSmithKline facilities and for work performed at GlaxoSmithKline.

Working in a safe and environmentally responsible manner is a condition of all contract work at GlaxoSmithKline. Contractors are responsible for the environment, health & safety performance of their employees who work at or for GlaxoSmithKline and their employees must assume responsibility for their own safety and health.

This policy applies to all contractors, contract services, and contract employees working at or for GlaxoSmithKline.

 **End of Section**

---

## SECTION 2: Definitions and Acronyms

### 2-1 General Information

- 2-1.1 The definitions listed in paragraph 2 are terms used throughout this manual. Definitions that apply only to a specific section of the manual are provided in that section.
- 2-1.2 The acronyms in paragraph 3 are used throughout the manual and listed here for reference.

### 2-2 Definitions

**Assembly Area** - A pre-determined location in which to assemble and conduct a roll call & providing emergency information in case of an emergency evacuation.

**cGMP (Current Good Manufacturing Practice)** - Regulations as specified by the US FDA or other regulatory body that describes the methods, equipment and control procedures required for food processing, medical device manufacturing and related industries that include all production, packaging & lab areas.

**Competent Person** - As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the work area that are unsanitary or dangerous to employees and who has the authority to correct or eliminate the hazards.

**Contract Employee** - An employee of a contractor, and the employees of subcontractors, consultants, vendors, and suppliers.

**Contractor** - A firm contracted to GlaxoSmithKline to perform specified work on GSK premises. For this manual, references to "contractor" mean the contractor's company, and the companies of their subcontractors, consultants, vendors, and suppliers.

**Contractor's Management** - Personnel employed by a contractor who are responsible for managing, supervising, or directing contract activities and employees.

**Contractor's Safety Manager** - An approved, competent safety professional employed by and assigned by the contractor to manage the safety program for a specific contract.

**Employee** - an employee of a contractor and the employees of subcontractors, consultants, vendors, and suppliers.

**Environmental Organization** - Zebulon Environment, Health, and Safety Department, (Refer to Appendix B for telephone numbers).

**GSK Approval** - Where a specific approval source (GSK Representative, the site safety and environmental organizations, etc.) is stated in the manual. The term GSK approval is used when the approval source may vary depending upon the situation or when approval is obtained through normal GSK business practices.

**GSK Representative** - An authorized GSK employee responsible for work performed by a specific contractor, i.e. project manager or Environment, Health & Safety Representative.

**Hazard Communication Program** - A comprehensive program to ensure that hazards from chemicals produced, used, or imported are evaluated and that information pertaining to these hazards are communicated to contractors and their employees.

---

**Hazardous Material** - A substance or mixture of substances that may by reason of being explosive, flammable, poisonous, irritating, or corrosive produce adverse effects on the health or safety of a human being.

**Hazardous Waste** - A biological, chemical, or radioactive waste which may pose a hazard to people or the environment.

**Job Safety Analysis** - Job Safety Analysis (JSA) is a method to identify, analyze and record: the steps involved in performing a specific job, the existing or potential safety and health hazards associated with each step, & the recommended action(s)/procedure(s) that will eliminate or reduce these hazards and the risk of a workplace injury or illness.

**Maintenance Organizations** - Zebulon Facilities Operations.

**Medical Review Officer (MRO)** - A licensed physician responsible for receiving laboratory results generated by a drug testing program, who has knowledge of substance abuse disorders and has been trained to interpret and evaluate an individual's positive test result with his or her medical history and other biomedical information.

**Non-Public Area** - An area with posted requirements for personal protective equipment or other safety precautions necessary prior to entry. Non-public areas include construction sites, production areas, warehouse areas, mechanical rooms, above-ceiling areas, and confined spaces.

**Premises** - GSK Zebulon facility, and property (owned and leased).

**Public Area** - An area where the general public operates. Public areas include offices, assembly areas, cafeterias, and conference rooms.

**Qualified Person** - An individual who has a recognized degree, certificate, or professional standing or extensive knowledge, training, and experience and who has successfully demonstrated the ability to resolve problems related to the work.

**Recordables** - Occupational injuries or illnesses as defined in OSHA 1904.12.

**Safety Organization** - Zebulon Environment, Health, and Safety Department, (Refer to Appendix B for telephone number).

**Security** - The local GSK Zebulon site security organization.

**Site** - A term used to indicate a campus, a building, an area (i.e., a place). A GSK site is a place located on GSK premises. When site is used alone (without GSK) in this manual, it refers to a GSK site. Thus, site refers to any location on GSK premises (owned or leased) where contractor employees may perform work and includes both interior (within buildings) and exterior (grounds, undeveloped property, etc.) spaces.

**Site Safety Representative** - A member of the local GSK Environment, Health & Safety organization. In cases of emergency, this term refers to the designated GSK safety representative in charge or the ranking fire department officer on the scene.

**Work** - Activities necessary to provide service, labor, materials, and equipment required by the contract.

**Work Area** - Specific site or location where work is performed.

## 2-3 Acronyms

<b>ANSI</b>	American National Standards Institute
<b>CFR</b>	Code of Federal Regulations
<b>DOT</b>	Department of Transportation
<b>EHS</b>	Environment, Health & Safety
<b>EPA</b>	Environmental Protection Agency
<b>ERC</b>	Emergency Response Coordinator
<b>FAC</b>	First-Aid Case
<b>FM</b>	Factory Mutual (testing laboratory)
<b>GMP</b>	Good Manufacturing Practices
<b>GSK</b>	GlaxoSmithKline
<b>JSA</b>	Job Safety Analysis
<b>LWC</b>	Lost Workday Case
<b>MRO</b>	Medical Review Officer
<b>MSHA</b>	Mine Safety and Health Administration
<b>NFPA</b>	National Fire Prevention Association
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NRC</b>	Nuclear Regulatory Commission
<b>OSHA</b>	Occupational safety & Health Administration
<b>SAMHA</b>	Substance Abuse and Mental Health Administration
<b>SDS</b>	Safety Data Sheet
<b>UL</b>	Underwriters Laboratories Inc.
<b>US FDA</b>	United States Food and Drug Administration
<b>ZSP</b>	Zebulon Safety Procedures



**End of Section**

## **SECTION 3: Safety Program Administration**

### **3-1 General Information**

- 3-1.1 The purpose of the contractor safety program is to establish, implement, and execute a practical and effective method for preventing accidents, illnesses, and injuries and protecting the environment.
- 3-1.2 The Zebulon Contractor Safety Manual will help contractors and their management to recognize, to evaluate, and to control hazardous activities or conditions within their areas of contract responsibility. GSK will not assume or relieve contractors of the responsibility for employee and public safety or regulatory compliance.
- 3-1.3 This manual defines how the safety program will be administered, identifies responsibilities, and ensures control of work area safety.
- 3-1.4 Relevant provisions of this manual apply to all contractors. Contracts signed with contractors and the provisions of this manual are intended to complement each other; however, in the event of a conflict between the provisions of this manual and the terms of a specific contract, the terms of the contract will govern. Notify the GSK representative of any such conflicts.
- 3-1.5 The provisions of this manual apply to the GSK Zebulon site. Specific Zebulon Safety Procedures (ZSPs) also apply when a contractor performs work on this site. Contractors are responsible for following the rules and regulations applicable to the site.
- 3-1.6 Visitors must be escorted at all times by a GSK employee or photo-badged contract employee and must follow the safety directives of the employee.

### **3-2 Safety Program Administration**

- 3-2.1 The effectiveness of the safety program depends on the participation and cooperation of employees and coordination of their efforts in carrying out the following basic responsibilities:
  - A. Planning work to avoid personal injury, property damage, environmental risk, and the loss of production
  - B. Establishing and maintaining a system for early detection and correction of unsafe practices and conditions
  - C. Providing adequate protection of public & private properties & the environment & ensuring the safety of the public
  - D. Establishing and conducting safety education programs designed to stimulate and maintain the interest and participation of employees through use of the following:
    - Safety meetings and communication
    - Proper work procedures, personal protective equipment, and mechanical guards
    - Safety instructions for individual employees and group safety training programs
    - Accident, illness, potential safety incident investigation & reporting to determine causes & corrective actions

- 
- Records of accidents and losses and accident/loss experience summaries
  - Proper waste disposal and emission control procedures
  - Incentive and recognition programs
- E. Developing an emergency plan for the work.

### 3-2.2 Safety Program Implementation

- A. Contractors are responsible for establishing and implementing a safety program for their employees. This program will include maintaining and auditing safety performance for compliance with applicable federal, state, local regulations and with established safety and environmental requirements, including but not limited to the contractor's safety and hazard communication programs.
- B. Contractors are to conduct regularly scheduled inspections. The scope or duration of work may regulate the frequency of these inspections.
- C. Contractors should report any unsafe conditions & must take immediate corrective action when a violation of job safety, fire, or environmental safety hazard is observed.
- D. Contractors are to regularly review their safety performance. Failure to correct a problem may result in work stoppage in the related area, and work will not be permitted to resume until the problem is corrected.
- E. If a contractor fails to correct the problem, GSK will take corrective action, and the cost will be the responsibility of the contractor.
- F. Under the terms and conditions of the contract documents, contractors are required to administer their own safety activities and are responsible for the safety of their employees. If requested by GSK, contractors will submit a written copy or description of their company's safety program.
- The contractor's safety program must meet federal, state, and local regulatory requirements and be equivalent to or more stringent than GSK's program.
  - Where the programs are in conflict or the contractor's program does not address an issue, the GSK safety program as defined in this manual will govern.
  - Prior to beginning work, contractors and their safety manager or designee must attend a pre-work safety conference with GSK to review procedures, forms, record keeping and reporting, and to ensure a clear understanding of the safety program relevant to the work to be performed.

## 3-3 Contractor Duties and Responsibilities

- 3-3.1 Contractors are responsible for ensuring that their employees adhere to the directives of the safety program when performing work for GSK. The contractor will submit to the GSK representative a list of individuals and their respective responsibilities.
- 3-3.2 The contractor's responsibility cannot be delegated to subcontractors, suppliers, or others.
- 3-3.3 Contractors are required to designate a qualified safety representative who is knowledgeable in safety, health, environmental protection, and fire prevention.

- 
- 3-3.4 If requested by GSK, contractors will submit a history of experience and qualifications for the person who is to manage the contractor's safety functions.
- 3-3.5 Safety violations by contract employees constitute non-compliance with provisions of the contract and may result in immediate removal from GSK premises.
- 3-3.6 Contractors are to train their employees on the Environment, Health & Safety, and fire prevention requirements for the work they are to perform and enforce adherence to safe work practices and procedures. (Refer to Section 6, Safety Orientation and Training, for more information.)
- 3-3.7 Contractors are required to maintain a safety training program designed for employees. At minimum, such programs are to provide employees with information on the following topics:
- Hazards present in their work assignment and surrounding area
  - Personnel protective equipment requirements
  - Proper procedure for reporting unsafe job conditions
  - Waste disposal and environmental release requirements
- 3-3.8 Contractors are responsible for planning and executing work according to the stated objectives of the safety program.
- 3-3.9 Contractors are to arrange for the proper use, maintenance, and repair of work equipment.
- 3-3.10 The contractor's manager, supervisor, or other person in charge who directs or allows employees to perform unsafe acts or to work in or around unsafe conditions will be immediately removed from GSK premises.
- 3-3.11 GlaxoSmithKline requires that some or all of the following functions are assigned. More than one function may be assigned to an individual.
- A. The manager is responsible for implementing and maintaining the safety program.
  - B. The supervisor is responsible for implementing and maintaining the safety program for areas under the supervisor's control. Responsibilities include administration and coordination of the following activities:
    - Thoroughly reviewing accident investigations and initiating corrective action
    - In the event of an accident, assisting in the investigation according to requirements
    - Holding safety meetings.
    - Reviewing safety performance and taking action as necessary within the areas of responsibility
    - Maintaining effective and prompt communication of safety matters
    - Monitoring compliance with established environmental and pollution control standards and regulations.
    - Assigning duties to subcontractors, checking work areas, making housekeeping inspections (accompanied by a subcontractor supervisor), and keeping records of conditions found and corrective actions taken.



- 
- Requiring employees to use personal protective equipment such as safety glasses, body harnesses, head and eyewear protection, and ventilation equipment.
  - Maintaining effective communication of safety matters to employees.
  - Instilling in personnel, by action, example, and training, an attitude toward safety so workers develop a better awareness of accident prevention.
  - Assisting in the development and communication of safe work procedures for unusual or hazardous operations.
  - Enforcing compliance with the requirements of federal, state, local, and other agencies, and with the requirements of the contractor and GSK safety manuals.
- C. The contractor's safety representative serves as a technical advisor to the contractor's management on safety and health planning, training, and problem resolution. The responsibilities associated with this position include the following:
- Applying policies, procedures, and work practices to promote and administer assigned functions to aid in this responsibility
  - Administering and coordinating medical and emergency first aid services and programs
  - Monitoring compliance with mandatory safety and health laws, regulations, standards, and codes, and auditing and documenting the results in order to eliminate or control hazards which could contribute to or result in an occupational injury or illness.
  - Investigating work related injuries, illnesses, and incidents that involve or could involve actual or potential risk to personnel and property, maintaining adequate records of pertinent data, and compiling the required reports of occupational injuries and illness
  - Administering and coordinating the contractor's alcohol and drug abuse program
  - Reviewing the Safety Procedure Waiver form (Refer to Section 12)

### **3-4 Subcontractor Duties and Responsibilities**

Subcontractor management, supervisors, and safety personnel have the same duties and responsibilities as the contractor as described in Part 3, Contractor Duties and Responsibilities.

### **3-5 Employee Duties and Responsibilities**

- 3-5.1 Contract employees must not knowingly work in an unsafe environment.
- 3-5.2 Employees are responsible for learning, understanding, and following the rules and regulations applicable to the work and for reporting observed or anticipated hazards to their supervisor(s). If such hazards are not addressed, employees must report the conditions to their supervisor and GSK representative.
- 3-5.3 Employees must be familiar with the Zebulon Contractor Safety Manual and understand the requirements that are applicable to their job function.

---

## 3-6 Disciplinary Action

- 3-6.1 Non-compliance with safety requirements that are a part of the contract documents will result in work stoppage and supervisor and/or employee removal from the premises. Willful or repeated non-compliance will result in contractor dismissal and contract termination.
- 3-6.2 Temporary or permanent removal from GSK premises may occur if the contractor's manager, supervisor, or person in charge of the work being performed requires, requests, allows, or condones employees to work in or around unsafe acts or conditions or violate environmental permits or regulations.
- 3-6.3 Immediate and permanent removal from GSK premises may occur if a contractor's manager, supervisor, or employee engages in any of the following activities:
- Openly exhibits disregard, defiance, or disrespect for the safety program
  - Knowingly falsifies investigative documents or testimony involving an investigation
  - Participates in fighting, violence, threats of violence, theft, or destruction of property
  - Violates established safety rules, regulations, or codes that endanger themselves or others
  - Violates established environmental rules, regulations, or procedures that endanger the environment

## 3-7 Reservation of Rights

- 3-7.1 GlaxoSmithKline reserves the right to interpret, to revise, or to depart from safety policies and procedures at any time without notice. GSK also reserves the right to dictate safety standards during the course of a contract as necessary in the interest of safety.
- 3-7.2 Compliance with this safety manual or GSK's policies, procedures, and standards does not confer or entitle contractors or their employees to any benefits, rights, or privileges that go to GSK employees by virtue of their status as employees of GSK.
- 3-7.3 Nothing in this safety manual alters contractor or contract employee status or infringes upon the rights of either.

## 3-8 GSK Representative's Responsibilities

- 3-8.1 The GSK representative's primary responsibilities are listed below:
- Be familiar with the Zebulon Contractor Safety Manual and understand the requirements established in it
  - Include manual requirements in contract safety requirements by referencing GSK policies and the Zebulon Contractor Safety Manual
  - Define the Zebulon Contractor Safety Manual application specific to each contract
  - Issue approvals and resolve problems in accordance with GSK policies
- 3-8.2 The GSK representative is to emphasize that the manual is:
- applicable to all contracts
  - applicable to all Zebulon sites

- a consolidated approach to safety
  - an expectation of minimum safety performance by all contractors
  - intended to increase requirements as risks increase
- 3-8.3 The GSK representative is to provide feedback to the standing committee for clarification and update.
- 3-8.4 The GSK representative is to monitor contractor's performance for compliance with the manual.
- 3-8.5 The GSK representative is to emphasize the following contractor responsibilities, as applicable:
- ensuring safety of all contractor activities and contract employees
  - establishing and implementing a safety program
  - conducting safety inspections
  - ensuring that contract employees comply with the safety program
  - designating a qualified safety manager
  - providing adequate safety training
  - transferring these same duties and responsibilities to subcontractor management, supervisors, and safety personnel.



**End of Section**

---

## SECTION 4: Reporting an Emergency

### 4-1 General Information

- 4-1.1 This section establishes the requirements, responsibilities, and methods of notification and response to emergency situations.
- 4-1.2 Where a specific procedure has not been established, use good judgment in determining what actions to take.
- 4-1.3 In addition to the reporting requirements of this manual, various policies and procedures (including ZSPs) require that all reports of accidents, incidents, or near misses be submitted to the GSK site safety representatives.

### 4-2 Definitions

- 4-2.1 All Clear - When an emergency situation is over, the site safety representative in charge notifies security to authorize employees to return to normal work activities. Security then dispatches officers to affected assembly areas to communicate the end of the emergency.
- 4-2.2 Call List - This is an approved list of individuals appointed to be the designated coordinators of emergency response for each contractor.
- 4-2.3 Emergency - Any unplanned event that adversely affects personnel, the environment, or GSK business is considered an emergency. In case of an emergency, refer to the following text.

### 4-3 Emergency Reporting Procedures

- 4-3.1 Immediately report an emergency on GSK property to security by telephone, radio, or messenger.
- 4-3.2 The emergency telephone number for the Zebulon site is 1111, 7-1111 or 269-1111.
- 4-3.3 Place emergency phone numbers in conspicuous places throughout the work area and on telephones.
- 4-3.4 Photographs of emergency situations are prohibited unless security gives written approval.
- 4-3.5 Do not make comments regarding emergencies to a media representative. Refer media inquiries to GSK security or a site safety representative if a site security representative is not available.

### 4-4 Accidents Involving Serious Injury or Death

- 4-4.1 In the case of a serious accident, call the emergency telephone number 1111 or 7-1111 & ask for assistance immediately and provide necessary first aid.
- 4-4.2 GlaxoSmithKline safety and medical personnel will assist in a life-threatening emergency.
- 4-4.3 Outside medical assistance should be requested through security when needed. Security will call and escort emergency vehicles onto the site. **DO NOT CALL 911**
- 4-4.4 Clear the area and keep away non-essential personnel.
- 4-4.5 Provide assistance to rescue personnel if requested.

- 
- 4-4.6 After proper evacuation of the injured employee, do not disturb or remove anything in the immediate area of an accident scene without GSK permission.
  - 4-4.7 The responsible contractor must make a full investigation and submit an Accident Injury Report for Medical Treatment Cases form (GSK-ZCSM-01) to the GSK representative within 24 hours of the occurrence. An alternate form may be used in place of form GSK-ZCSM-01 if approved by GSK.

## 4-5 Fire or Smoke

- 4-5.1 In the event of a fire or visible smoke, use the nearest fire alarm pull station, if available, and evacuate the area immediately. If the pull station does not activate (fire alarm is NOT sounding) or if no pull station is available, call the emergency telephone number 1111 or 7-1111 from the nearest phone that is located in a safe area. NOTE: The indication of an evacuation is given by any of the following - loud horn, Hi-LO pitch sound, &/or white strobe light.

**NOTE: Security will contact the fire department and escort them to the scene.**

- 4-5.2 Employees who have been trained within the past 12 months in the use of fire extinguishers may attempt to fight a fire, but only after evacuating people from the area. Your main responsibility is to evacuate the building IMMEDIATELY upon hearing the evacuation sound.
- 4-5.3 Keep non-essential personnel away from the fire.
- 4-5.4 If explosive materials or compressed gases are involved or other hazards may exist, ensure that affected personnel are immediately evacuated to a safe distance.
- 4-5.5 Once evacuation is complete, report to a pre-determined location or go to an outside designated assembly point. Contractors must account for everyone who reports to them or for whom they are responsible. If an employee is missing, notify local security or fire department personnel immediately.
- 4-5.6 Responsible or affected contractors must make a full investigation of the incident and submit a written report to the GSK representative within 24 hours of the occurrence.

## 4-6 Chemical or Hazardous Material Spill

- 4-6.1 In case of a spill, call the emergency telephone number 1111 or 7-1111 immediately. Isolate and contain the spill if it is safe to do so.
- 4-6.2 Comply with the requirements of Section 15, Environmental Issues.
- 4-6.3 Responsible or affected contractors must make a full investigation of the incident and submit a written report to the GSK representative within 24 hours of the occurrence.

## 4-7 Property Damage

- 4-7.1 If property under GSK control is damaged, notify the GSK representative immediately.
- 4-7.2 Protect against further damage where possible.
- 4-7.3 Keep non-essential personnel away from the area.
- 4-7.4 Make a full investigation and submit a completed Report of Accident, Environmental Release, Property Damage, or Near Miss form (GSK-ZCSM-02) to the GSK representative within 24 hours of the occurrence. An alternate form may be used instead of GSK-ZCSM-02 if approved by GSK.

---

## 4-8 Severe Weather

- 4-8.1 Upon notification of a tornado warning affecting the Zebulon site, security will immediately issue a tornado alert (e.g., by public address announcement, building sweep & outside areas.) In case of other severe weather, notification may come from security or one of the local safety organizations.
- 4-8.2 Security will immediately make appropriate public address and radio announcements instructing personnel to take emergency actions.
- 4-8.3 Take the following actions during warning conditions.
- Secure loose materials that can become displaced.
  - Identify escape routes and evacuation locations
  - Seek shelter in designated tornado safe areas if possible. If not, seek shelter in the center of a building or near the strongest supported section of the lower levels of a building.

## 4-9 Bomb Threat

- 4-9.1 The receiver of a bomb threat telephone call should attempt to transfer the call to security 7-1600. (See Appendix B for site specific contact numbers). Security will notify local police, fire department, or bomb disposal authorities.
- 4-9.2 When a bomb threat is received, the site and office areas may be evacuated. Once evacuation is complete, each contractor will account for every employee, and if an employee is missing notify GSK immediately. Security will usually determine if an evacuation is required.
- 4-9.3 If repeated threats occur within a short period of time, GSK will evaluate the situation and take appropriate action.
- 4-9.4 If possible, a Bomb Threat Report Form, which can be obtained from the local GSK security organization, should be completed by the person receiving the call.

## 4-10 Evacuation

- 4-10.1 Security and/or safety personnel will determine if evacuation of occupied buildings and site structures is required. An individual can initiate a building evacuation by pulling a fire alarm pull station.
- 4-10.2 Security and/or safety personnel will determine the evacuation route and assembly area.
- 4-10.3 Leave the affected location by the designated transport and route, and proceed calmly to the designated evacuation area.
- 4-10.4 Security and/or safety personnel will stay in the affected area as long as it is safe to ensure that all personnel have evacuated.
- 4-10.5 After reaching the evacuation area, contractors and the GSK representative must report to security or safety personnel any problems relating to the emergency.
- 4-10.6 When evacuation is complete, contractors must account for their personnel.
- 4-10.7 A GSK evacuation also requires that contract employees evacuate.

---

## 4-11 Transportation

- 4-11.1 It is the policy of GSK that first aid, medical, and emergency transportation is to be provided by the contractor for employees who sustain occupational injuries or illness. GlaxoSmithKline personnel will assist when injuries are serious or life threatening.
- 4-11.2 Contact security to request and escort an emergency vehicle onto the site.
- 4-11.3 Contractors must provide non-emergency transportation for their employees from the job site to the specified doctor's office or clinic.

## 4-12 Employee Injury and Illness Status

- 4-12.1 Contractors must have a policy that encourages an ill or injured employee to return to work as soon as a safe return to work is possible.
- 4-12.2 Contractors must ensure that work is provided for employees who sustain an on the job injury or illness when the contractor's medical service approves "light duty" status.

## 4-13 Reporting of Non-Referred Medical Treatment

- 4-13.1 Contractors must notify the GSK representative of employees who have obtained outside medical treatment for an alleged on the job injury or illness.
- 4-13.2 The contractor's policy for reporting an on the job injury or illness must be posted on bulletin boards, in change rooms, and at first aid and other commonly used facilities when practical. The policy will be stated during new-hire orientation and referenced regularly during safety meetings.

 **End of Section**

---

## SECTION 5: Investigation and Reporting

### 5-1 General Information

- 5-1.1 Accident and incident investigation and reporting promote accident prevention by detecting the causes of accidents. This allows steps to be taken to remove the causes and eliminate future accidents, thus, reducing the number and severity of occupational illnesses and injuries.
- 5-1.2 Accident investigation and reporting also helps to reduce worker compensation, public liability, and property damage insurance premiums.
- 5-1.3 Report all injuries and occupational illnesses to your supervisor, no matter how minor the injury/illness may be.

### 5-2 Accident and Incident Investigation

- 5-2.1 An accident or incident resulting in an injury or illness, fatality, environmental release, damage to property or equipment, or a "near miss" must be investigated. The following categories are recognized by GSK.
  - Near Miss - An event or occurrence that had or has a high probability of compromising the safety or health of employees.
  - Incident - An event that interrupts operations or damages property or equipment
  - First Aid Injury or Illness
  - Recordable Injury or Illness
  - Lost Workday Case (LWC)

**NOTE:** First Aid Injury or Illness, recordable Injury or Illness, & Lost Workday Case (LWC) are defined in the OSHA publication A Brief Guide to Recordkeeping - Requirements for Occupational Injuries and Illnesses. This publication can be obtained from the Department of Labor of the state in which the site is located.
- 5-2.2 Environment, Health & Safety will lead investigations involving fatalities, serious injuries or illnesses, and significant property damage.
- 5-2.3 The contractor or designee responsible for the area or trade involved in the accident or injury will conduct other categories of investigations. A GSK representative will participate if deemed appropriate by GSK.
- 5-2.4 Investigation will begin promptly after the accident or incident. The contractor must report accidents that result in fatalities and/or three or more injuries requiring hospitalization within eight hours of occurrence to appropriate state's Department of Labor.
- 5-2.5 Accidents or incidents can be documented on the Report of Accident, Environmental Release, Property Damage, or Near Miss form (GSK-ZCSM-02). An alternate form may be used in place of GSK-ZCSM-02 if approved by GSK.
- 5-2.6 The investigation and report should be completed immediately & submitted the project manager.
- 5-2.7 Contractors may be asked by GSK to take photographs (if approved by site security) in conjunction with investigations of accidents involving serious personal injury, non-project personnel injuries,



---

substantial property damage, and equipment or material failure. Photographs will be appropriately documented and controlled by GSK.

- 5-2.8 Information provided to the media is the responsibility of Zebulon GSK Management. Do not give information to the media without written approval from GSK.

### 5-3 Reporting Safety Performance

- 5-3.1 If requested by GSK, contractors who work at the Zebulon GSK facility will submit a monthly Contractor Safety Performance Report (GSK-ZCSM-03) to the GSK Project Manager. The recording period begins on the first day that labor is applied to the job and ends on the last day of each month. Reports must be submitted by the tenth calendar day of each month. If the tenth day falls on a weekend or holiday, the report is to be submitted on the next business day.
- 5-3.2 The report will contain the following information
- The total number of hours worked during the reporting period
  - The cumulative number of hours worked on the job at the end of the reporting period
  - The total number of near misses that occurred on the job during the reporting period
  - The total number of incidents that occurred on the job during the reporting period
  - The total number of injuries or illnesses requiring first aid treatment that occurred on the job during the reporting period
  - The total number of recordable injuries or illnesses (recorded on the OSHA 300 Log) that occurred on the job during the reporting period
  - The total number of injuries or illnesses resulting in a lost workday case that occurred on the job during the reporting period
  - The cumulative number of safe hours worked, which is the number of hours worked without a lost workday case.

 **End of Section**

---

## **SECTION 6: Safety Orientation and Training**

### **6-1 General Information**

- 6-1.1 This section establishes basic training and instruction activities to ensure that their employees are trained in hazard recognition and are informed of their responsibilities in carrying out their assignments in an efficient and accident-free manner.
- 6-1.2 The provisions in this section will also help contractors comply with specific OSHA, state, and local safety requirements, as well as the requirements of this safety manual.
- 6-1.3 It is the contractor's responsibility to provide training in a language that their employees can understand.
- 6-1.4 The contractor's supervisor must instruct employees on the safest way to perform each task of the work assignment prior to starting work.

### **6-2 Safety Meetings, Records, and Minutes**

- 6-2.1 Contractors must hold regularly scheduled safety meetings and require mandatory attendance by employees.
- 6-2.2 Accident prevention will have a prominent place on the agenda, and the meeting records must state the specific items discussed.
- 6-2.3 Each supervisor must hold safety and environmental training meetings in their work area with their entire crew, and review specific procedures pertinent to the crew's activity. This meeting provides an opportunity to point out hazardous conditions or unsafe work practices, and discuss safety and environmental rules and regulations, safe working procedures, analysis of accidents, and potential hazards.
- 6-2.4 Records and minutes of safety meetings are required, including attendees and subjects covered. Lack of recording and prompt or proper distribution indicates non-compliance with contract requirements.
- 6-2.5 The contractor's safety representative will attend meetings with GSK personnel as required. Items of discussion will include coordination of safety activities, training, problems, accidents, and accident/injury status.
- 6-2.6 Failure to attend safety meetings may result in contractors or their employees being removed from GSK premises.

### **6-3 Personal Contacts**

Supervisors must periodically call to the attention of employees under their direction pertinent safety and environmental items relative to the work. This instruction is an extremely valuable training technique, and a continuing indication of management's commitment to safety.

### **6-4 Specific Instruction**

- 6-4.1 Contractors are required to provide regular and continuing training for their employees. They will also monitor the training activities of subcontractors and others under their direction.

---

6-4.2 The following are examples, but not a complete list, of the areas of training required.

- Recognizing and avoiding unsafe conditions and acts, specific regulations applicable to the work environment, and the safe handling and use of poisons, caustics, and harmful substances when the employee is exposed to or required to handle or use them (Refer to Section 9, Hazard Communication Program for additional information.)
- The potential dangers of exposure to harmful plants or animals, how to avoid injury, and the first-aid procedures to be used in the event of injury
- Awareness of potential hazards, personal hygiene, and personal protective measures
- Handling and use of flammable gases, liquids, or toxic materials, if applicable to work
- Entering a confined or enclosed space, the hazards involved, the necessary precautions, and the use of protective and emergency equipment required, if applicable to the work
- Environmental training as described in Section 15
- Hazard recognition, emergency procedures, and the use of tools and equipment
- Electrical safety and lockout/tagging
- Fire safety
- Ladder safety and fall protection
- DOT hazardous materials training, if applicable to their work
- Using a respirator, if applicable to the work
- Working in a roadway, if applicable to the work
- The proper method of flagging, if applicable to the work (This training must be documented and include selection of proper clothing and equipment.)
- The proper method of giving signals for operators of cranes, backhoes, and helicopters, if applicable to the work (This training must be documented.)

## 6-5 Promotional Material

6-5.1 OSHA safety requirements and additional safety promotional material must be posted.

6-5.2 Contractors using temporary offices should make use of bulletin boards to post safety requirements. Other postings are as required by OSHA.

## 6-6 Job Safety Analysis

6-6.1 Job safety analysis is the process of carefully studying and recording each step of a job to identify existing and potential safety and health hazards, then evaluating the hazards to determine the best way to perform the job while avoiding the hazards. Improved work methods reduce costs resulting from employee absenteeism and worker compensation and lead to increased productivity.

6-6.2 Contractors must conduct a careful study and recording of each step of the job being assigned to each employee. The purpose of this study is to identify existing or potential safety and health hazards and

---

to determine the safest way to perform the job by eliminating or significantly reducing and controlling any hazards. The study will focus on identifying the following:

- potential hazardous tasks or conditions
  - toxic or hazardous materials
  - hazard control methods
  - personal protective equipment and training procedures required to perform each task, duty, or work assignment safely
- 6-6.3 Contractors must develop guidelines and controls to implement a job safety analysis program that enables their management and employees to anticipate hazards that may cause injuries, near misses, or death and to take corrective action. This allows everyone to anticipate what tools, safety equipment, and procedures they will need to do a job.
- 6-6.4 The Job Safety Analysis (JSA) program provides a review of the various procedures needed to safely accomplish work. Hazard analysis information must conform to the requirements of OSHA.
- 6-6.5 A JSA is required to accompany a work permit request for authorization.

## **6-7 Orientation and Refresher Training**

- 6-7.1 Contractors must instruct newly employed, promoted, or transferred personnel in the safety practices required by their assignments. Employees must receive Zebulon safety Orientation prior to starting work. (This includes all RTP transferred employees & those that require site access).
- 6-7.2 Initial safety orientation for new employees must include a discussion of the basic safety and environmental regulations at the Zebulon site. The initial orientation must be performed by GSK Safety or the contractor (if approved by site safety), and must be documented.
- 6-7.3 Employees are required to attend safety orientation before going unescorted into the work area.
- 6-7.4 Other specific, identified training requirements must be met in addition to this safety orientation before employees are permitted to perform work. This procedure does not supersede vendor requirements.
- 6-7.5 The following exception applies. Contract employees may work on a site for a maximum of six consecutive calendar days within one calendar year without safety orientation if they comply with the following requirements.
- They are escorted at all times and supervised by a GSK employee or an approved "hard badged" contractor who has attended the Contractor Safety Training class and who is responsible for the work and competent to address safety issues specific to the work area.
  - They follow applicable safety requirements specified for performing the work.
- 6-7.6 The safety orientation is site-specific; therefore attendance is required for work performed at the GSK Zebulon site. At the conclusion of the orientation, employees will sign a training log.
- 6-7.7 Zebulon Environment, Health & Safety must approve safety orientation conducted by contractors.
- 6-7.8 Contractors are required to understand and comply with each safety requirement. Employees will attend refresher training annually.

---

## 6-8 Contractor Self-Certification

- 6-8.1 Contractors may orient their employees on behalf of GSK if they comply with all of the following requirements.
- The contractor has an instructor authorized by the Zebulon safety organization who is a member of the contractor's staff assigned to work the Zebulon site.
  - The contractor submits their safety record to the Zebulon safety organization for consideration.
  - The orientation program is evaluated and approved in writing annually by the Zebulon safety organization.
- 6-8.2 Contractors must document safety training and provide records to GSK as requested.
- 6-8.3 A current list of orientation attendees will be maintained by GSK, and the list will be the authority for answering questions regarding employee training.

 **End of Section**

---

## SECTION 7: Inspection and Auditing

### 7-1 General Information

- 7-1.1 If requested by GSK, contractors will establish an inspection and audit program to help eliminate unsafe practices by employees, establish a hazard-free workplace, and protect the environment. The program will be in writing, including the scope of the inspection and audit, frequency, responsibility, record keeping, and corrective action.
- 7-1.2 The inspection and audit program reaffirms the contractor's responsibility for the actions of their employees as originally assigned under the General Duty Clause Provision of the Occupational Safety and Health Act of 1970 (revised). The exercise of these responsibilities by contractors is an effective deterrent to accidents arising from unsafe acts or conditions.

### 7-2 Inspection and Auditing Procedures

- 7-2.1 Control of workplace safety is achieved only when each contractor fulfills contractual and statutory responsibilities by implementing practical steps to maintain safe, healthy, and environmentally sound work practices and conditions.
- 7-2.2 Contractors are responsible for conducting continuous monitoring of their operations to ensure that they are aware of the probable sources of potential injury, illness, or loss due to unsafe acts or conditions.
- 7-2.3 Contractors must continually monitor and audit the performance of subcontractors and their supervisors. Subcontractors must notify contractors if unsafe practices are observed. The contractor's safety manager may use the Contractor Safety Survey form (GSK-ZCSM-04) to record findings, or use an alternate form that is approved by the GSK representative.
- 7-2.4 Contractors must appropriately plan the procedures to be followed for each operation. Personnel chosen to perform a planned operation must be trained in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.
- 7-2.5 In addition to inspections conducted by the contractor, GSK representatives such as insurers or site safety personnel may conduct inspections and audits. Contract activities are also subject to periodic inspection by OSHA compliance officers.
- 7-2.6 If an OSHA compliance officers visit the Zebulon site, they will be escorted to the GSK project manager or safety representative. The appropriate contractors will then be notified so that an opening conference may be conducted. If the inspection is to occur on GSK property, GSK will organize the inspection in accordance with OSHA regulations. Contractors must forward copies of OSHA inspection reports & citations received by the contractor to GSK. The contractor must post citations as required by OSHA.
- 7-2.7 Contractors must notify GSK in writing of the existence of hazardous conditions, property, or equipment in work areas that are not under the contractor's control. It is the contractor's responsibility to take necessary precautions against injury until such hazards are removed.

---

7-2.8 The contractor's equipment must be used, inspected, and maintained as directed by this manual, the manufacturer's instructions, and by applicable federal and state environment, health & safety regulations. If a conflict exists, the more stringent requirement takes precedence.



**End of Section**

## **SECTION 8: OSHA Regulations**

### **8-1 General Information**

- 8-1.1 Contractors must know and understand their responsibility for compliance with NC OSHA regulations, and should have a copy of the applicable NC OSHA standards.
- 8-1.2 Preventing accidents is the primary reason contractors must comply with OSHA standards. Avoiding a citation or financial penalty is also a benefit to the contractor.

### **8-2 OSHA Publications**

- 8-2.1 OSHA Part 1926 - This portion of OSHA is applicable specifically to construction work. A helpful publication for job supervisors is Construction Industry OSHA Safety & Health Standards (OSHA 2202), which is a digest of basic applicable standards.
- 8-2.2 OSHA Part 1910 - Areas of safety not dealt with in the Construction Standards (Part 1926) may be covered in the General Industry portion of OSHA Part 1910.

### **8-3 OSHA Regulations**

- 8-3.1 Contractors must know, understand, and comply with the Occupational Safety and Health Act of 1970 as it pertains to their work responsibility. This act is administered by the US Department of Labor in conjunction with various state OSHA (or OSHA-approved) programs.
- 8-3.2 The General Duty Clause states that each employer "shall furnish to each of his/her employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his/her employees."
- 8-3.3 OSHA Poster - Part 1903 of OSHA requires posting the "Safety and Health Protection on the Job" poster in a prominent location. The poster briefly states the intent and coverage of OSHA. Failure to post this document is a citable offense.
- 8-3.4 Recordkeeping requirements include OSHA Form 300, Log of Occupational Injuries and Illnesses and the First Report of Injury Form.
- 8-3.5 The contractor must report fatalities to OSHA within 8 hours. Additionally, inpatient hospitalizations of one or more employees, amputations (including fingertip amputations without bone loss) and loss of an eye must be reported to OSHA within 24 hours as required by law.
- 8-3.6 Contractors must meet all OSHA requirements for employers for applicable health surveillance programs, including required record keeping.
- 8-3.7 Copies of the Occupational Safety and Health Act of 1970 and related information on state plans, standards, and education and training programs may be obtained from the Department of Labor in the state where the site is located.



---

8-3.8 Should the OSHA regulations not address a specific procedure or hazard, contractors are still responsible for their employees' general safety. A contractor's failure to accept this responsibility is a citable offense.

 **End of Section**

## SECTION 9: Hazard Communication Program

### 9-1 General Information

- 9-1.1 Contractors must establish & maintain a written, comprehensive hazard communication program that complies with applicable state law & includes:
- A list of hazardous materials in the workplace
  - Safety data sheets (SDS)
  - Provisions for container labeling
  - An employee training program
- 9-1.2 Contact the project manager or the Zebulon site safety representative for specific hazard communication concerns relevant to the location and department. (Refer to Appendix B for a list of telephone contact numbers for GSK sites.)
- 9-1.3 Refer to the DOT Emergency Response Guidebook for information about hazardous material spills.

### 9-2 Hazardous Materials List

- 9-2.1 Contractors must prepare a hazardous materials list before the materials arrive on site.
- 9-2.2 The hazardous materials list must contain:
- A. The chemical name or the common name used on the SDS or container label
  - B. The quantity usually stored on site in the following ranges:
    - Class A for quantities of less than 55 gallons or 500 pounds
    - Class B for quantities between 55 and 550 gallons or 500 and 5,000 pounds
    - Class C for quantities between 550 and 5,500 gallons or 5,000 and 50,000 pounds
    - Class D for quantities greater than 5,500 gallons or 50,000 pounds
  - C. The area where the hazardous material is stored and to what extent it may be stored at altered temperature or pressure
- 9-2.3 The hazardous materials list must be prepared for each work area and updated within 30 days of the addition or removal of a hazardous material, or when the quantity stored changes enough for it to be listed in a different class. The entire hazardous materials list must be updated at least annually.
- 9-2.4 Contractors must submit three copies of the hazardous materials list and material safety data sheets to the GSK representative before the hazardous materials are brought on site. All material safety data sheets submitted must be accompanied by Form GSK-ZCSM-9 Site Chemical Request & Approval Form.
- 9-2.5 The GSK representative will forward a copy of the list to the site safety organization, which will retain one copy for their files and hold the second copy for the local fire department.
- 9-2.6 Upon receiving and forwarding this information, GSK does not imply acceptance of responsibility or guarantee completeness or accuracy of contractor submittals.

- 
- 9-2.7 The use of hazardous materials in a GSK facility requires consultation with the site safety organization.
- 9-2.8 Hazardous materials may not be stored on site without written consent from the site safety organization. This consent should be documented by site safety on Form GSK-ZCSM-09.

### 9-3 Safety Data Sheets

- 9-3.1 Contractors must maintain the most current material safety data sheets provided by manufacturers and distributors of the material. If the contractor does not receive an SDS from the manufacturer or distributor, the contractor must submit a written request for one. As a general guideline, an SDS dated three years earlier than the submission date should not be submitted to GSK without verification that it is the latest version of the document.
- 9-3.2 Beyond the identity information, the SDS must provide information in the ten areas required by OSHA in 1910.12.00g (4).
- 9-3.3 A copy of each SDS must be submitted to the site safety organization and maintained at the work site. The copy must be easily accessible to contractors, employees, and GSK personnel in that area.
- 9-3.4 In addition to maintaining copies of SDSs at the work site, copies and annual updates must be submitted to the GSK representative and the site safety organization.

### 9-4 Container Labels

- 9-4.1 Contractors must ensure that labels on incoming containers are not removed or defaced, and that containers are clearly marked as hazardous.
- 9-4.2 Each container must be labeled, logged, or marked with the identity of the hazardous chemical it contains, and it must show appropriate hazard warnings for employee protection. The hazard warning can be messages, words, pictures, or symbols used to convey the hazard. Labels must be legible, in English (plus any other language required), prominently displayed, and meet OSHA and DOT requirements.

### 9-5 Hazard Communications

- 9-5.1 Contractors must have a means of informing employees of the hazardous materials associated with the work they perform, and communicating information on hazards in the GSK facilities at which they are working.
- 9-5.2 Contractors must train employees to recognize and avoid hazards and train them in the use of personal protective equipment to be used when working with hazardous materials.
- 9-5.3 Employee Information and Training
- A. Contractors must establish a training and information program for employees potentially exposed to hazardous materials in their work area at the time of initial assignment, and whenever a new hazard is introduced to their work area. The discussion topics must include at a minimum:
- Existence of the hazard communication standard and its requirements
  - Operations in the work area where hazardous materials are present

- 
- Where the contractor will keep the written hazard evaluation procedures, communications program, hazardous materials list, and the required SDSs.
- B. Training must comply with OSHA standards and, at a minimum, focus on the following:
- How the hazard communication program is implemented on site, how to read and interpret information on labels and SDSs, and how employees can obtain and use the available hazard information
  - Hazards of the materials in the workplace
  - Measures employees can take to protect themselves from hazards
  - Specific procedures put into effect by the contractor to provide protection, such as work practices and using personal protective equipment
  - Methods and observations, such as appearance or smell, workers can use to detect the presence of a hazardous material to which they may be exposed
- C. Where necessary, GSK will provide training on the potential hazards that contractors may encounter in GSK facilities.
- D. For further information, contractors not familiar with the applicable state's hazard communication program are encouraged to contact the Department of Labor in the state where the site is located.
- E. Contractors must report to the GSK representative any illness or injury known or suspected to be associated with hazardous material use or potential exposure while on GSK premises.

#### 9-5.4 Hazardous Materials

- A. Contractors are responsible for the safe use, storage, transportation, and disposal, in accordance with applicable laws, of chemicals or hazardous materials used in the performance of their work.
- B. Contractors must provide GSK with a list of chemicals or materials used in the performance of their work and a copy of the SDS for each material. The receipt of the list or SDS by GSK does not relieve the contractor from requiring employees and other persons performing work to assume responsibility for the safe use, storage, and disposal of hazardous materials.
- C. Contractors must require their suppliers, agents, and employees of other persons performing work to use an approved substitute chemical or material in the place of a chemical or material that GSK requests not be used for the work.
- D. Chemicals or materials brought on site by employees and other persons performing work must bear a label stating the identity of the chemical or material, hazards associated with it, and the name of responsible party bringing the chemical or material onto the site.
- E. Waste resulting from the work must be properly disposed of by the responsible contractor in accordance with instructions from the appropriate GSK environmental organization.
- F. Hazardous materials, pollutants, and contaminants encountered or generated from soils or facilities in place prior to commencement of work, or from portions of the contract already completed by other contractors, are the responsibility of GSK. These will be disposed of as directed by the site environmental organization in accordance with applicable laws. The contractor

---

must immediately notify GSK if hazardous substances, pollutants, and contaminants are encountered at the work site.

- G. Contractors are required to keep accurate records of the types and quantities of waste, including hazardous waste, and the facilities in which the wastes are treated, incinerated, or disposed. The contractor must provide GSK with copies of these records. Liquids (including muddy water) or chemicals should not be pumped or allowed to flow into a sewer. Do not clean equipment or change lubrication or pneumatic fluids in areas that are not equipped with spill contaminant and control facilities.



**End of Section**

---

## **SECTION 10: Alcohol and Drug Abuse and Tobacco Policies**

### **10-1 Alcohol and Drug Abuse Policy**

- 10-1.1 Contractors must develop and enforce a policy that prohibits the possession, distribution, promotion, manufacture, sale, use, and abuse of illegal drugs, drug paraphernalia, controlled substances, and alcoholic beverages by employees while on GSK premises. Contractors must comply with the Drug Free Workplace Act of 1988.
- 10-1.2 Contractors must require and fund drug testing and alcohol screening as outlined in paragraphs 2 and 3. Contract employees are prohibited from reporting to the premises under the influence of alcohol or drugs which affect their working ability or safety, including but not limited to their alertness and coordination.
- 10-1.3 The policy applies to all contractors, contractor's management, and employees. GSK may take legally permissible steps as necessary or appropriate to enforce compliance with this policy.
- 10-1.4 Employees may possess a prescription medication in its original container to be administered only to the person for whom it is prescribed. Contractors must provide a mechanism to ensure that employees taking prescription medicine inform the contractor about potential side effects of medication that may affect work ability, alertness, coordination, safety, and the safety of others.

### **10-2 Drug Testing**

- 10-2.1 GlaxoSmithKline requires the following regarding drug testing.
  - A. Contractors must have a program that includes pre-employment drug testing.
  - B. Employees of contractors involved in engineering construction work must be tested prior to coming on site, and the test cannot be more than 30 days old. Tests must be repeated annually so that no one is working on the premises with a test older than one year.
  - C. The GSK representative may request additional drug testing for work with exposure to risk
- 10-2.2 A Safety Procedure Waiver (GSK-ZCSM-05) as described in Section 12 is required to waive any portion of the drug testing procedure.
- 10-2.3 When drug testing is conducted, contractors must require that each employee produce a urine sample to be tested at a minimum for marijuana metabolites (cannabinoids), cocaine metabolites, opiate metabolites, phencyclidine, and amphetamines.
- 10-2.4 At a minimum, contractors must comply with the DOT Procedures for Transportation Workplace Drug Testing Programs as specified in 49 CFR Part 40. Contractors may assign more stringent screening or confirmation values at their discretion except when regulated by applicable state or federal laws.
- 10-2.5 Testing methods must conform to applicable state laws, and results must be reviewed by a Medical Review Officer, a licensed physician with knowledge of substance abuse disorders.
- 10-2.6 Certification in the form of the test results or a letter from the laboratory performing the testing must be available to GSK prior to the employee's orientation. Contractors will retain the certification in their files. The GSK representative may request the certification for archiving with the contract files.

- 
- 10-2.7 GlaxoSmithKline has the right to request that the contractor perform additional testing under the following circumstances.
- A. Reasonable Suspicion of Illegal Drug Use  
When reasonable suspicion exists that an employee exhibits signs of intoxication, drug influence, or other behavior causing a prudent and reasonable person to have concern for the safety of the employee, other employees, or the public
  - B. Suspicious Incidents and Occurrences  
When there is suspicion (based on demonstrable information such as an unusual number of post-accident positive test results, incidents of theft, lost productivity, unexplained personal behavior or other facts) that specific employees or other designated work groups (including but not limited to entire crews, work sites, shifts, or sensitive job classifications) are under the influence of drugs.
  - C. Discovery of Illegal Drugs or Drug Paraphernalia  
Where an employee is found to be in possession of illegal drugs or drug paraphernalia, or when these items are found in an area controlled or used exclusively by employees
  - D. Random Testing  
Includes employees in positions where unsafe work behavior, performance, or error in judgment caused by drug abuse may affect the safety of operations or the well being of the employee, other employees, or the public
- 10-2.8 Clarification of Drug Testing Requirements
- A. If an employee has been tested previously and the results were confirmed to be negative, he/she will be allowed to return to another GSK project by submitting a copy of the previous test. The test must have been performed within the last year and a copy of the test must be submitted for each project. The test results pertain to the individual and are acceptable if an individual changes companies.
  - B. Individuals who may be on site for a limited time (maximum of six continuous work days) may be allowed to work without drug testing if they are escorted by a GSK employee or approved contractor.

### 10-3 Alcohol Screening

- 10-3.1 If the contractor has just cause to believe an employee is using alcohol, the employee must be evaluated and a urine or blood screening test must be performed if necessary.
- 10-3.2 An employee is considered "under the influence" by meeting the legal definition based on blood alcohol content, or if he/she is unable to perform his/her job in an acceptable manner because of impaired judgment or physical abilities following the use of alcohol.

### 10-4 Consequences

- 10-4.1 A contractor who produces a confirmed positive drug test after Medical Review Officer (MRO) review or is determined to be under the influence of alcohol will be prohibited from working at any GSK facility.
- 10-4.2 Contract employees will be barred from the Zebulon premises for the following:

- 
- A. Refusing to submit to a search or inspection, urine, drug, or blood test when requested by the contractor
  - B. Degrading, diluting, switching, altering, or tampering with a test sample
  - C. Using, manufacturing, distributing, or dispensing illegal drugs while on the premises
  - D. Off-duty possession, use, sale, or manufacture of an illegal drug, whether or not resulting in criminal charges or conviction
- 10-4.3 Security will be immediately informed of the name of any person that is barred or removed from GSK premises for violation of the alcohol and drug abuse policy.

## 10-5 Enforcement

- 10-5.1 Contractors will remove their employees from the premises if they appear on the premises while under the influence of alcohol or drugs.
- 10-5.2 Contractors must obtain appropriate permission so that their employees entering, departing, or on the premises will, upon the contractor's request, undergo a search of their person, locker, desk, or any property under their control for illegal drugs. This includes the employee's personal effects and automobile if it is located on the premises. Such searches may be conducted when there is a reasonable basis to suspect that the employee's work performance or on-the-job behavior may have been affected by drug use or that the employee has sold, purchased, used, or possessed illegal drugs on the premises.

## 10-6 Tobacco Policy

- 10-6.1 All facilities and grounds owned, leased, or operated by GlaxoSmithKline, and all Company-owned and leased vehicles, will be designated as tobacco-free and smoke-free areas. Use of tobacco products or nicotine products, including electronic cigarettes, in and around entryways or on land/property adjacent to GSK worksites, owned or leased, is prohibited.

 **End of Section**



---

## **SECTION 11: Security Program**

### **11-1 General Information**

- 11-1.1 Contractors must establish a security program and coordinate their security actions with the GSK site security organization.
- 11-1.2 GlaxoSmithKline is not responsible for lost or stolen property at its facilities.

### **11-2 Use of GlaxoSmithKline Facilities**

- 11-2.1 GlaxoSmithKline facilities are not to be used by contractors, contract employees, subcontractors, vendors, or suppliers without prior authorization. Violation of this policy may result in immediate removal from GSK premises.
- 11-2.2 Use only designated roads, gates, and doors for entry or exit.
- 11-2.3 The maximum speed limit on site is 25 MPH.
- 11-2.4 Park in designated areas only.
  - A. Unauthorized vehicles parked on site or vehicles parked in areas other than assigned will be towed. Security reserves the right to tow vehicles that are parked in areas other than those assigned. Vehicle damage, towing, and storage charges are the vehicle owner's responsibility.
  - B. Vehicles parked or operated on site are subject to search without prior notice. Failure to allow a search may result in the vehicle and employee being barred from GSK premises.
- 11-2.5 Reckless or irresponsible vehicle or machinery operations may result in immediate removal from GSK premises.
- 11-2.6 The GSK representative determines normal working hours for the contract.
- 11-2.7 Visitors must be escorted while on GSK premises.

### **11-3 Harassment**

Harassment, including sexual harassment, will not be tolerated. Violation of this policy may result in immediate removal from GSK premises.

### **11-4 Contractor Identification Badges**

- 11-4.1 Contractors must wear a GSK identification badge in plain sight while on the premises. Personnel without a proper badge will be questioned regarding their presence and may be asked to leave the premises. Do not enter or attempt to enter GSK facilities without proper authorization and identification. GSK identification badges shall be turned in at the end of assignment. Temporary badges and visitor passes shall be turned in at the end of each work day.
- 11-4.2 Visitors to GSK facilities will be admitted through a security post, where they will sign in, provide their U.S. federal, foreign passport or state-issued photo ID and are issued a visitor pass. The contractor is to provide visitors with any required personal protective equipment before they enter a work area.

---

Visitors must follow the same procedure as other personnel when entering or exiting the work area through a designated security post.

- 11-4.3 Unescorted visitors are not permitted. Visitors and unauthorized contractors must be escorted at all times.
- 11-4.4 Identification badges and visitor passes are not transferrable. Violation of this policy may result in immediate removal from GSK premises.
- 11-4.5 Dismissal of a Contractor employee from the premises requires that the contractor's supervisor to notify security, escort the employee to the designated exit; obtain the dismissed person's GSK identification badge, documents, keys, and equipment; ensure that the person immediately leave GSK premises; and notify the GSK representative. The supervisor will note the termination date and time and immediately return the dismissed employee's identification badge or sticker to security.

## 11-5 Deliveries

- 11-5.1 Unless waived by the GSK site security organization, delivery drivers for contractors, subcontractors, vendors, and suppliers must report to a designated security post upon arrival at the work area. A GSK security officer will clear entry to the work area through the GSK representative or the appropriate contractor.
- 11-5.2 The driver will sign-in, provide their U.S. federal, foreign passport or state-issued photo ID, receive a visitor pass, and be directed to the appropriate area for receiving and unloading. Upon completion of the delivery, the driver must return to the same gate entered, sign out, and leave the visitor pass with the security officer. Drivers must remain in the delivery or receiving dock area until they are ready to leave the site.

## 11-6 Site Security

GlaxoSmithKline provides security at the Zebulon facility 24 hours per day, seven days per week. This service does not, however, relieve contractors of their contractual duties, obligations, and responsibilities to ensure that their trailers, vans, vehicles, equipment, tools, and storage areas are properly secured at the end of each workday.

## 11-7 Contractor Responsibilities

- 11-7.1 Contractors will provide or direct the following as appropriate:
  - A. Designated parking areas for employees
  - B. A method of identification, such as hard hat decals or a company uniform
  - C. Security personnel for construction entrance roads and non-work periods
  - D. Perimeter security fencing for sites not maintained by GSK
  - E. Site lighting for night security
- 11-7.2 Contractors are responsible for any additional field office security beyond that provided by GSK security personnel

- 
- A. If additional security measures are instituted, advise GSK of installed audible or visible alarm devices.
  - B. Complete the ID Badge/Access Card Request form (available from the site security organization) for issuance of identification badges.
  - C. Provide a list of supervisory personnel (name, address, and telephone number) who will be available during non-work periods to assist in the event of a security breach or other problem.
  - D. Perimeter security fencing for sites not maintained by GSK
  - E. Provide identification of equipment and machinery by paint scheme, ID tag, or contractor name painted in a prominent location.
  - F. Disable and store motorized machinery during non-work hours to prevent unauthorized operation.
  - G. Provide proof of required insurance for vehicles to be used on site, prior to vehicle use.
- 11-7.3 Contractor employees are responsible for:
- A. Safe operation of vehicles while on site and when leaving the site
  - B. Locking or securing personal vehicles against theft (NOTE: GlaxoSmithKline does not assume responsibility for damage, fire, or theft to a contractor's vehicle.)
  - C. Parking in designated areas only
  - D. Displaying an identification badge while on site
  - E. Ensuring the security of personal tools and equipment
  - F. Reporting accidents & incidents to the contractor's management & to GSK site security

## 11-8 Security for Contractors Working Inside Occupied Facilities

- 11-8.1 A GSK security issued identification badge and Site/building specific access approval is required for an employee to enter a GSK facility. Employees must sign in at the designated security post for the facility each day before proceeding to the work area. Employees without ID badges may be issued a temporary paper badge by security.
- 11-8.2 Contractors must provide approved identification (government issued type: i.e.; drivers license, military ID card, etc.) for non-badged supervisory and trade personnel sufficient to meet the security requirements and to efficiently execute the work. At the discretion of the GSK representative, contractor employees may be required to obtain an ID badge.
- 11-8.3 The Contractor/Temporary Personnel Background Authorization form (available online) must be completed for contractor employees scheduled to work at a GSK facility who needs unescorted access to GSK facilities.
- A. The ID Badge/Card Access Request form must be used to identify the building access requirements for an employee, including non-business-hours access.
  - B. Forms must be filled out completely and submitted together to security, or they will be returned with no action taken. Card access may be granted to employees who have completed the background investigation process.

- 
- C. When security has received a completed set of forms, the GSK representative will be notified that the employee is to be scheduled to have a photo taken and receive an ID badge.
  - D. Before any contractor can receive an ID badge, they must complete the "Contractor Safety Orientation Class".
- 11-8.4 Issuance of a badge and being added to the approved contractors list does not imply that the employee has passed the security background check. The GSK representative will be notified when an individual does not pass the background check and arrangements will be made to remove the individual from GSK premises.
- 11-8.5 Contractor employees with GSK ID badges must have approval for the specific site and building of their current contract assignment. The GSK representative will initiate the approval process by notifying security to make changes to building access or to designate a new GSK representative.
- 11-8.6 The department manager with signature authority for the building or area must submit a separate ID Badge/Card Access Request form to GSK for approval.

## 11-9 Firearms

Firearms, including concealed handguns and other weapons, are prohibited on GSK premises regardless of permit.

## 11-10 Cameras

11-10.1 The use of video cameras is prohibited unless approval has been obtained from GSK security.

11-10.2 The use of still image photographic equipment is permitted for GSK Business Use Only.



**End of Section**

## **SECTION 12: Safety Procedures and Permitting**

### **12-1 General Information**

- 12-1.1 Sections 13 through 38 of this manual contain specific, technical safety procedures to be followed by contractors and their employees.
- 12-1.2 The technical safety procedures are not intended to be "all inclusive." If certain provisions of these safety procedures are less stringent than applicable federal, state, or local statutory safety regulations, the statutory regulations take precedence. Where GSK standards are more stringent than federal, state, or local regulations, the more stringent standards take precedence.

### **12-2 Safety Procedures**

- 12-2.1 The safety procedures in Sections 13 through 38 apply to all contractors unless otherwise noted. Contractors and their employees are responsible for familiarizing themselves with applicable site-specific procedures such as the permit to work procedure. (Refer to the Appendix C, References, for additional information.)
- 12-2.2 Contractors must review these procedures with the GSK representative to determine which procedures are applicable to the contract.
- 12-2.3 Contractors and employees must review the applicable safety procedures described in these sections to determine their roles and responsibilities as they relate to the work.
- 12-2.4 GlaxoSmithKline and contractors will enforce the provisions of these safety procedures.
- 12-2.5 Contractors are responsible for administering and controlling the activities of the work area. Where work is to be performed within existing GSK facilities or structures, the GSK representative and the site safety organizations reserve the right to assume the responsibility for administration and permitting, which will be determined on a case-by-case basis.

### **12-3 Site Procedures and Permits**

- 12-3.1 GSK facilities have specific site procedures, medical clearance and surveillance requirements, and permit requirements with which contractors must fully comply. Examples include, but are not limited to the following: permit to work, line break, lockout/tagging, respiratory clearance, and hearing conservation. These site-specific requirements and the requirements in this manual must be met, with the most stringent requirements taking precedence. Contact the GSK representative for site-specific requirements.

### **12-4 Waiver of Safety Procedures**

- 12-4.1 If working conditions dictate that current safety procedures are inadequate or unusable, the safety procedures defined in this manual may be modified.
- 12-4.2 The modified procedure must conform to the following rules:
  - A. Must be specific to an activity or repeatable activity.

- B. Must specify a location and an effective time period.
- C. Must be proposed on the Safety Procedure Waiver form (GSK-ZCSM-05) & signed by the GSK project manager (or individual responsible for the area in which the work is being done) & the contractor.
- D. Must be submitted to GSK's Zebulon site safety organization for approval and signature.

 **End of Section**

## SECTION 13: Housekeeping

### 13-1 General Information

- 13-1.1 Good housekeeping is mandatory. Contractors must keep their work area neat, clean, and orderly.
- 13-1.2 If a contractor's work area is not kept clean, GSK will have the area cleaned and charge the cost to the contractor.

### 13-2 Definitions

- 13-2.1 A barricade is a device used to direct and protect pedestrians and vehicles from a work area. Ensure barricades do not block egress, impede emergency response, create trip hazards, etc. Temporary walls must be secured to prevent collapse.
- 13-2.2 A trash chute is a controlled means of conveying debris from an elevated location to the ground.

### 13-3 Housekeeping Procedures

- 13-3.1 Keep work areas, passageways, fire exits, fire lanes, and stairs in and around the buildings and structures clear of debris at all times.
- 13-3.2 Store materials, equipment, and tools in an orderly manner.
- 13-3.3 Keep storage areas and walkways free of dangerous depressions, obstructions, and debris.
- 13-3.4 Clean the work area daily and dispose of debris in dumpsters, or off site in accordance with GSK environmental organizations, the EPA, and other regulatory agencies.
- 13-3.5 Dumpsters
  - A. Do not allow dumpsters to block fire exits, fire lanes, or traffic areas (personnel or vehicular).
  - B. Keep dumpsters that are not part of a trash chute a minimum of 50 feet from structures.
  - C. Barricade the areas around dumpsters.
  - D. If dumpsters are used in combination with trash chutes, employees are not allowed inside the barricaded area or dumpster unless trash chute loading locations have a door and lock, which ensures that no material can be placed in the chute while work is being performed inside the barricaded area or dumpster.
  - E. Dumpsters that will contain material that is potentially hazardous to the environment (such as construction debris, dry wall...) must be staged or designed to prevent leaking into the environment.

 **End of Section**

---

## **SECTION 14: Personal Protective Equipment**

### **14-1 General Information**

- 14-1.1 This section defines the requirements for the use of personal protective equipment and for lift programs to control or eliminate hazards or exposure to illness or injury.
- 14-1.2 Unless otherwise noted, contractors are to provide the required and needed personal protective equipment, medical clearance, and the training described in this section and is responsible for the compliance of their employees. The contractor's safety manager will make regular field inspections to verify compliance.
- 14-1.3 The contractor's safety manager will review personal protective equipment to ensure that only equipment complying with OSHA, ANSI, NIOSH, and MSHA regulations or this manual is used.
- 14-1.4 A contractor who refuses to use the prescribed personal protective equipment or willfully damages this equipment may be immediately removed from GSK premises.
- 14-1.5 Contractors must be trained on the use, inspection, care, and storage of personal protective equipment.
- 14-1.6 Be mindful of loose clothing, rings and jewelry which may present a potential safety hazard.

### **14-2 Definitions**

- 14-2.1 A combination hard hat is a hard hat with a welding helmet and/or face shield attached.
- 14-2.2 A shock absorbent lanyard is a device that is suitable for supporting one person when one end is fastened to a body harness and the other end secured to a substantial object or lifeline.
- 14-2.3 A body harness is comprised of straps that help distribute fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders and that can be attached to other components of a fall arrest system.
- 14-2.4 Safety shoes or protective footwear is footwear that contains a protective toe box specially designed and manufactured to meet the requirements established in the ANSI Z41 standard. However, protective footwear (safety shoes) may also include other types of protection, including metatarsal guards and anti-static protection.

### **14-3 Head, Eye, and Face Protection**

- 14-3.1 Wearing an approved, non-conductive safety hat is mandatory in construction areas and designated areas at all times. Refer to ANSI Z89.1, Safety Requirements for Industrial Head Protection, and NIOSH standards.
- 14-3.2 Construction areas and designated areas require 100 percent eye protection. Minimum eye protection includes approved safety glasses with side shields or mono-goggles that meet the standards specified in ANSI Z87.1, Practice for Occupational and Educational Eye and Face Protection. Dark safety glasses are prohibited when working indoors.



---

14-3.3 Eye protection is required to protect against flying particles, molten metal, hazardous material, gases, vapors, and light radiation. When performing the following tasks, contractors must wear appropriate eye and face protection:

- Welding, burning, or cutting with torches
- Using abrasive wheels, grinders, circular saws, or files
- Chipping concrete, stone, or metal
- Working with materials subject to scaling, flaking, or chipping
- Drilling
- Working under dusty conditions
- Waterproofing
- Using powder-actuated or pneumatic tools
- Working with compressed air or gases
- Working with chemicals or hazardous materials
- Using chop saws, chain saws, masonry saws, or similar equipment
- Working near the operations listed above
- Working in laboratories

14-3.4 Dark glasses may not be worn before sunrise, after sunset or when inside any building.

## 14-4 Respiratory Protection

14-4.1 Respiratory protection devices approved by NIOSH must be worn by contractors exposed to hazardous concentrations of dust, fumes, mists, gases, smoke, sprays, or vapors as required by OSHA.

14-4.2 A respiratory protection program must be established per OSHA regulations that includes medical surveillance; training; equipment selection, storage, and maintenance; fitness testing; and recordkeeping.

## 14-5 Hearing Protection

14-5.1 Hearing protection must be worn by contractors exposed to noise levels at or above 85 decibels and in designated areas where noise levels exceed 85 decibels.

14-5.2 A hearing conservation program, including baseline and annual audiometric testing, must be established as required by OSHA.

## 14-6 Fall Protection

14-6.1 Fall protection is required for work performed at certain heights as established by OSHA regulations.

14-6.2 One or a combination of the following fall protection systems can be used on GSK sites:

- 
- a fall arrest system consisting of a full body harness, shock absorbent lanyard(s), or a self-retracting lifeline that meets OSHA standards (Certain work that mandates 100% fall protection requires two shock absorbent lanyards.)
  - guardrail systems
  - work platforms with standard guardrails
  - interior and exterior safety nets
- 14-6.3 Body harnesses, shock absorbent lanyards, and self-retracting lifelines, regardless of configuration, must be subjected to a documented monthly inspection by the contractor. This inspection is to be documented using a Body Harness and Lanyard Inspection Report form (GSK-ZCSM-06) and the completed form is to be maintained by the contractor so that it is readily available to appropriate GSK representatives.
- 14-6.4 ***Marking for harness and lanyard monthly inspection will use the color code shown in Appendix D, Monthly Inspection Color Code Chart. The tape must be placed around the "D" ring located in the middle of the back on the harness and the shock absorber ends of lanyards.***
- 14-6.5 In addition to monthly inspections, the contractor is expected to conduct additional inspections in accordance with regulatory requirements. According to OSHA standard 1926.502(d) (21), personal fall arrest systems shall be inspected prior to each use for wear, damage, and other deterioration, and defective components shall be removed from service.
- 14-6.6 Fall protection must secure to an anchor point that can support a 5000 lbs load (structural tie off point).

## 14-7 Footwear

- 14-7.1 Contractors must wear appropriate footwear while on the GSK Zebulon site. Athletic-type shoes, sandals, high heels, open-toe shoes, and bare feet are prohibited in construction and non-public areas.
- 14-7.2 Contractors must ensure that the appropriate protective footwear is worn by employees in areas where safety shoes signs are posted and in areas where workers are exposed to foot injuries due to falling or rolling objects, objects piercing the sole, or where workers' feet are exposed to electrical hazards. All personnel in construction and demolition where the risk of falling or rolling objects has been identified are required to wear safety footwear meeting the ANSI Standard Z41-1999 requirements for toe-cap protection.

## 14-8 Hand and Skin Protection

- 14-8.1 Wear appropriate hand protection when handling objects or substances that could cut, burn, injure the hand, or be absorbed into the skin, and when exposed to harmful temperature extremes.
- 14-8.2 Wear fully buttoned lab coats, hairnets, and beard covers in designated areas (available at entries to these areas). Certain areas require a higher level of protection in the form of coveralls or air suits. Do not enter these areas without appropriate clearance, training, and protection.
- 14-8.3 Shirts with sleeves must be worn at all times.
- 14-8.4 Shorts are prohibited in construction & cGMP areas.

---

## 14-9 Welding, Cutting, and Burning

- 14-9.1 Wear a welding helmet with welding hood (combination hard hat) when welding. Soft caps are prohibited.
- 14-9.2 Face shields or goggles that fit on hard hats must be worn along with approved safety glasses during grinding operations.
- 14-9.3 For overhead work, wear fire-resistant hard hats and fire-retardant shoulder covers.
- 14-9.4 Keep clothing free of oil, grease, and flammable material. Button collars and cuffs, and turn pant cuffs inside pants. Pockets must be covered with flaps and buttoned, or removed from the front of vests, shirts, and aprons.
- 14-9.5 Welders and their helpers must wear gloves and proper infrared/ultraviolet eye protection in addition to safety glasses.
- 14-9.6 Workers engaged in oxy-acetylene welding or cutting must wear a welding helmet or safety goggles that are equipped with suitable filter lenses.
- 14-9.7 Workers who are engaged in electric arc welding must use shields or helmets that are equipped with suitable filter lenses that fit on a hard hat.
- 14-9.8 Wear approved safety glasses or goggles under a combination hard hat or welding hood.
- 14-9.9 Do not perform welding, burning, or open flame work on staging suspended by fiber or synthetic rope.

## 14-10 Additional Personal Protective Equipment

The contractor must furnish any additional equipment required by unusual circumstances (such as high temperature work or handling corrosive liquids) and not specifically covered in this section. Use of such must be reviewed with the GSK representative.

## 14-11 Safe Lift Program

- 14-11.1 Contractors must have a program that identifies which occupations and activities have routinely occurring lifting hazards.
- 14-11.2 At a minimum, contractors must train employees identified in paragraph 6.1 on the following topics: recognizing lifting hazards, proper lifting techniques, back safety, and ergonomics.



**End of Section**

## **SECTION 15: Environmental Issues**

### **15-1 Hazardous Waste Management**

- 15-1.1 Contractors are responsible for the safe use and disposal of chemicals and hazardous materials brought onto GSK property in compliance with applicable laws and regulations, and for complying with the applicable requirements for generators of hazardous waste.
- 15-1.2 Contractors that generate hazardous waste on site must notify the site environmental organization for disposal directives. (Refer to Appendix B for a list of contact telephone numbers for GSK sites.)
- 15-1.3 Do not store more than 55 gallons of hazardous waste or one quart of acutely hazardous waste as defined Part 261, Title 40, Code of Federal Regulations (40 CFR 261) without written approval from the site environmental organization. Waste containers must be clearly labeled as to their contents. Waste must not be transferred between GSK facilities when it involves crossing or traveling on a public roadway without approval from the site environmental organization. Do not dispose of hazardous and chemical waste in company dumpsters.
- 15-1.4 Contractors that meet the qualifications of a conditionally exempt small quantity generator of hazardous waste as defined in Part 261.5, Title 40, Code of Federal Regulations (40 CFR 261.5), must coordinate the transfer of potentially hazardous waste to the site environmental organization for disposal. Contractors that do not meet the qualifications of a conditionally exempt small quantity generator are responsible for obtaining an EPA Identification Number and managing hazardous waste generated in accordance with applicable state and federal regulations. Contractors are subject to periodic inspections by the site environmental organization to ensure proper management, storage, and documentation practices are being followed.
- 15-1.5 The disposal of waste materials such as asbestos, lead paint, hazardous construction debris, or contaminated soil resulting from demolition, excavation, or maintenance activities that are not the result of hazardous materials or petroleum products brought on site by a contractor must be approved by GSK. These waste streams must be transferred to the site environmental organization for disposal or be disposed of in accordance with written procedures approved by the site environmental organization.

### **15-2 Spill Prevention and Control**

- 15-2.1 To minimize the risk of spills or releases to the environment, contractors must employ appropriate protective procedures such as double containment, employee training, overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials on GSK property.
- 15-2.2 Containers of hazardous materials and petroleum products should be stored in order to prevent releases to the environment. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground. Enclosures, shelters, and secondary containment should be used where appropriate. Containment pans should be placed under equipment where there is the potential for a leak or discharge. In the event that secondary containment is used in an area that is exposed to rainfall, the following requirements apply.

- 
- A. Prior to discharge of a containment system to the storm water system, inspect the primary container for signs of leakage and inspect the containment system by visual observation for color, foam, outfall staining, visible sheens, and dry weather flow. The discharge of a containment system that has evidence of contamination is prohibited.
  - B. The responsible contractor must maintain a log indicating the individual making the observations, description of accumulated storm water, and the date and time of release.
  - C. Submit a copy of the log to the site environmental organization.

### **15-3 Notification of a Spill or Release to the Environment**

- 15-3.1 GlaxoSmithKline is subject to government notification and reporting requirements when a petroleum product or hazardous material is spilled or released to the environment, including releases to the ground, surface water, sanitary sewer system, process sewer, or air that are not specifically authorized by the company's environmental permits. A spill or release of a hazardous chemical or petroleum product must be cleaned up immediately.
- 15-3.2 The responsible contractor must notify GSK immediately by telephone (see Appendix B for site specific contact numbers); followed by a written incident report within 24 hours that includes the following information:
  - Description of the spill or release event
  - Names of individuals involved
  - Date and time of spill or release
  - Copy of the SDS for the material spilled or released
  - Estimated quantity and type of material spilled or released
  - Duration of the release
  - Steps taken or planned to reduce, eliminate, and prevent recurrence of the spill or release

### **15-4 Discharges to Storm Water Conveyance Systems**

- 15-4.1 A discharge to a storm water conveyance system refers to any discharge to a storm water drain, parking lot, ditch, loading dock, or ground that is not connected to a sanitary sewer. The following types of non-storm water discharges may be discharged to the facility's storm water conveyance systems.
  - Uncontaminated groundwater
  - Water from foundation drains and footing drains
  - Air conditioner condensate without added chemicals
  - Springs
  - Uncontaminated potable water
  - Waterline, sprinkler system, and fire hydrant flushing

- Discharges resulting from fire fighting

15-4.2 No other non-storm water discharges are permitted unless approved by the site environmental organization. Examples of prohibited activities include:

- Discharging of rinse water from vehicle or equipment washing
- Discharging of treated water systems such as reflecting pool water, cooling tower water, and water used to passivate piping

15-4.3 An unauthorized or un-permitted non-storm water discharge is considered a release and must be reported and documented in accordance with the notification procedures described in Part 3, preceding.

## **15-5 Erosion Control**

15-5.1 Settling basins and/or straw barricading around storm sewers is required for ground breaking or any condition that could cause silt to enter a storm sewer.

15-5.2 If a construction activity involves five or more acres, contractors must obtain a storm water discharge permit before starting the work.

## **15-6 Excavation Activities in Environmentally Restricted Areas**

In areas outlined in the general site drawings as environmentally restricted, excavations are prohibited unless approved in writing by the Environment Health & Safety.

## **15-7 Open Burning**

Open burning of debris on GSK property is prohibited unless approved in writing by Environment Health & Safety.

## **15-8 Disposal of Waste in Sanitary Sewers**

No hazardous materials, chemicals, or petroleum products may be disposed in sanitary sewers unless approved in writing by Environment Health & Safety.

## **15-9 Asbestos**

If material that contains asbestos is suspected or encountered, stop work immediately, notify the GSK representative, and proceed only after an asbestos plan has been approved.

## **15-10 Training**

Contractors are responsible for training their employees on these procedures, and for maintaining training documentation.

## 15-11 Recycling

GlaxoSmithKline encourages and supports recycling of materials. At the start of the work, contractors should prepare a recycling plan and submit it to the GSK representative.

 **End of Section**

---

## SECTION 16: Electrical Safety

### 16-1 General Information

- 16-1.1 This procedure applies to the installation of temporary and permanent electrical work and the use of electrical power to operate equipment and electrical power tools.
- 16-1.2 Approved, site-specific procedures must be followed for work on electrically charged components. If no site-specific procedures exist, use the procedures described in this section.

### 16-2 Definitions

- 16-2.1 Grounding is a conducting connection between an electrical circuit or equipment and earth, or to a conducting body that serves as earth.
- 16-2.2 A ground fault circuit interrupter is a device for the protection of personnel that de-energizes a circuit or portion of a circuit.
- 16-2.3 Outage approval is authorization from the appropriate maintenance organization to shut down electrical service to a facility or equipment.

### 16-3 Electrical Safety Procedures

- 16-3.1 Temporary and permanent electrical work, installation, and wire capacities must conform to the National Electrical Code, applicable federal, state, and local codes and the GSK electrical safety standards.
- 16-3.2 Only qualified electricians familiar with code requirements are allowed to perform electrical work.
- 16-3.3 Contractors are not permitted to work near an unprotected electrical power circuit unless they are protected against electrical shock by de-energizing the circuit and grounding it, or are protected by effective insulation or other means. Work around energized systems must be done in accordance with the site-specific procedure. Contractors must comply with NFPA (National Fire Protection Association) 70E to work at or near any live electrical components.
- 16-3.4 Do not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors, or liquids are present, unless specifically approved for the location.
- 16-3.5 Switches must be enclosed and grounded. Panel boards must have provisions for closing and locking the main switch and fuse box compartment.
- 16-3.6 Avoid wearing rings, necklaces, or other conductive apparel.
- 16-3.7 Extension Cords.
  - A. Limit the use of extension cords as much as possible.
  - B. Extension cords used with portable electric tools and appliances must be extra hard usage as defined in ANSI/NFPA 70 Article 400 (Table 400-4), heavy duty (not less than 12 gauge conductors for construction work) and of the three-wire grounding type conforming to the type and configuration required by OSHA standards. Acceptable types of flexible cords include hard service cord (types S, ST, SO, and STO) and junior hard service cord (types SJ, SJO, SJT, and SJTO).



- 
- C. Flat electrical extension cords are prohibited.
  - D. Elevate (at least 7 feet) or otherwise protect from damage electrical cords and trailing cables that could create a hazard to people in the area. Repair electrical cords with heat shrink tape only. Do not splice damaged electrical cords.
  - E. In areas where water or moisture is present or likely to be present, protect portable electric tools and cords by a ground fault circuit interrupter (GFCI) throughout each phase of the work. GFCI protection for temporary wiring is mandated on construction sites at all times.
  - F. Plugs must be of the dead front type.
- 16-3.8 In areas where water or moisture is present or likely to be present, always use ground fault circuit interrupters on power circuits. If permanent plant power circuits are not GFCI, use a portable GFCI box with electrical tools and equipment. Test interrupters on a regular basis.
- 16-3.9 Should a circuit breaker or other protective device "trip," ensure that a qualified electrician checks the circuit and equipment and corrects problems before resetting the breaker.
- 16-3.10 Provide suitable means for identifying electrical equipment and circuits, especially when two or more voltages are used on the same job. Mark circuits for the voltage and the area of service they provide.
- 16-3.11 NC OSHA regulations governing the operation of heavy equipment in proximity to high-voltage power lines are very specific. Wide loads over 10 feet require a specified escort. An outage approval must be obtained from the GSK representative before heavy equipment, which can reach within arcing distance and is to be located from 10 to 50 feet of high-voltage lines or equipment, may be brought on site.
- 16-3.12 Do not leave electrical boxes, switch gear, cabinets, and electrical rooms open when not directly attended. Insulate energized parts when covers have been removed or doors are ajar. Do not use cardboard, plywood, or other flammable material to cover energized circuits.
- 16-3.13 ***On GSK construction sites, the contractor must perform monthly inspections on drop cords, GFCI, electrical tools and equipment and mark such items in accordance with Appendix D, Monthly Inspection Color Code Chart.***



**End of Section**

---

## SECTION 17: Lockout and Tagging

### 17-1 General Information

- 17-1.1 This section provides standard procedures for rendering inactive any electrical equipment or operating systems (stored energy systems) when equipment is down for repair, removal, replacement, or installation of new equipment.
- 17-1.2 Do not work on existing equipment until it is de-energized and tested using Zebulon lockout tagout procedures. If new equipment is installed by the contractor the minimum procedures described in section 17-2 must be followed.
- 17-1.3 "Danger - Do Not Operate" tags must be used with locks. Tags are available from the GSK representative.
- 17-1.4 Lockout/tagout is required during servicing and/or maintenance of equipment if any of the following conditions are met:
- an employee is required to remove or bypass a guard or other safety device
  - an employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is being performed on the material being processed (point of operation)
  - when an associated danger zone exists during a machine operating cycle.
- 17-1.5 Specific training is required prior to working on any potentially hazardous task involving stored energy.

### 17-2 Lockout and Tagging Procedures

- 17-2.1 Following are the minimum lockout tagout procedures for new equipment.
- A. Use only standard "Do Not Operate - Danger" tags and single-key locks.
  - B. When tags are used, fill in only the spaces provided to indicate a description of the equipment, circuit number involved, date, signature, and company name. Attach tags securely. Do not use tags without locks.
  - C. Never reuse or alter tags.
  - D. Never attempt to operate equipment that has been locked & tagged regardless of the circumstances.
  - E. Operating a valve or switch that has been locked & tagged, or removing a lock by a person other than the individual that installed the lock & tag, without authorization will result in removal from GSK premises.
  - F. If the lockout and tagout originator is off the site, & a lock must be removed, the authorization to remove the lock must involve the Zebulon site safety organization. The GSK Zebulon Lock Removal Form must be used. Violation of this policy may result in immediate removal from GSK premises.
  - G. A minimum two-tier lockout and tagging system is required for existing GSK facilities.

- 
- Personnel responsible for GSK facility operations at the site must place the first lock on any circuit that is being locked-out. After ensuring that all parties have completed their work and removed their locks, the GSK Facility Operations individual who placed the first lock will remove the lock.
  - Each individual working in the area affected by the lock-out must use their own lock to isolate hazardous energy. Never work under another employee's lock and tag. When each person completes work in the area, the person who placed the lock will remove it.

NOTE: All lockout and tagout information must be noted on the Permit to Work prior to the commencement of work.

- H. Lockout tagout required beyond one shift will be replaced by the oncoming shift or by the GSK representative if no work is scheduled and the system remains shut down. Engineers must be designated by GSK to act in this capacity.

## 17-3 New Equipment and Facilities Prior to Turnover

### 17-3.1 Electrically Operated Systems

- A. The electrician places multi-lock devices when other crafts are involved in the shutdown.
- B. The electrician opens the switch, pulls power and control fuses, places the lock and tag, and tests the equipment to verify it is inactive.
- C. Personnel from other crafts performing work place their locks and tags on the electrician's multi-lock device. Where several craftspersons of one craft are involved, the foreman may place one lock on the multi-lock device, and then each craftsperson's must place their locks and tags on the multi-lock device after witnessing a proper test.
- D. Upon completion of work, personnel from other crafts remove their locks & tags.
- E. The electrician's lock and tag is the last to be removed. After ensuring that everyone is clear, the electrician removes the lock and tag and notifies GSK.
- F. New work is inspected and tested.

### 17-3.2 Piping Systems

- A. The piping contractor places multi-lock devices when other crafts are involved in the shutdown.
- B. The piping contractor de-energizes, locks, tags, and tests the system.
- C. Personnel from other crafts performing work place their locks and tags on the piping contractor's multi-lock device. Where several craftspersons of one craft are involved, the foreman may place one lock on the multi-lock device, and then the craftspersons may place their locks and tags on the multi-lock device.
- D. Upon completion of work, personnel from other crafts remove their locks & tags.
- E. The piping contractor's lock and tag is the last

---

## 17-4 Existing Equipment and Facilities

### 17-4.1 Electrically Operated Systems

- A. The GSK designee de-energizes the system, demonstrates that the power is off to the electrician and other contractors, and locks and tags the system.
- B. A qualified person ensures that fuses are removed and locks, tags, and verifies that the system is inactive.
- C. Other personnel must place locks and tags as described in paragraph 3.1.C.
- D. Upon completion of work, the electrician removes their lock & tag & replaces fuse where required.
- E. The GSK designee checks the system, removes their lock and tag, & re-energizes the circuits
- F. New work is inspected and tested.

### 17-4.2 Other Systems

- A. The GSK designee de-energizes the system and places a lock and tag.
- B. The piping contractor verifies the system is de-energized, makes the first break in the flange, places blanks as directed by the GSK designee, & places his lock & tag.
- C. Personnel of other crafts then must place their own locks & tags to perform work.
- D. The appropriate contractor ensures the system is clear and removes their lock and tag. When completed, the contractor notifies GSK that the system is acceptable, and the contractor's lock and tag is removed.
- E. The GSK representative removes the lock & tag & re-energizes the system.
- F. New systems are inspected and tested.

## 17-5 Shop Equipment

17-5.1 Authorized operators of shop equipment must lock & tag their equipment to change tools, chucks, blades, & perform similar tasks. A power disconnect switch will be provided for this purpose at or near the equipment unless the equipment can be unplugged.

17-5.2 Do not use pushbutton controls or butterfly valves for lockout.

17-5.3 Do not use a tag without a lock or a lock without a tag.

## 17-6 Locks and Multi-Lock Devices

17-6.1 Use only single-key locks. The key must remain in the possession of the person placing the lock.

17-6.2 The prime craft directly related to the item to be locked out will provide & install multi-lock devices.



**End of Section**

## **SECTION 18: Protecting Employees and the Public**

### **18-1 Exterior Protection Procedures**

- 18-1.1 When it is necessary to maintain employee or public use of work areas involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways, protect the public with appropriate guardrails, barricades, temporary fences, overhead protection, temporary partitions, shields, and adequate visibility. The work should be done in accordance with the state's building code and other applicable regulations.
- 18-1.2 Keep sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, and exits clear of obstructions to permit safe entrance and exit at all times.
- 18-1.3 Conspicuously post appropriate warnings and instructional safety signs. In addition, a signal person must control the movement of motorized equipment in areas where traffic might be endangered.
- 18-1.4 Provide sidewalks, sheds, canopies, catch platforms and appropriate fences when it is necessary to maintain public pedestrian traffic adjacent to the erection, demolition, or alteration of outside walls on a structure.
- 18-1.5 Provide a temporary fence, at least six feet high, around the perimeter of above ground operations adjacent to public areas. Fences may be constructed of wood or metal frame and sheathing, wire mesh, or a combination of both. When a fence is adjacent to a sidewalk near a street intersection, at least the upper section of the fence must be open wire mesh. This upper section of the fence consists of any fencing that is more than 4 feet above the level of the sidewalk. The wire mesh section of the fence must extend at least 25 feet in both directions from the corner of the fence, or as otherwise required by local conditions.
- 18-1.6 Provide guardrails on both sides of vehicular and pedestrian bridges, ramps, runways and platforms. Protect pedestrian walkways elevated above adjoining surfaces or walkways within 6 feet of the top of excavated slopes or vertical banks with guardrails. Construct guardrails of rigid materials capable of withstanding a force of at least 200 pounds applied in any direction at any point in their structure. Guardrails must be approximately 42 inches high and made of dressed wood or equivalent. Intermediate horizontal rails at mid-height and toeboards at platform level must be 2 x 4 inch wood. Posts must not be more than 8 feet apart.
- 18-1.7 Barricades meeting local requirements must be provided where sidewalk, shed, bridge fences, or guardrails are not required between work areas and pedestrian walkways, roadways, or occupied buildings. Secure barricades to prevent accidental displacement and maintain them except where temporary removal is necessary to perform work. During the period a barricade is temporarily removed for work, a watchperson must be positioned at each opening. Barricade the area where work is being done overhead.
- 18-1.8 Provide temporary sidewalks when a permanent sidewalk is obstructed by work. Install temporary sidewalks in accordance with the requirements listed above.
- 18-1.9 Maintain warning lights from dusk to sunrise around excavations, barricades, or obstructions in designated areas. Provide illumination from dusk to sunrise for temporary walkways.
- 18-1.10 Take care to prevent damage to adjacent occupied areas.

---

18-1.11 When exit routes or assembly areas are affected by work, notify the site safety organization in writing of the effect and proposed alternatives.

18-1.12 All golf cart vehicles must use headlights when used on site from dusk to sunrise.

## 18-2 Interior Protection Procedures

18-2.1 Before starting work in occupied buildings, contractors must include steps in the work plan to provide protection for people and property in areas that may be affected by the work. Electricity or gas outages, excessive noise generation, chemical fumes, asbestos, and fire exit blockage are examples of risks that should be considered in the plan.

18-2.2 Construction, facilities and production equipment and material must be secured to prevent items from falling over and injuring employees.

18-2.3 The work plan should address these risks and include provisions for proper communication of the risks and related control measures. Control measures may include providing protective equipment, scheduling work during non-business hours, area evacuation, etc.

18-2.4 Contractors must notify the GSK representative if they encounter an occurrence that may threaten people or property.

## 18-3 Pressure Testing of Pipework

18-3.1 Because of the risk of catastrophic failure during a pipework strength test, a hydrostatic rather than a pneumatic test method must be used wherever practicable. Pneumatic strength test is only permitted on an exception basis and must be authorised in writing by the site Head of Engineering and a member of the site EHS department.

## 18-4 Access to Good Manufacturing Practice (GMP) Areas

18-4.1 Access to GMP areas is permitted if you meet one of the following requirements:

- escorted by an area qualified/trained employee
- are current on contractor safety training and have completed training on area gowning SOPs.  
Note: Not all GMP areas have the same gowning procedures, therefore you must be trained on the procedure for the specific area that you will be entering.



**End of Section**

## SECTION 19: Small Tools

### 19-1 General Information

Contractors must follow approved, site-specific procedures for using small tools. If no site-specific procedures exist, contractors are to use the procedures described in this section.

### 19-2 Power, Air, and Hand Tools

- 19-2.1 Power, air, and hand tools shall not be altered in any way & must be operated in accordance with the manufacturer's recommendations.
- 19-2.2 Keep hand tools in good condition, inspected, cleaned, sharpened, oiled, and not abused. Replace worn tools immediately.
- 19-2.3 Inspect tools for damage and worn parts before use. Remove damaged or frayed cords from service. Do not hoist or lower tools by the cord or hose; use hand lines.
- 19-2.4 ***A qualified person must inspect power tools before use and at least once per month.*** (See Appendix D for Monthly Inspection Color Code Chart.)
- 19-2.5 Do not force tools beyond their capacity by using "cheater bars" or other shortcuts.
- 19-2.6 Do not use power tools if safety equipment such as shields, tool rests, hoods, and guards have been removed or rendered inoperative.
- 19-2.7 Employees must wear the required personal protective equipment when using tools under conditions that expose them to flying objects or harmful dust.
- 19-2.8 Ground electrically powered tools. Protect outlets used for 110-volt tools by ground-fault-circuit-interruption devices throughout each phase of the work.
- 19-2.9 Do not use gasoline-powered tools in unventilated areas, enclosed spaces, or outside of enclosed spaces. Dispense gasoline and other flammable liquids only from UL approved safety cans or equivalent. A permit is required for use of gasoline/diesel powered tools inside any area of the Zebulon site.
- 19-2.10 Use portable grinders with hood-type guards with side enclosures that cover the spindle and at least 50% of the wheel. Inspect wheels regularly for signs of fracture.
- 19-2.11 Equip bench grinders with deflector shields and side-cover guards. Tool rests must have a maximum clearance of 1/8 inch from the wheel.
- 19-2.12 Secure couplings to hoses supplying pneumatic tools to prevent accidental disconnection.
- 19-2.13 Protect air-supply lines, inspect lines regularly, and maintain lines in good condition. Provide excess flow valves on supplying hoses exceeding 1/2 inch in diameter.
- 19-2.14 Reduce the operating pressure of compressed air used for cleaning purposes to 30 psi or less (except for cleaning of forms, etc.). Avoid operating pressure in excess of 30 psi.

---

## 19-3 Powder-Actuated Tools

- 19-3.1 Powder-actuated tools must not be used unless approved in writing by a GSK representative, and then only after a permit is issued. Contractors must submit documentation from their insurance company certifying that the use of powder-actuated tools is under the liability provisions of the insurance policy and under the specific circumstances of the work. In addition, the contractor will submit documentation certifying that the type and use of powder-actuated tools are in accordance with applicable laws.
- 19-3.2 Powder-actuated tools must meet applicable requirements of ANSI-A10.3-1970 as stipulated by OSHA, and be UL listed or FM approved.
- 19-3.3 Post signs throughout the area warning of the use of powder-actuated tools.
- 19-3.4 Powder-actuated tools must be .22 or .25 caliber cushioned pistol grip design.
- 19-3.5 Loads, studs, and nails used in powder-actuated tools must be specifically approved by the manufacturer for use in that tool.
- 19-3.6 Do not use loads, studs, and nails in powder-actuated tools for any purpose other than recommended by the manufacturer.
- 19-3.7 Do not use powder-actuated tools when adjacent areas are occupied by personnel.
- 19-3.8 Powder-actuated tools must be designed so that discharging the powering load can only be accomplished when the barrel of the tool is firmly depressed against the work surface.
- 19-3.9 Powder-actuated tools must be piston-driven and designed so that the pistons always remain captive within the tool.
- 19-3.10 Employees must not operate powder-actuated tools until they have satisfactorily completed the manufacturer's sponsored training for the tool and have evidence of this training.
- 19-3.11 Do not use powder-actuated tools in areas where hazardous accumulations of ignitable dust, gases, or liquids could be present or collect until the area has been proven free from such hazards with appropriate instrumentation. Store loads that are not being used in a location and manner specifically approved by GSK, for that purpose only.
- 19-3.12 Goggles face shields, or substantial eye protection must be worn by each person within 25 feet of the point of discharge.
- 19-3.13 Personnel not directly involved with the operation of powder-actuated tools must stay clear unless granted specific written permission by the contractor, and applicable provisions of the procedure regarding personal protective equipment have been met.
- 19-3.14 **Do not leave powder-actuated tools or loads unattended at any time! Powder-actuated tools, loads, studs, and nails must be stored in a locked box or otherwise secured when not in use. Do not load the tool until ready for use.**
- 19-3.15 Handle misfires in accordance with manufacturer's training. Dispose of misfired loads safely in a manner approved by GSK. Misfired loads are considered to be ammunition.



---

19-3.16 Powder-actuated tools must be regularly inspected and maintained. Maintenance work must be performed by competent technicians as directed by the manufacturer's literature. Parts used in maintenance or repair of powder-actuated tools must be exact replacement parts.



**End of Section**

---

## SECTION 20: Gas Cylinders, Welding, Cutting, and Burning

### 20-1 General Information

Contractors must follow approved, site-specific procedures for portable gas cylinder handling and storage, welding, cutting, and burning. If no site-specific procedures exist, contractors are to use the procedures described in this section.

### 20-2 Permits

20-2.1 **Welding, cutting, or spark-producing work is prohibited until the site safety organizations have issued the proper permits.**

20-2.2 Within areas with sprinkler protection, the sprinkler system shall be operational at all times during the performance of open flame work - unless the site safety organization has issued special permission. Under no circumstance are flame permits to be issued for areas in which the sprinkler system is impaired or malfunctions.

### 20-3 Handling and Storage of Cylinders

#### 20-3.1 General Requirements

- A. Cylinders must be legibly marked to identify content.
- B. Empty cylinders must be labeled "Empty."
- C. Do not place cylinders where they can contact an electrical circuit.
- D. Keep oxygen cylinders, cylinder valves, couplings, regulators, hoses, & apparatus free from oil and grease. Do not handle oxygen cylinders or apparatus with oily hands or gloves.
- E. Secure compressed gas cylinders in an upright position at all times, except for short periods of time when cylinders are being hoisted or carried.
- F. Do not store or take compressed gas cylinders into closed or confined areas, or near elevators or stairs.
- G. If a leak develops in a cylinder and it cannot be immediately corrected, move the cylinder to a safe location outside the building.

#### 20-3.2 Use and Transportation

- A. A suitable cylinder truck with chain or other secure form of fastening must be used to keep cylinders from being knocked over while in use.
- B. Close valves on empty cylinders. Keep valve protection caps in place except when cylinders are in use or connected for use.
- C. Provide a suitable platform when moving cylinders by crane, derrick, cradle, or boat. Do not use slings, hooks, or electric magnets. Cylinder caps should remain installed on the cylinder until connected to equipment. Keep the cylinder cap near the cylinder when in use.

- 
- D. If a cylinder is not equipped with a valve wheel, keep a key or cylinder wrench on the valve stem while in use.
  - E. Acetylene cylinders should be protected in a cradle while being transported by crane or derrick.
  - F. Visually inspect cylinders to ensure they are safe before use.
  - G. When transporting gas cylinders on site, the cylinders must be secured in an upright position with no other unsecure objects within the vehicle that could potentially damage the cylinders. The vehicle storage area must be well ventilated.

### 20-3.3 Storage

- A. Cylinders must be separated by hazard classes (flammable, toxic, oxidizing...) with a demarcation and labeling.
- B. Do not store cylinders of oxygen near cylinders of acetylene or other fuel gas. Separate oxygen and fuel gas cylinders by a minimum of 20 feet, or with a five-foot non-combustible barrier with at least a two-hour fire rating.
- C. LPG cylinders must be stored at least 10 feet away from all other cylinders.
- D. Keep cylinders in storage away from sources of heat and flame.. Remove combustibles from the storage area.
- E. Store compressed gas cylinders in well-ventilated, proper construction storage racks that are labeled for the type of gases to be stored.
- F. Gas cylinders may not be stored in an occupied building except during short periods when the cylinder is in use.
- G. No other material may be stored in gas cylinder storage areas.
- H. The storage areas must be constructed of non-combustible materials.
- I. Gas cylinder storage areas must be labeled to indicate the purpose of the area and appropriate safety notices must be posted.

## 20-4 Welding, Cutting, and Burning Operations

20-4.1 Each welding, cutting, or spark-producing operation requires a fire watch.

- A. A fire watch consists of a properly trained person standing by with an approved fire extinguisher provided by the contractor. The employee shall know the site emergency number and location of the nearest fire alarm pull station.
- B. The fire extinguisher must be of a size and type (3A40BC) that will extinguish a fire that may ignite on materials being welded or cut or on materials immediately adjacent to welding and cutting operations.
- C. The fire-watch person must remain in the area for a minimum of **60 minutes** after the hot work is completed to ensure the site is cold.

20-4.2 Frequently inspect hoses, lines, and leads for leaks, worn areas, and loose connections.

- 
- 20-4.3 Where practicable, all combustibles shall be relocated at least 35 feet from work site. Where relocation is impracticable, combustibles shall be protected with flame proofed covers.
- 20-4.4 Provide flash arresters fitted to the regulators at both the fuel and oxygen cylinders. Flashback arresters shall be fitted to the torch for oxygen and acetylene hoses.
- 20-4.5 Welding return current (grounding clamp) must NOT pass through any of the following:
- A. Acetylene, fuel gas, oxygen, or compressed gas cylinders
  - B. Tanks or containers used for gasoline, oil, or flammable/combustible material
  - C. Pipes carrying compressed air, steam, gases or flammable/combustible liquids
  - D. Conduits carrying electrical conductors
  - E. Chains, wire ropes, metal hand railings, ladders, machines, shafts, bearings, or weighing scales
  - F. Critical instrumentation
- 20-4.6 Shield arc welding and cutting operations by using non-combustible or flame-proof screens.
- 20-4.7 All AC portable welders shall be connected to the same phase of the supply circuit and with the same instantaneous polarity and must not exceed 80% ampacity (rated load).
- 20-4.8 Provide mechanically strong and electrically adequate ground for the service required.
- 20-4.9 Support and elevate welding cables at least 7 feet above ground to allow the safe passage of workers and equipment.
- 20-4.10 Keep welding cables away from ladders and stairways. Prevent doors from damaging welding cables.
- 20-4.11 Use insulated cable connectors to couple or un-couple several lengths of cable for a welding circuit. Use insulated cable connectors on the ground line and the electrode holder line.
- 20-4.12 Use an electrode holder of adequately rated current capacity, insulated to protect the operator against possible shock, and to prevent a short or flash when laid on grounded material.
- 20-4.13 Do not use cables with worn or damaged insulation.
- 20-4.14 Insulate connection lugs on welding machines.
- 20-4.15 Wear suitable eye protection and other personal protective equipment under welding helmet.
- 20-4.16 Ensure adequate ventilation.
- 20-4.17 When welding overhead, take precautions to prevent sparks from falling on other workers.

 **End of Section**

## SECTION 21: Ladders

### 21-1 Manufactured Ladders

- 21-1.1 Manufactured ladders and their maintenance and use must comply with OSHA, ANSI, manufacturer's specifications, and job procedures.
- 21-1.2 Only fiberglass ladders are allowed. All portable ladders shall meet or exceed Duty-Rated Type IA requirements for 300 pounds.
- 21-1.3 Metal ladders are prohibited (except for window washers) unless approved by a GSK safety representative.
- 21-1.4 Do not use wooden ladders in GMP manufacturing areas.
- 21-1.5 Do not use ladders with broken or missing rungs, broken or split side-rails, or damaged components. Damaged ladders must be immediately removed from the work area or destroyed.
- 21-1.6 Equip portable ladders with non-skid safety feet and place on a stable base. Keep the access areas at the top and bottom of ladders clear. Stepladders must be fully opened when in use. Safety latches on extension ladders must be fully engaged.
- 21-1.7 Always face the ladder when climbing or descending. When working, face the ladder with both feet securely on the rungs. Never stand on the top two steps or sit on the top of the ladder, straddle the ladder, fold up or lean stepladders, or work two people from the same ladder. Three points of contact shall be maintained while working, climbing or descending (two hands and one foot, or two feet and one hand in contact with the ladder steps, rungs and/or side rails).
- 21-1.8 Post warning signs when doing overhead work in traffic areas.
- 21-1.9 Fall protection is required when performing work from ladders above 6 feet.

**Note 1:** Straight ladders are best used for access. They should only be used as a working platform where the provision of safer means of access (e.g. scaffolding, mobile scaffolds, etc.) is not feasible and for tasks that:

- only require one hand to be used;
- do not involve lifting or holding heavy items (e.g. power drills);
- are of short duration (e.g. less than 10 minutes);
- do not require the user to stretch or lean sideways

**Note 2:** Due to the independant stability of A frame ladders, A-frame ladders may be used for tasks that:

- are of low complexity that minimizes the amount of time spent without three points of contact on the ladder
- do not involve heavy items or tools that require two hands (e.g. hammer drill) that may create instability of the ladder;
- are of short duration (e.g. less than 10 minutes);

- do not require the user to stretch or lean sideways

Examples of suitable and unsuitable A frame ladder tasks:

Suitable A Frame Ladder Tasks	Unsuitable A Frame Ladder Tasks
Replacing a light bulb (simple, short duration)	Wiring a light fitting (complex, requires prolonged attention to task)
Using a cordless drill to create a small number of holes in lightweight building materials (i.e. drill can be effectively used with one hand and a high degree of force is not required)	Using a heavy, hammer action drill to create holes in concrete (both hands needed and will require force that might create instability); or drilling many holes in lightweight materials (movement up and down ladder, moving ladder, etc likely to create increased risk of instability)
Removing or replacing a tile from a suspended ceiling to allow access for inspection (simple, short duration)	Carrying out remedial work on or above tiles of a suspended ceiling (prolonged, potentially requiring movement up and down, moving ladder, unknown complexity etc)
Placing or removing lightweight items from a high shelf (e.g. item can be easily held in one hand)	Placing or removing heavy or bulky items from a high shelf (e.g. requires two hands to carry the item)

- 21-1.10 Keep ladders free of lines, ropes, hoses, wires, cables, oil, grease, and debris. Do not leave objects on ladders.
- 21-1.11 Do not use single portable ladders over 30 feet in length. Use separate ladders with intermediate landing platforms to reach heights above 30 feet.
- 21-1.12 Extend side rails 36 inches above the landing. When this is not practical, install a grab rail. Ladders in use must be tied, blocked, or otherwise secured.
- 21-1.13 **Ladders must be inspected before use and at least once per month. (See Appendix D for Monthly Inspection Color Code Chart. A ladder tag may be used in lieu of color-coding).**

## 21-2 Ladder Training Requirements

- 21-2.1 Contractors must provide a training program and related documentation for employees using ladders. The training program will provide the procedures necessary for employees to recognize the ladder hazards.
- 21-2.2 Contractors must ensure that a competent person has trained each employee in the following topics:
- Nature of fall hazards in the work area
  - Correct procedures for erecting, maintaining, and disassembling a fall protection system
  - Proper construction, use, and placement of ladders and care in handling ladders
  - Maximum intended load-carrying capacities of ladders
- 21-2.3 Contractors must ensure that employees maintain the required understanding and knowledge of ladder safety.



**End of Section**

## **SECTION 22: Scaffolds**

### **22-1 Definitions**

- 22-1.1 A cleat is a cross-piece positioned on edge upon which a person may step to ascend or descend a ladder or scaffold.
- 22-1.2 An outrigger is a structural member of a supported scaffold used to increase the base width of the scaffold to provide increased stability.

### **22-2 Scaffold Design and Erection**

- 22-2.1 Scaffolds must be designed, built, inspected, and tagged by trained, competent persons in accordance with the latest OSHA requirements. Carefully plan each application to ensure that scaffolds are used where required and that scaffolds conform to the applicable scaffold erection requirements.
- 22-2.2 Lean-to scaffolds and make-shift platforms are prohibited.
- 22-2.3 Do not use scaffolds for storing material except material being used while on the scaffold. Place material over cross members. Do not allow tools, material, or debris to accumulate on scaffolds.
- 22-2.4 Adequately design scaffolds to carry, without failure, four times the maximum intended load in addition to the weight of the scaffold. Never overload a scaffold.
- 22-2.5 Immediately replace weakened or damaged scaffolds.
- 22-2.6 Scaffold or staging more than six feet above the ground or floor, suspended from an overhead support, or erected with stationary supports, must have standard guardrails and toeboards properly attached.
- 22-2.7 Guardrails must be two inches by four inches, approximately 42 inches high, with a midrail. Do not use diagonal braces as guardrails. Supports must be at intervals not to exceed eight feet (Refer CFR 1926.451 for guard rail protection requirements).
- 22-2.8 Toeboards must be a minimum of four inches high. Cleat or secure planking to prevent displacement. Platforms must be the complete width of the scaffold being erected. Secure the scaffold horizontally and vertically at intervals specified in the applicable regulations.
- 22-2.9 Scaffolds with any dimension of less than 45 inches must be equipped with outriggers and standard guard rails when the working platform is at a height of four feet or higher.
- 22-2.10 Equip mobile scaffolds with outriggers and lock casters. Guard mobile scaffolds with standard railing, regardless of height. Mobile scaffolds must not be constructed or used where there is a change of elevation in the floor level.
- 22-2.11 Moving a mobile scaffold with personnel on it must be performed in accordance with the latest OSHA requirements.

---

## 22-3 Use of Scaffolds

22-3.1 Follow the fall protection requirements described in Section 14 when working on, erecting, and dismantling scaffolds, or on scaffolds not meeting guarding requirements.

22-3.2 **A competent person must inspect scaffolds daily before work begins.**

22-3.3 Prior to use, a competent person must inspect scaffolds on which weakened or damaged weight bearing parts have been replaced.

## 22-4 Scaffold Tags

22-4.1 The contractor erecting the scaffold must attach a standard industry tag to a completed scaffold at the point of access to signify the scaffold was designed and erected by trained, competent persons and is safe for use. The tag shall contain a daily inspection record.

22-4.2 The tag must state the intended purpose of the scaffold and indicate the level of personal protective equipment required to use the scaffold. The tag and the handwriting on it must be capable of withstanding extended periods of inclement weather.

## 22-5 Scissors Lifts and Man Lifts

22-5.1 Operate scissors lifts and man lifts in accordance with the manufacturer's recommendations and the latest OSHA requirements.

22-5.2 Always keep both feet on the platform of a man lift or scissor lift

22-5.3 Never tie-off outside of a man lift or scissor lift



**End of Section**



## **SECTION 23: Fire Prevention and Protection**

### **23-1 Fire Prevention and Protection Procedures**

#### 23-1.1 Temporary Heating Equipment

- A. Temporary heaters are prohibited unless approved by the GSK safety representative. A permit is required.
- B. The Operation and maintenance of temporary heating equipment is the responsibility of the contractor. Heaters must bear the UL label (or approved equal).
- C. Contractors must ensure that heaters are in working order and provide trained personnel to be in attendance at all times while heaters are in operation.
- D. A tipover shut-off device must be included for space heating equipment.
- E. Do not place clothing or flammable items on or near heaters.
- F. Operators must be trained for fire watch and using fire extinguishers and the contractor must retain the training documentation.
- G. Provide adequate ventilation when using liquid fuels in an enclosed environment, and conduct atmospheric testing as needed.

#### 23-1.2 Flammable and Combustible Materials

- A. Storage and use of flammable liquids is prohibited without the written approval of the Safety Department.
- B. Store and handle flammable and combustible materials with regard to their fire characteristics. Materials must be clearly labeled.
- C. Store flammable liquids outdoors in an approved manner and dispense only in approved safety containers
- D. Separate and store combustible materials or equipment in non-combustible containers in a proper manner.
- E. Do not store more than a one day supply of combustible materials or containers in one location within the building. Locate supplemental firefighting equipment in the vicinity of these containers and materials.

23-1.3 Fire protection equipment must be furnished for all phases of the work as required by law. Fire extinguishers must be installed on construction sites at least every one hundred feet of travel.

23-1.4 Fire extinguishers must not be used by employees who have not received documented fire extinguisher training within the past 12 months.

23-1.5 Use fire resistant materials for temporary structures.

23-1.6 Provide access to the work area and around the perimeter. Maintain access in a serviceable condition suitable at all times for use by heavy firefighting equipment.

- 
- 23-1.7 Do not drive trucks and motor vehicles within the perimeter of buildings, unless they are designed for that purpose and approved by the GSK representative.
  - 23-1.8 Perform torch-cutting and welding operations in accordance with the applicable fire and safety regulations. Use fire resistant tarpaulins when torch-cutting or welding.
  - 23-1.9 Remove combustible waste materials, rubbish, and debris daily.
  - 23-1.10 Replace temporary fire fighting or fire protection equipment immediately after use, and remove when the work is complete.
  - 23-1.11 Do not fuel equipment while the motor is running or hot.
  - 23-1.12 Provide proper safety waste cans for disposing oily rags or combustible materials.
  - 23-1.13 Sprinkler systems and fire alarm systems must be placed in service as early in the project as possible.
  - 23-1.14 Gasoline or diesel powered portable generators must be approved by the GSK safety representative and used only outside when a qualified operator is present.
  - 23-1.15 Post "No Open Flame" signs where applicable.

## 23-2 Temporary Fuel Tanks

- 23-2.1 Temporary fuel tanks (gasoline, diesel, and fuel oil) are only allowed when approved by the GSK safety representative.
- 23-2.2 Tanks must meet construction and design criteria provided by the GSK safety representative.
- 23-2.3 Temporary fuel tanks require a permit in accordance with local and state regulations.



**End of Section**

## **SECTION 24: Work Area Conditions**

### **24-1 General Information**

- 24-1.1 Contractor employees must define and clearly identify work areas using tape, signs, barricades, etc. to prevent unwarranted entry.
- 24-1.2 The contractor will provide the equipment needed to mark work areas.
- 24-1.3 No eating or drinking in construction or production areas (no food, candy, chewing gum or sodas). Medicine is not permitted in construction or production areas.
- 24-1.4 No sleeping in vehicles or on GSK property.
- 24-1.5 Unapproved radios are not permitted on site.
- 24-1.6 Construction material and equipment must be secured to prevent items from falling over and creating a hazard to personnel.

### **24-2 Drinking Water**

- 24-2.1 Contractors must provide an adequate supply of drinking water where employees are working.
- 24-2.2 Portable containers used to dispense drinking water must be tightly closed and equipped with a tap. Do not dip into containers for water.
- 24-2.3 Clearly mark containers used for drinking water and do not use them for other purposes. Containers should be prepared, sealed and dated daily.
- 24-2.4 Do not use a "common" drinking cup.
- 24-2.5 Provide single service cups, a sanitary container for unused cups, and a receptacle for disposal of used cups.

### **24-3 Toilets and Washing Facilities and Break Areas**

- 24-3.1 Contractors must provide toilets for employees according to applicable sanitary work standards.
- 24-3.2 Contractors must provide adequate washing facilities for employees or make arrangements with the GSK representative for using GSK facilities.
- 24-3.3 Contractors must provide adequate break areas for employees to permit a sanitary environment that is free from work hazards during breaks or make arrangements with the GSK representative for using GSK facilities.

## 24-4 Lighting

Light work areas, ramps, runways, corridors, offices, shops, and storage areas to at least the minimum illumination intensities listed below while work is in progress.

<u>Foot-Candles</u>	<u>Area of Operation</u>
5	General areas, ramps, warehouse
10	Operations involving machinery

## 24-5 Material Use and Waste Management

- 24-5.1 Hazardous waste or potentially hazardous waste, as determined by the methods and definitions from environmental regulations, must be stored and collected in special areas.
- 24-5.2 Do not abandon material in the work area. If material found in the work area is traced to a contractor, that contractor is responsible for expenses involved in collecting, moving, disposal of the material, and clean up.
- 24-5.3 Waste haulers, disposers, recyclers, and scavengers are not allowed in the work area without GSK permission. It is the responsibility of the contractor to provide copies of licenses, permits, and authorization.
- 24-5.4 Do not remove waste from the work area without GSK authorization. Do not bring waste into the work area and dispose of it using GSK's systems or facilities. Contractors must inspect dumpsters frequently and remove potentially hazardous material or waste and place it in the appropriate storage area at the expense of the responsible contractor.
- 24-5.5 Do not allow used oils, paint waste, or similar products to accumulate or be dumped in the work area. Spills, whether accidental or on purpose, must be immediately cleaned up by trained individuals from company that created the spill to the satisfaction of GSK, and disposed of in accordance with instructions from GSK. If spill cannot be contained or poses a hazard contact site emergency number (1111).
- 24-5.6 Place receptacles and dumpsters around the work area for collection of waste materials. Dumpsters that will contain material that is potentially hazardous to the environment (such as construction debris, dry wall) must be staged or designed to prevent leaking into the environment.
- 24-5.7 Do not use the plastic pallets that are located within the manufacturing areas or warehouse. These pallets are designated for production use. If one of these pallets are used, do not return the pallet to the building and notify warehouse personnel.

## 24-6 Dust and Erosion Control

- 24-6.1 Creating dust by any means is not acceptable. It is the responsibility of the contractor to:
  - A. Prior to starting work, explore methods of dust control for work that is expected to produce dust.
  - B. Take immediate action to control or eliminate dust that may be inadvertently created.
- 24-6.2 When required, tree protection, erosion, and sediment control must be provided and maintained.

- A. Contractors that create or could create one of these situations must take the steps necessary to control and guard against these situations.
- B. Settling basins and/or straw barricading around existing storm sewers is required for work (excavation or disturbance of soil) that could cause silt to enter a storm sewer. The plan must be approved by the site Environment, Health & Safety Department.



**End of Section**

## **SECTION 25: Special Equipment**

### **25-1 Lasers**

Laser operators must take the steps necessary to prevent unintentional laser beam exposure to workers and the public per OSHA 29 CFR 1926.54 and ZSP-028. The use of equipment containing Class 3b or 4 lasers requires authorization from the Environment, Health & Safety Department.

### **25-2 Radioactive Sources**

25-2.1 Operators of industrial radiography sources and radioactive density/moisture gauges must comply with North Carolina Department of Environment and Natural Resources (NCDENR) Radiation Protection Section and must take the steps necessary to prevent unintentional radiation exposure to workers and the public.

25-2.2 Contractors must provide the following information to GSK Environment, Health and Safety Department bringing radioactive devices to the work area.

- A copy of the applicable license for radioactive material
- A copy of the licensee's most recent state inspection report
- The kind of device to be used and the date, time, and location of its use



**End of Section**

## **SECTION 26: Motor Vehicles and Heavy Equipment**

### **26-1 Motor Vehicle and Heavy Equipment Procedures**

- 26-1.1 Construction vehicles and heavy equipment brought on site must be inspected, tested, and certified to be in safe operating condition. The certification documentation must be available for GSK's review prior to bringing the equipment on site. Vehicle and equipment passes will be issued by GSK if required.
- 26-1.2 Certification of an equipment operator's ability to safely operate designated equipment is required. Certification is required for crane operations, power industrial trucks, and others as required by OSHA. Training documentation must be current and be provided at GSK request.
- 26-1.3 Use of motor vehicles to transport hazardous material must comply with DOT requirements.
- 26-1.4 Motor vehicles must be properly equipped and maintained in accordance with the manufacturer's recommendations.
- 26-1.5 Only authorized, licensed drivers are allowed to operate vehicles or equipment.
- 26-1.6 Shut off the engine during fueling and maintenance, or when leaving a motor vehicle unattended.
- 26-1.7 Use wheel chocks if the vehicle could possibly roll and while loading/unloading heavy equipment.
- 26-1.8 Do not use a motor vehicle or equipment having an obstructed view to the rear, unless the vehicle has a backup alarm audible above the surrounding noise level.
- 26-1.9 Heavy machinery, equipment, or their parts which are suspended or held aloft by slings, hoists, or jacks must be substantially blocked or cribbed to prevent falling or shifting. Do not work under or between suspended loads. Bulldozer and scraper blades, end-loader buckets, dump bodies, hydraulic lifts, and similar equipment must be either fully lowered or blocked when being repaired or when not in use. Controls must be in neutral position, with motors stopped and brakes set, unless the work being performed requires otherwise.
- 26-1.10 Hauling vehicles for which the payload is loaded by cranes, power shovels, loaders, or similar equipment must have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.
- 26-1.11 Arrange and label control handles for tailgates, dump trucks, and heavy equipment for ease of identification when dumping.
- 26-1.12 Check vehicles at the beginning of each shift to ensure that equipment and accessories are in safe operating condition, and free of damage that could cause failure while in use.
- 26-1.13 Do not ride with arms or legs outside of the truck body, in a standing position, on running boards, seated on side fenders, tailgates, cabs, cab shields, rear of truck, or on the load. All passengers must be seated & restrained with seat belt.
- 26-1.14 Do not drive above the posted speed. Weather, traffic, width and characteristics of the road, type of motor vehicle, and existing conditions may reduce the speed limit.
- 26-1.15 Conspicuously post rated load capacities, operating speeds, and special hazard warnings on equipment. Instructions or warnings must be visible to the operator while at the control station.

- 
- 26-1.16 A competent person must inspect machinery and equipment prior to each use. Deficiencies must be corrected and defective parts replaced before continued use.
- 26-1.17 Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if parts are exposed or create a hazard.
- 26-1.18 Rollover protection specified by OSHA is required for applicable equipment operated in the work area.
- 26-1.19 Operators of vehicles or equipment are to use seat belts or other restraint devices, if provided, at all times during operation of vehicles or equipment.

## 26-2 Loading Dock Vehicle Safety

- 26-2.1 Motor vehicles parked in a GSK loading dock area must have the engine turned off (except for motors required for refrigeration).
- 26-2.2 When loading or unloading a motor vehicle at a dock, set the emergency brake and place wheel chocks under the rear wheels, and engage dock-locks if available, to prevent the vehicle from rolling.

## 26-3 Fleet Services

- 26-3.1 Fleet Services has an extensive Driver Safety Manual and related program. If you or employees reporting to you drive GSK vehicles or vehicles leased or rented by GSK, you should be familiar with both.
- 26-3.2 You can access Fleet Services manuals to view or print them from the Fleet Services Forms and Documents Library page on the GSK Intranet at:  
<http://clientresource.arifleet.com/gskuspharma/indexus.shtml>

 **End of Section**



## **SECTION 27: Powered Industrial Trucks**

### **27-1 General Information**

- 27-1.1 This section contains safety requirements relating to fire protection, design, maintenance, and use of fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors or internal combustion engines.

### **27-2 Powered Industrial Truck Procedures**

- 27-2.1 Construction contractors must contact the GSK safety representative prior to the use of any powered industrial truck on the Zebulon site.
- 27-2.2 Internal combustion powered industrial trucks are prohibited for indoor use. Any exceptions must be approved by the GSK safety representative and documented on the Open Flame Permit.
- 27-2.3 Only trained and licensed personnel are authorized to operate powered industrial trucks. Certification of training must be available for GSK review prior to operation.
- 27-2.4 Operators of powered industrial trucks are required to maintain a current valid driver's license.
- 27-2.5 All operator restraint devices or seat belts must be used during operation of powered industrial trucks that are equipped with such devices.
- 27-2.6 All powered industrial trucks must be operated per NC OSHA guidelines (29CFR 1910.178)
- 27-2.7 Operators of powered industrial trucks are responsible to immediately report all accidents, incidents, injuries and near misses to their supervisor.

 **End of Section**

## **SECTION 28: Transporting Hazardous Materials**

### **28-1 General Information**

- 28-1.1 This section references regulatory requirements and corporate policies designed to protect employees, the public, and the environment; to promote safe transportation of chemical, biological, and radioactive materials; and to enhance compliance with state, federal, and international transportation laws and regulations.
- 28-1.2 The policies and procedures in this section apply to contractors, subcontractors, and vendors who transport or ship chemical, biological, and radioactive materials to, from, or within GSK facilities. Deviation from these policies and procedures is not permitted without written approval from the site environmental organization.

### **28-2 References**

See Appendix C for site-specific references.

### **28-3 Transportation Procedures**

- 28-3.1 Employees Contractor employees involved in transporting or shipping chemical, biological, and radioactive materials are responsible for regulatory compliance and for promoting the safe transportation of dangerous goods.
- 28-3.2 Only employees who have completed DOT training may package and prepare chemical, biological, and radioactive materials for transport. Contact the site environmental organization for more information about DOT training.
- 28-3.3 Contractors that ship hazardous materials are responsible for complying with site-specific procedures and for ensuring that their employees complete the appropriate DOT training.
- 28-3.4 Refer to applicable site-specific procedures for more information regarding dangerous goods safety, hazardous materials services, and hazardous waste operations.

 **End of Section**

## **SECTION 29: Confined Space Entry**

### **29-1 Confined Space Entry Procedures**

- 29-1.1 Confined spaces will be evaluated by GSK to determine the need for an entry permit. A confined space is an enclosed area that has a limited means of egress and is subject to the accumulation of toxic or flammable contaminants or has an oxygen-deficient atmosphere.
- 29-1.2 Entry into a confined space is not allowed unless a Confined Space Permit and applicable work permits have been issued in accordance with site facility requirements.
- 29-1.3 Contractors must provide documentation of effective confined space entry training in accordance with OSHA requirements.
- 29-1.4 At least three days prior to the entry date, contractors, through the GSK representative and work permit system, must request a Confined Space Permit and specify their plan and purpose.
- 29-1.5 Personnel, equipment, and supplies needed for entry must be present at the confined space before beginning work.
- 29-1.6 Contractors must abide by the provisions and restrictions of the permit.
- 29-1.7 If space or work conditions change, the issuer of the permit may terminate the work and require the contractor to obtain a new permit.
- 29-1.8 Violation of these requirements may result in immediate removal from GSK premises.

### **29-2 Confined Space Monitoring**

- 29-2.1 The confined space may need to be continuously monitored with monitoring equipment. The contractor is responsible for providing this equipment and being qualified to use it.
- 29-2.2 Contractors are responsible for the safety and health of their employees and must not allow them to enter a confined space without a permit.
- 29-2.3 The contractor must pay the costs of additional inspection, evaluation, or consultation provided by GSK for the benefit of the contractor concerning the safety of the confined space. A GSK employee, engineer, architect, visitor, or vendor who enters a controlled confined space must abide by site/facility-specific confined space procedures.
- 29-2.4 Additional monitoring equipment may be needed as determined by GSK. Contractors must ensure that employees, visitors, vendors, consultants, or other persons under their direction or assisting them are thoroughly trained and understand these requirements before they are allowed to enter a confined space.
- 29-2.5 A rescue team must be readily available for all permit required confined space entries.

### **29-3 Working in Confined Spaces**

- 29-3.1 The following rules apply to work performed in confined spaces:

- 
- A. Ventilation must be of adequate volume to safely maintain the airflow within the confined space. The contractor must prove calculations of the airflow volume. Gas powered blower systems are prohibited.
  - B. Employees or the person supervising the work must report unsafe conditions immediately.
  - C. Welding, cutting, brazing, and purging operations have specific requirements. Consult with the issuer of the permit.
  - D. Chemicals used or transported inside the confined space have specific requirements. Consult with the issuer of the permit.
  - E. Tools such as grinders, drills, and sanders have specific requirements. Consult with the issuer of the permit.
- 29-3.2 The GSK representative or the issuer of the permit will stop confined space entry during an emergency and not allow entry except as necessary to respond to the emergency.
- 29-3.3 Employees and the issuer of the permit will determine sources of power, fluids, gases, ventilation, and other means of disturbing the work area within the confined space. Potential disturbances must be locked, tagged, and secured prior to allowing entry.
- 29-3.4 Employees must be able to identify the location of a purge gas release and where the gas is being vented. Purge gas must not be vented inside a building or in a confined space.
- 29-3.5 Wear hearing protection if the noise level inside the confined space is greater than 85 decibels.

 **End of Section**

## SECTION 30: Floor, Roof, and Wall Openings

### 30-1 Floor, Roof, and Wall Opening Procedures

- 30-1.1 Conditions must be controlled where there is a danger of employees or materials falling through floor, roof, or wall openings, or from floor or roof perimeters.
- 30-1.2 Remove guarding and covers only after other means of fall protection are in place. Employees installing or removing guarding and covers must be protected by alternative fall protection throughout the process. The contractor responsible for the removal of guarding and covers is responsible for their replacement.
- 30-1.3 Perimeter, floor, roof, and wall opening protection must be maintained throughout all phases of the work. Notification of a violation that is not corrected immediately may result in removal from the premises of the supervisor responsible for the activity.
- 30-1.4 In accordance with OSHA standards, installation of a standard railing is required for floor perimeter and wall opening protection.
  - A. A standard railing consists of a top rail, a midrail, toeboards, and four-foot vertical debris nets and posts.
  - B. Wire rope used as railing (as top rail and midrail) must be ½ inch in diameter with at least three J-type fist grip wire rope clamps at each connection and turn buckles every 100 feet, and thimbles must be used where the wire rope is connected.
  - C. All non-routine roof work requires a Permit to Work.
- 30-1.5 For maintenance activities on roofs, no fall protection is required when safe access is provided and walking paths are marked and located at more than 15 feet from unprotected sides or edges. When the access, walking path, or maintenance area is less than 15 feet from an unprotected side or edge, one of the conventional methods of fall protection (see Section 14, Part 6) or a combination of these must be implemented.
- 30-1.6 For construction work performed, a warning line system may be used as an alternative protection system where it can be reasonably anticipated that workers will be within 25 feet of an unprotected side or edge.
  - A. In such cases, the warning line system must meet OSHA standards and must be established no less than 15 feet from the unprotected edge.
  - B. Where a warning line system is used, no materials are allowed inside the warning line zone.
  - C. Regardless of the type of work, the use of one of the conventional fall protection systems allowed by GSK (see Section 14, Part 6) or a combination of them is required whenever workers are within 15 feet of unprotected sides or edges. The Safety Monitoring System is not allowed as fall protection on the GSK Zebulon site.
- 30-1.7 Access to roofs where fixed fall protection is not provided must be authorized by a permit-to-work.
- 30-1.8 Any deviation from the fall protection requirements of this manual requires a safety waiver (GSK-ZCSM-05) that has been approved by the contractor safety manager and the GSK safety

---

representative. Alternative fall protection methods must be as safe as those required by GSK and must comply with OSHA standards.

## 30-2 Stair Railings

- 30-2.1 Stair railings must be constructed similar to a standard railing, but the vertical height must be 34 to 36 inches from the top rail to the surface tread in line with the face of the riser, at the forward edge of the riser.
- 30-2.2 Provide a minimum clearance of 3 inches between the handrail and other surfaces or objects.

## 30-3 Floor Opening Covers

- 30-3.1 Floor opening covers must be capable of supporting the maximum intended load and installed to prevent accidental displacement.
- 30-3.2 Protect floor openings by a cover and standard railing. Clearly mark and anchor covers.

## 30-4 Stairs

- 30-4.1 During construction, provide temporary stairs on structures that are two or more floors or more than 20 feet high until permanent stairways are in place.
- 30-4.2 Keep stairways free of hazardous objects. Do not allow debris and loose material to accumulate on stairways. Storage of combustibles under stairways is NOT allowed.
- 30-4.3 Permanent steel stairways having hollow pan-type treads and landings that are to be used prior to concrete placement must have the pans filled with solid material to the level of the nosing.
- 30-4.4 Temporary stairs must have a landing not less than 30 inches wide in the direction of travel for every 12 feet of vertical rise. Use full-width wooden treads for temporary service.
- 30-4.5 Provide uniform riser height and tread width throughout the flights of stairs.

## 30-5 Runways and Openings

- 30-5.1 Install standard guarding at wall openings from which there is a drop of more than 3 feet.
- 30-5.2 Guard runways using a standard railing, or the equivalent, on open sides above the floor or ground level. When tools, machine parts, or materials are likely to be used on the runway, provide a toeboards on each exposed side.
- 30-5.3 Regardless of height, open-side floors, walkways, platforms, or runways above or adjacent to dangerous equipment and similar hazards must be guarded with a standard railing and 4-foot debris net.



**End of Section**

## **SECTION 31: Lifting Equipment, Cranes and Rigging**

### **31-1 General Information**

- 31-1.1 Contractors whose activities require the use of cranes are responsible for proper set up and operation. Evidence of up-to-date crane inspections must be provided to GSK prior to use. Cranes may be rejected for even minor deformity of a crane part.
- 31-1.2 This procedure applies to the following types of cranes as specified in ANSI B30.5, Section 5-0.1 crawler cranes, locomotive cranes, wheel mounted cranes of both truck and self-propelled wheel type and any variations thereof that retain the same fundamental characteristics.
- 31-1.3 Prior to starting work, contractors will provide GSK with documented evidence of annual inspections in accordance with OSHA requirements, for all cranes, hoisting, and associated rigging equipment, brought onto the site. If one year has elapsed since the last inspection, or if the crane or its associated rigging has sustained any incident resulting in damage, the crane and the associated rigging will be inspected and documented evidence of the current inspection provided. No claims will be considered for losses sustained by the contractor for delays caused by failure to comply with these requirements.
- 31-1.4 The crane operator or other competent person will perform a daily inspection of cranes. The person performing this inspection will document results in writing, and the documentation will be available for examination.
- 31-1.5 Lifts will be planned in advance. Critical lift plans must be in writing and approved by a third party vendor. All riggers, signal persons, inspectors and crane operators must be trained and qualified per OSHA 1926.
- 31-1.6 All material and personnel lifting equipment (including scissor lifts, aerial work platforms, fork lift trucks (FLT), hoists and rigging) must have a periodic thorough examination by a competent person (FLT semi-annually, all other at least annually). Additionally, all material and personnel lifting equipment must have a daily inspection by a competent person.
- 31-1.7 All lifting equipment must be marked with its maximum Safe Working Load (SWL).

### **31-2 References**

- 31-2.1 Cranes and Derricks, by Howard I. Shapiro, published by McGraw Hill Book Company
- 31-2.2 ANSI Standard B30.5
- 31-2.3 ZSP-042 Cranes and Rigging

### **31-3 Mobile Crane Set Up**

- 31-3.1 The operator is responsible for properly setting up the crane, determining the weight of the load to be lifted, and performing a test lift.
- 31-3.2 Cranes must be inspected by a third-party certified crane inspector:
  - after set up and prior to the initial lift

- 
- after a malfunction has occurred
  - after crane has been moved from its original position

**NOTE:** Boom trucks are exempt from 3.2 above when they are being used solely for the purpose of delivering material to the site. Prior to the lift, however, the GSK project manager and the GSK safety representative must determine if a lift plan is required, depending upon weight and elevation of the lift, and if so, approve the plan.

31-3.3 Additional inspections are required before each shift and on a daily basis in accordance with paragraph 1.4 of this section.

## 31-4 Recordkeeping

31-4.1 Records pertaining to crane inspections will be kept on site with the crane or in the contractor's temporary office.

31-4.2 During safety inspection, if the operator or supervisor cannot produce the required crane inspection records, the crane will be shut down and inspected.

31-4.3 The crane operations and maintenance manual should be kept on each crane or hoisting equipment.

## 31-5 Operator Qualifications and Operating Procedures

31-5.1 Only the following personnel may operate cranes and hoisting equipment.

- Designated crane operators who have been licensed by an approved agency and meet the requirements of ANSI B30.5, Chapter 5
- Operators meeting the minimum DOT requirements as provided in DOT 391, Physical Examination for Truck Drivers

**NOTE:** Crane operators will not be allowed to operate cranes until they have passed the physical exam conducted by a licensed physician approved by the DOT.

- Inspectors certified for crane inspection
- Test and maintenance personnel when necessary to perform testing or maintenance functions

31-5.2 Cranes not subject to DOT requirements must have the operator approved by the GSK representative.

31-5.3 No one other than the above personnel will be in or on the crane during operations. Exceptions are oilers or supervisors whose duties may require their presence.

31-5.4 Crane operating procedures must be in accordance with OSHA requirements.

## 31-6 Maintenance

Records indicating a preventative maintenance program based on the equipment manufacturer's recommendations must be provided to GSK.



---

## 31-7 Rigging Requirements

- 31-7.1 A qualified rigger must inspect rigging equipment prior to each use and immediately remove from service and destroy any damaged or defective slings.
- 31-7.2 Rigging devices, including slings, must have permanently affixed identification stating size, grade, rated capacity, and manufacturer.
- 31-7.3 Remove rigging not in use from the immediate work area.
- 31-7.4 Hang rigging and slings on a rigging frame to eliminate bends and kinks.
- 31-7.5 Do not leave slings lying on the ground or exposed to dirt or the elements.
- 31-7.6 Do not shorten slings using bolts, knots, or other devices.
- 31-7.7 A licensed engineer must certify lifting beams and spreader bars as to their configuration and lifting capacity.
- 31-7.8 Rigging must be available for inspection by the third party inspector.

## 31-8 Emergency Plan

The critical lift plan must contain a Section regarding handling emergencies should a crane collapse, turn over, or drop a load.

## 31-9 Work Platforms Suspended from Cranes

- 31-9.1 Cranes may be used to hoist, lower, and suspend personnel on an approved work platform ONLY when such action results in the least hazardous exposure to employees.
- 31-9.2 Do not use cranes to hoist, lower, or suspend personnel on a work platform in situations where the use of other equipment is possible.
- 31-9.3 The GSK safety representative must approve the use of crane-suspended personnel platforms in writing on a case-by-case basis.
- 31-9.4 Train personnel involved in crane-suspended personnel platform operations as required by OSHA.

 **End of Section**

## SECTION 32: Excavation and Trenches

### 32-1 General Information

- 32-1.1 Design the supporting system for excavation and trenches after careful consideration of the depth of the cut; anticipated changes in the soil due to air, sun, and water; ground movement caused by vehicle vibration or blasting; and earth pressures (not only the angle of repose).
- 32-1.2 Approved, site-specific safety procedures (ZSP-39 Excavation & Trenching) for excavation and trenches must be followed.

### 32-2 Definitions

- 32-2.1 The Angle of Repose is the angle closest to the perpendicular at which the soil will remain at rest under all conditions.
- 32-2.2 An excavation is any man-made cut, cavity, trench, penetration or depression in the earth's surface.
- 32-2.3 The term, shore, refers to a structure that supports the sides of an excavation to prevent a cave-in.
- 32-2.4 A trench is a narrow excavation in which the depth is greater than the width, and the width is not greater than 15 feet.
- 32-2.5 A trench box is a prefabricated, movable trench shield composed of metal plates attached to a heavy metal frame.
- 32-2.6 A trench jack is a mechanical or hydraulic device used to support the sides of an excavation.

### 32-3 Excavation Permit

- 32-3.1 All excavation performed on GSK property by machine or power tool requires an Excavation Permit prior to starting work.
- All hand digging greater than two feet deep requires an Excavation Permit** prior to starting work.
- The GSK representative will supply the names of people who will issue the Excavation Permit or authorization.
- 32-3.2 The contractor in charge of the work must perform the following tasks:
- Complete the Excavation Permit and forward it to the GSK representative
  - Ensure that approval signatures on the permit are obtained after the required personnel have reviewed the field drawings
  - Present the completed Excavation Permit to the operator
- 32-3.3 Do not begin excavation until the permit, signed by the required personnel, is present at the excavation site.
- 32-3.4 The Excavation Permit must remain at the excavation site during the entire time of the excavation.
- 32-3.5 When the excavation is complete, return the Excavation Permit to GSK for filing.

---

## 32-4 Protection Design

- 32-4.1 Excavations and trenches over 4 feet deep must be sloped, shored, benched, braced, or supported. When soil conditions are unstable, excavations less than four feet must be sloped, shored, or supported.
- 32-4.2 OSHA standards permit the use of a trench box as long as the protection it provides is equal to or greater than the protection provided by the appropriate shoring system.

## 32-5 Protection Installation

- 32-5.1 Regardless of the support system used, install shoring starting from the top of the trench or excavation and working down. Be careful when installing the shoring. Place the cross beams or trench jack in a true horizontal position and space them vertically at appropriate intervals. Secure the braces to prevent sliding, falling, or kickouts.
- 32-5.2 Ensure shoring materials are in good condition, free of defects, and of the right size. Do not use timbers with large or loose knots.
- 32-5.3 Installation of shoring must closely follow the excavation work. It is dangerous to allow trenches to remain unshored even if no work is being done in them because dirt walls will slough off, causing dangerous overhangs. The longer a trench is left unsupported, the greater the chance of a cave-in.
- 32-5.4 One method of ensuring the safety of workers in an excavation or trench is to slope the sides of the cut to the angle of repose. The angle of repose varies with different kinds of soil, and will be determined on each individual project and at each trench or excavation. Flatten the angle of repose when an excavation has water conditions, silt material or loose boulders, or where erosion, deep frost, or slide planes are apparent.
- 32-5.5 Other methods of support include shoring-sheeting, tightly placed timber shores, bracing, trench jacks, piles, or other materials installed in a manner strong enough to resist the pressures surrounding the excavation.

## 32-6 Special Precautions

- 32-6.1 Guard against an unstable excavation bottom, such as below the water line. Sheet piling may have to be driven below the bottom for this type of excavation to add to the soil stability.
- 32-6.2 OSHA standards require using diversion dikes and ditches or other suitable means to prevent surface water from entering an excavation, and to provide adequate drainage of the area adjacent to the excavation. Water causes erosion and softening and must not be allowed to accumulate in a trench or excavation.
- 32-6.3 In excavations where employees may be required to enter, excavated and other material must be effectively stored and retained 6 feet or more from the edge of the excavation.
- 32-6.4 When employees are required to be in trenches 4 feet deep or deeper, adequate means of exit, such as ladders or steps, must be provided and located to require no more than 25 feet of lateral travel. Ladders must be in good condition, extend from the floor of the trench to three feet above the top of the excavation, and secured at the top.
- 32-6.5 Locate underground utilities in advance of excavation and make provisions for their protection.

---

## 32-7 Inspections

- 32-7.1 Excavations and shoring systems must be inspected daily by a competent person.
- 32-7.2 Inspections are required after a rain storm or change in conditions that can increase the possibility of a cave-in, slide, or water accumulation. If dangerous ground movements such as tension cracking are apparent, stop work in the excavation until the problem has been corrected.

## 32-8 Completion of Work

- 32-8.1 As soon as work is completed, begin backfilling and dismantling the shoring.
- 32-8.2 Remove the shoring from the bottom up, taking care to release jacks or braces slowly. In unstable soil, use ropes to pull out the jacks or braces from above.

## 32-9 Drilling Operations

- 32-9.1 An Excavation Permit is required for drilling operations. OSHA mandated clearance from power lines is required.
- 32-9.2 Inspect the drilling area for hazards before starting the drilling operation.
- 32-9.3 Drill crews and other employees must stay clear of augers or drill stems that are in motion.
- 32-9.4 When drill helpers assist the drill operator during installation or operation of a drilling rig, the helpers must be in sight of or in communication with the operator at all times.
- 32-9.5 Attend drilling rigs while in operation.
- 32-9.6 Safely store drill steel, spare parts, and tools in racks or receptacles on the drilling rig when not in use.
- 32-9.7 Do not drill from positions that hinder access to the controls, or from insecure footing or staging.
- 32-9.8 A competent person must inspect drilling equipment at the start of each shift, and defects must be corrected before the equipment is used.
- 32-9.9 Warn workers in the area around the drilling operation before each drilling cycle is started.

 **End of Section**

## **SECTION 33: Concrete and Formwork**

### **33-1 General Information**

The following procedures apply to the erection of concrete formwork and placement of concrete for either cast-in-place or precast work.

### **33-2 Definitions**

- 33-2.1 A form is a mold into which concrete is placed.
- 33-2.2 A lanyard is a rope suitable for supporting one person when one end is fastened to a body harness and the other end is secured to a substantial object or lifeline.
- 33-2.3 A body harness consists of straps that help distribute fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders and can be attached to other components of a fall arrest system.

### **33-3 Concrete and Formwork Procedures**

- 33-3.1 Equipment and materials used in concrete construction and masonry work must meet the applicable requirements as described in the ANSI publication Safety Requirements for Concrete Construction and Masonry Work.
- 33-3.2 Employees working more than six feet above an adjacent work surface while placing reinforcing steel or setting/dismantling forms must use a body harness with two lanyards. Follow 100 percent tie-off and fall protection practices.
- 33-3.3 Cover protruding reinforcing steel with a minimum of 2-inch thick material or standard caps where employees may be required to work above or pass through.
- 33-3.4 Do not work above vertically protruding reinforcing steel unless the steel has been protected to eliminate the hazard.
- 33-3.5 Affix impalement caps on reinforcing steel that is less than six feet high.
- 33-3.6 Do not ride concrete buckets or operate concrete buckets over occupied areas.
- 33-3.7 Cover reinforcing mats used as walkways with plywood for safe footing.
- 33-3.8 Wear NIOSH-approved, supplied-air respirators and hoods when sandblasting.
- 33-3.9 Concrete workers must wear appropriate shirts, boots, and gloves to reduce the danger of concrete burns.
- 33-3.10 Remove nails, staples, and wire from lumber and materials. Remove excess materials from the work area.

 **End of Section**

## SECTION 34: Steel Erection

### 34-1 Definitions

- 34-1.1 A barricade is a device used to direct or protect pedestrian or vehicular traffic from a work activity.
- 34-1.2 Christmas treeing is the practice of suspending multiple structural steel members from one another horizontally and hoisting them in a single lift.
- 34-1.3 An outrigger is a structural member of a supported scaffold used to increase the base width of the scaffold to provide increased stability.
- 34-1.4 A tag line is a rope that is tied to a structural member and used to control the movement of the member during placement.

 **End of Section**

## SECTION 35: Roadway Work

### 35-1 General Information

- 35-1.1 Work on or adjacent to existing public and work site roadways must be performed in accordance with the requirements of ANSI D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways.
- 35-1.2 Contractors are to obtain any permits required by local, state, or federal law.
- 35-1.3 Unless otherwise specified, the contractor performing this work is responsible for furnishing, setting-up, and maintaining traffic control signs, devices, barricades, arrow boards, and flag-persons. The site Safety Department and security organizations must approve traffic control provisions.
- 35-1.4 The responsible contractor must ensure that: a quarter inch (¼") gap between it and the floor level where vertical debris nets cannot be installed.
- Roadways, walkways, and other means of access and egress are free of trash, rubbish, mud, sand, and loose material.
  - Where required, a wheel wash station is provided.
  - Vehicles and equipment are clean prior to leaving the site. The contractor is responsible for immediate cleanup and public liability.
  - Reflective vests are to be worn at all times during performance of roadway work.

 **End of Section**

## SECTION 36: Blasting

### 36-1 General Information

- 36-1.1 If the project scope requires blasting, the work must be in accordance with state and local requirements.
- 36-1.2 The contractor must prepare a blasting plan and submit the plan to GSK.
- 36-1.3 Blasting is not allowed on GSK property without the written approval of the Safety Department.
- 36-1.4 Blasting is allowed only during the hours specified by GSK.

 **End of Section**

## SECTION 37: DEA Regulated Areas

### 37-1 General Information

- 37-1.1 The Zebulon site has been approved by the DEA for the manufacture of a controlled substance. In order for the Zebulon site to meet the strict guidelines as set by the DEA, the Zebulon site has set forth a set of guidelines all contractors must follow in order to work in a DEA designated area.
- 37-1.2 The DEA designated areas are listed as: Manufacturing (TS1, TS2 and TS3), Diff-Core, QUEST Building, QC Lab, Incoming Lab, Warehouse storage cages, Micro Lab, and some areas in Packaging.
- 37-1.3 Entry into DEA controlled areas are controlled by card access or key control. DEA approved card access is granted to only designated GSK employees and a very limited few on-site contractors who have passed DEA background checks.

### 37-2 Work Requirements

- 37-2.1 Each contractor who is to work in a controlled substance area will be issued a controlled substance visitor badge by Security at Post A or Post C company entrances.
- 37-2.2 Contractors who are scheduled to work in a DEA designated area must be escorted by an approved DEA authorized person. The DEA escort must remain with the contractor at all times. Contractors are not allowed to work in DEA compliant areas without the escort. If the escort leaves the area, the contractor must also leave the area.
- 37-2.3 Prior to entry into a DEA designated area, the contractor should swipe their badge at the card reader for the entry to be recorded, however, entry will not be allowed. The authorized employee must swipe their badge at the card reader to allow entry to the area. Security will maintain a log of badges issued to visitors for comparison to entries at card reader locations. Badges are assigned to specific people and cannot be loaned. Contractors cannot “piggy back” through a card access door.
- 37-2.4 **Remember:** the authorized GSK or authorized contractor must remain with contractor at all times. **The contractor must be escorted by an authorized DEA compliant employee at all times.** Contractors cannot be left alone in a controlled area at any time.

### 37-3 De-classifying a DEA Compliant Space

- 37-3.1 In some instances, a DEA designated area may be declassified. This requires that the space be free of all classified product or all classified product is secured within locked areas. The area must be secured in a way that the contractor cannot gain entry into an adjacent area that is DEA designated. The GSK department manager and the GSK DEA Compliance Specialist must agree on de-classifying the area.
- 37-3.2 If an area is declassified, then the contractor will not need the controlled substance visitor badge or need to be escorted.



**End of Section**



---

## SECTION 38: Corporate Integrity Agreement (CIA)

### 38-1 General Information

- 38-1.1 The Zebulon facility is currently registered to import, manufacture, test, and store and export Schedule 5 controlled substances. The facility received Importer, Manufacturer, Analytical Lab and Exporter controlled substance registration certificates from the U.S. Drug Enforcement Agency and its Manufacturer controlled substance registration certificate from the North Carolina Department of Health and Human Services in February 2012.
- 38-1.2 The Zebulon facility is also considered a Covered Manufacturing Facility and is in a Corporate Integrity Agreement with the US Government. Due to additional restrictions around background screening and training requirements, a contractor may be required to complete additional screening and training to be qualified for badge access to the Zebulon facility.

 **End of Section**

---

## Appendix A: Safety Related Forms

### A-1 General Information

- A-1.1. The forms referenced in this appendix are to be used to document safety related information.
- A-1.2. These forms are to be used when equivalent, site-specific forms are not available.
- A-1.3. Forms may be filled out by hand or electronic versions of the forms may be obtained from the GSK representative.

NOTE: Electronic versions can also be saved to your local PC from either of the two web sites:

GSK Intranet Site (Internal): [https://connect.gsk.com/sites/gms\\_zebulon/EHS/Pages/default.aspx](https://connect.gsk.com/sites/gms_zebulon/EHS/Pages/default.aspx)

GSK Internet Site (External): <http://ussupplierdiversity.gsk.com/helpfullinks.htm>

### A-2 Form Description and Use

- A-2.1. Accident Injury Report for Medical Treatment Cases (GSK-ZCSM-01)
- Use this form to report medical treatment cases.
  - Contractors must complete the form and submit the original to GSK within 24 hours of occurrence.
- A-2.2. Report of Accident, Environmental Release, Injury/Illness, Property Damage, or Near Miss (GSK-ZCSM-02)
- Use this form to report accidents, incidents, and near misses.
  - Contractors must complete the form and submit the original to GSK within 24 hours of occurrence.
  - Accidents involving damage to property, including raw materials or equipment, installed equipment, and motor vehicles and heavy equipment must be reported.
- A-2.3. Contractor Safety Performance Report (GSK-ZCSM-03)
- Contractors must submit one report for each active contract.
  - The report should be submitted to the GSK representative by the 25th day of each month.
- A-2.4. Zebulon Safety Inspection Form (GSK-ZCSM-04)
- Use this form to report the results of safety inspections made by the contractor in accordance with contract specifications, or at a minimum weekly.
  - Contractors must complete the form, submit the original to GSK, and retain a copy.
- A-2.5. Safety Procedure Waiver (GSK-ZCSM-05)
- If specific working conditions dictate that the current safety procedures be amended or revised, the safety procedures defined in this manual may be modified using this form.
- A modified procedure must:
- Be specific to an activity or repeatable activity
  - Specify a location and an effective time period
  - Be signed by the GSK safety representative, or the GSK project manager responsible for the area where the work is being done and the contractor's safety representative.

- Be approved by the GSK safety representative.

Contractors must update their employees on this safety procedure.

A-2.6. Body Harness and Lanyard Inspection Report (GSK-ZCSM-06)

- Use this form to log monthly inspections of body harnesses and lanyards.
- A competent person must inspect body harnesses and lanyards, complete the form, and submit it to the GSK representative.
- Completion of this form does not a substitute for inspections required by OSHA.

A-2.7. Safety Compliance Audit (GSK-ZCSM-07)

- Use this form to document whether or not the work being performed by the contractor complies with the requirements of the Contractor Safety Manual.
- The form provides a large selection of administrative (A) and Technical (T) questions. An audit is performed by choosing ten questions, five administrative and five technical.

Questions should be picked that pertain to the work being performed.

Questions should be answered with a yes or no response.

- Each contract should be audited at least once every month.
- Auditors are required to follow up on all violations observed and record the date when the corrective action occurred.

A-2.8. Supervisor Safety Awareness and Compliance Report (GSK-ZCSM-08)

- Use this form to document whether or not the contractor's supervisor is aware of the requirements of the Contractors Safety Manual and if the supervisor is complying with those requirements
- The form provides a large selection of administrative (A) and Technical (T) questions. An audit is performed by choosing ten questions, five administrative and five technical.
  - a) Questions should be picked that pertain to the work being performed.
  - b) Questions should be answered with a yes or no response.
- Each contract should be audited at least once every month.
- Auditors are required to follow up on all violations observed and record the date when the corrective action occurred.

A-2.9. Site Chemical Request and Approval Form (GSK-ZCSM-09)

- Use this form to obtain approval to bring chemicals on GSK property.
- A SDS sheet must accompany this form
- The form must be must be submitted to the GSK safety representative prior to bringing the chemicals on site.

A-2.10. Job Safety Analysis / Job Hazard Analysis Form (GSK-ZCSM-10)

- This form can be used as a JHA or JSA.
- The required information for a JHA should include a high level overall description of any anticipated hazards. The JHA should be completed when the project is in its conception design phase.
- The required information for a JSA should include a step by step analysis of the job. Each step should identify hazards (if any) with specific methods to control or eliminate the hazards.

## Appendix B: Telephone Contact Numbers

Zebulon, NC. USA (Area Code 919)

TO REPORT	CALL
All Emergencies (Fire, Smoke, Chemical Spill, Accident/Injury, Medical)	269-1111 (internal 1111 or 7-1111)
Construction Safety	269-1769 or 269-1478
Environmental Concerns	269-1478
Fire Safety	269-1769 or 269-1478
General Safety	269-1478
Hazardous Waste	269-1478
Industrial Hygiene / Exposure Issues	269-1917
Safety Permits	269-1769 or 269-1478
Safety Training	269-1478
Security Concerns (bomb threats, etc)	269-1111 (internal 1111 or 7-1111)

TO REQUEST	CALL
Bound copies of the <u>Zebulon</u> Contractor Safety Manual	Contact your GSK representative.

## **Appendix C: References**

### **Zebulon Safety Procedures are available from DELTA (Intranet Only):**

Periodically, new procedures are added and existing procedures are revised, updated and rescinded.

<b>GSK Documents</b>	
ZSP028	Laser Safety
ZSP039	Excavation & Trenching
ZSP042	Cranes and Rigging
GSK-ZCSM-##	For all forms, see reference listing in Appendix A
<b>Government Documents, Regulations and Standards</b>	
OSH Act	Occupational Safety and Health Act of 1970
29 CFR Part 1903	Inspections, Citations, and Proposed Penalties
29 CFR Part 1910	Occupational Safety and Health Standards
29 CFR Part 1926	Safety and Health Regulations for Construction
OSHA 2202	Construction Industry Digest
OSHA Form 300	Log of Occupational Injuries and Illnesses
40 CFR 261	Identification and Listing of Hazardous Waste
49 CFR Part 40	Procedures for Transportation Workplace Drug and Alcohol Testing Programs
49CFR Part 391	Qualifications of Drivers
-	Drug Free Workplace Act of 1988
<b>Trade Association References</b>	
NFPA 70E	Standard for Electrical Safety in the Workplace
ANSI-A10.3	Safety Requirements for Powder Actuated Fastening Systems
ANSI/ASME B30.5	Mobile and Locomotive Cranes
ANSI D6.1	Manual on Uniform Traffic Control Devices for Streets and Highways
ANSI Z41	American National Standard for Personal Protection – Protective Footwear
ANSI Z87.1	Practice for Occupational and Educational Eye and Face Protection
ANSI Z89.1	Safety Requirements for Industrial Head Protection
<b>Other References</b>	
Cranes and Derricks, by Howard I. Shapiro, published by McGraw Hill Book Company	

## Appendix D: Monthly Inspection Color Code Chart

(for body harness, lanyards, power tools, temporary wiring/drop cords and ladders)

<b>Monthly Inspection Color Codes</b>		
<i>(for body harness, lanyards, power tools, temporary wiring/drop cords &amp; ladders)</i>		
<b>MONTH</b>	<b>COLOR</b>	
<b>January</b>	<b>White</b>	
<b>February</b>	<b>White</b>	<b>Yellow</b>
<b>March</b>	<b>White</b>	<b>Blue</b>
<b>April</b>	<b>Green</b>	
<b>May</b>	<b>Green</b>	<b>Yellow</b>
<b>June</b>	<b>Green</b>	<b>Blue</b>
<b>July</b>	<b>Red</b>	
<b>August</b>	<b>Red</b>	<b>Yellow</b>
<b>September</b>	<b>Red</b>	<b>Blue</b>
<b>October</b>	<b>Orange</b>	
<b>November</b>	<b>Orange</b>	<b>Yellow</b>
<b>December</b>	<b>Orange</b>	<b>Blue</b>

(Current monthly inspections shall occur between the 25<sup>th</sup> and 7<sup>th</sup> calendar dates.)

**History of Change**

<b>Version: 5.0</b>				<b>Owner: Chris Herring</b>	<b>Prepared by: Michael Fraticelli</b>
<b>Old Page</b>	<b>Old Section</b>	<b>New Page</b>	<b>New Section</b>	<b>Change(s)</b>	<b>Reason(s)</b>
All	All	All	All	Rewrote entire document as a manual instead of previous powerpoint.	To give more safety instruction to the Contractors.