

APPENDIX H
CASE 10-T-0189
CONSTRUCTION AND SAFETY POLICIES AND
PROCEDURES [EMCP B(4)(A)]

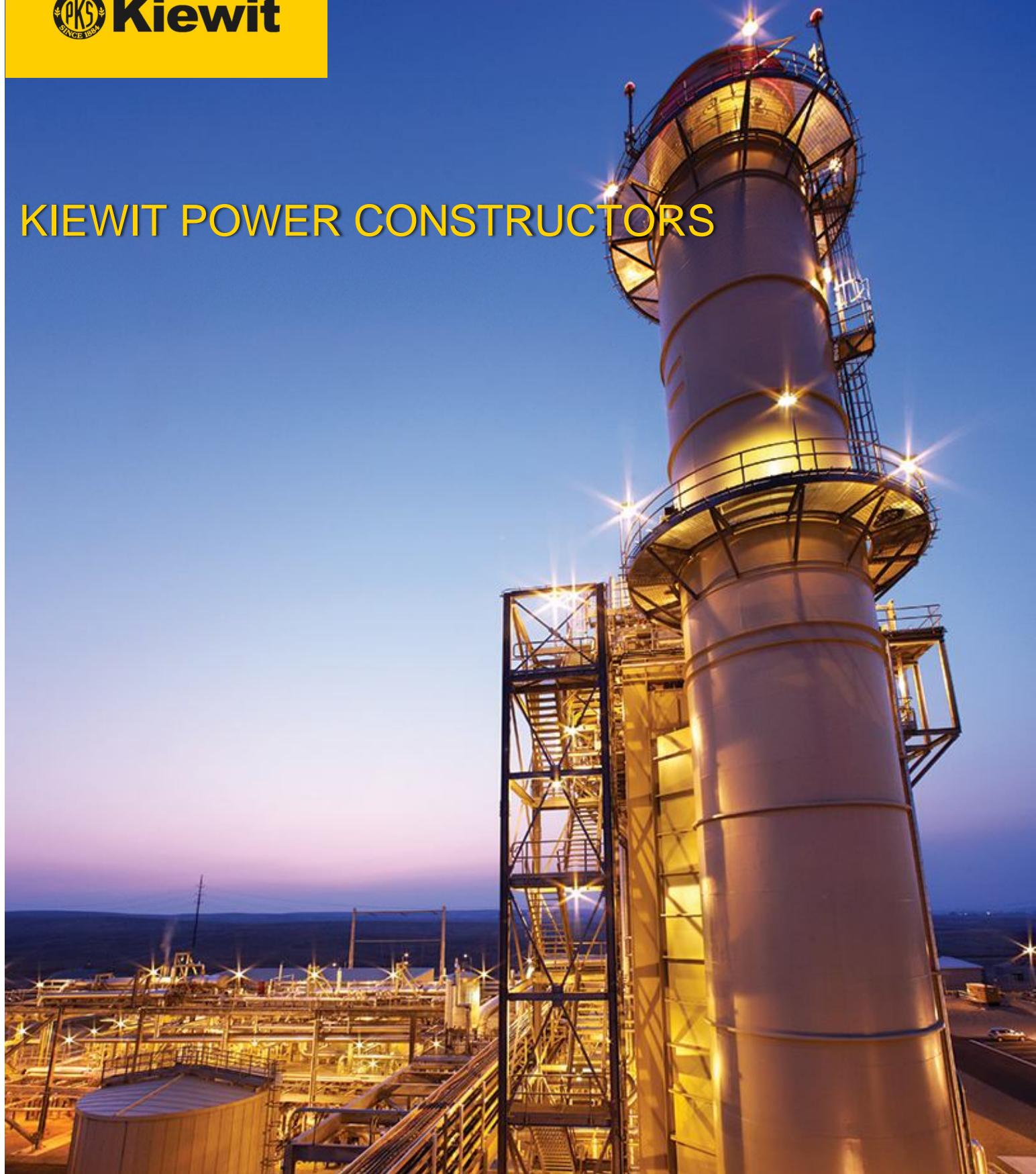
A site specific plan will be provided two weeks prior to the onsite pre-construction meeting which is required to be held two weeks prior to construction (see CC # 58).



Kiewit

Standard Manual Template
SA-GN-ML-001

KIEWIT POWER CONSTRUCTORS



KIEWIT.COM



Table of Contents

Introduction.....	6
Statement of Policy.....	6
Purpose.....	7
Scope.....	7
Responsibilities	7
Safety Procedures	8
1.0 Management Leadership and Employee Involvement	8
1.1 Safety Meetings	8
1.2 Safety Recognition.....	8
1.3 Safety Inspections.....	8
1.4 Job Hazard Analysis.....	8
1.5 Subcontractor Safety Management.....	8
1.6 New Employee Safety Orientation	8
1.7 Management of Change.....	8
1.8 Disciplinary Action Procedure.....	8
1.9 Drugs and Alcohol Policy	9
1.10 Injury Management – Incident Reporting.....	9
1.11 Project Safety Planning and Execution.....	9
1.12 Access to Medical Records.....	9
1.13 Documentation and Regulatory Compliance.....	9
1.14 Fatigue Management.....	9
1.15 Fit for Duty	9
1.16 Safe Process	9
1.17 Short Service Employees.....	9
1.18 Safe Return to Work.....	9
2.0 Worksite Analysis	9



2.1 Hazard Communication.....	10
2.2 Industrial Hygiene	10
2.3 Incident Investigation Procedure.....	10
2.4 Life Saving Actions	10
2.5 Safety Assessments	10
3.0 Hazard Prevention and Control	10
3.1 Asbestos.....	10
3.2 Benzene.....	10
3.3 Bloodborne Pathogens.....	10
3.4 Compressed Gases / Cylinders.....	10
3.5 Concrete and Masonry Construction.....	11
3.6 Confined Space Procedure.....	11
3.7 Demolition Work.....	11
3.8 Drinking Water and Sanitation.....	11
3.9 Electrical Safety	11
3.10 Emergency Action Plan.....	11
3.11 Trenching and Excavation Procedure.....	11
3.12 Housekeeping and Access	11
3.13 Fire Prevention.....	11
3.14 General Gas Hazards.....	11
3.15 Hearing Conservation.....	11
3.16 Heat Stress Prevention Program.....	12
3.17 Ladder Procedure	12
3.18 Lead	12
3.19 Lock Out Tag Out Procedure.....	12
3.20 Material Handling & Storage.....	12
3.21 Mobile Equipment.....	12
3.22 Office Safety.....	12



3.23 Personal Protective Equipment	12
3.24 Personnel Lifts Procedure.....	12
3.25 Process Safety Management.....	12
3.26 Protection of the Public	13
3.27 Respiratory Protection.....	13
3.28 Rigging.....	13
3.29 Safe Cargo Loading and Unloading	13
3.30 Scaffolding.....	13
3.31 Danger and Caution Barricades	13
3.32 Silica Protection	13
3.33 Simultaneous Operations (SIMOPS)	13
3.34 Tools and Equipment Procedure	13
3.35 Vacuum Truck	14
3.36 Vehicle Safety	14
3.37 Cutting and Welding Procedure.....	14
3.38 Dropped Object Prevention.....	14
3.39 Severe Weather Procedures	14
3.40 Cold Weather Working Plan.....	14
3.52 Compressed Air	14
4.0 Occupational Health/ Environmental Controls	14
4.1 First Aid and Medical	14
4.2 Back Injury Prevention.....	14
4.3 Knife Procedure	14
4.4 Temporary Power	14
4.5 GFCI.....	15
4.6 Arc Flash.....	15
5.0 Fall Protection and Overhead Work.....	15
5.1 Fall Protection Procedure.....	15



5.2 Open Holes.....	15
5.3 Traffic Control.....	15
5.4 Rollover Protective Structures	15
5.5 Pipe Testing Procedure.....	15
5.6 Governmental Inspections	15
5.7 Rescue Planning (NEW)	15
5.8 Grounding Procedures (NEW).....	15
6.0 Cranes and Derricks.....	15
6.1 Corporate Crane Procedures Manual.....	16
6.2 KPC Additional Crane Policies	16
7.0 KPC Safety Best Practices	16

Introduction

"Nobody Gets Hurt" means just that - no incidents and no injuries, no matter how seemingly minor. We all have family and friends who care about us and want us to stay safe at work. We also care about our coworkers and take seriously our responsibility to keep each other safe on the job. No matter what job you do, "Nobody Gets Hurt" applies to you. Embrace it; promote it; live by it.

Nothing is more important.

Statement of Policy

It is our policy to perform work in the safest manner possible and be consistent with good construction practices. To fulfill the requirement of this policy, an organized and effective safety program must be carried out at the job location where the work is performed.

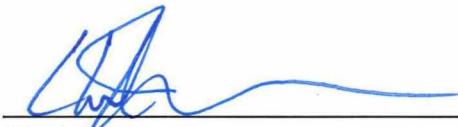
Responsibility for the safety program is delegated to line supervision in accordance with the chain of command. The Safety Manager is a staff assistant to line personnel, and their presence in no way relieves the line organization of its responsibility.

We recognize that to achieve and maintain safe operations, there must be written guidelines which will assist employees in conducting their daily work activities in a safe and efficient manner. We also recognize that all personnel associated with the construction operations must consider safety as an integrated function of their individual responsibilities and duties.

This manual contains Safety Responsibilities of Management Personnel, Field Employees, and Safety Department Personnel. Also included are several safe work programs and procedures, which will be updated and supplemented with others as the need arises. This manual has been established to perform the following objectives:

1. Source of safety and health material for project management.
2. Policy guide for company programs.
3. Source document for training.

The Champlain to Hudson Power Express project will write a formal Site Specific Safety Plan that addresses the specific safety and health issues and regulations for their project. The site-specific manual must be written to be equal to or exceed the degree of protection provided by this reference manual.



Chad Jessen
Vice President
Kiewit Power Constructors Co.



Purpose

The purpose of the KPC Safety Manual is to standardize the project safety programs across all KPC sponsored projects and to provide the project team with the resources and documents needed to execute the project in accordance with the contract requirements and the KPC safety policy. The links contained within this Safety Manual will provide the user with all the supplemental information and documents needed to run an effective project safety program.

Scope

The Safety Manual applies to all work performed on KPC sponsored projects. Applicable legislative requirements, additional contract requirements, and site-specific policies are used in conjunction with this Safety Manual when work is performed.

Responsibilities

Commitment and excellence in safety and health is a core value to Kiewit as a corporation and it is expected that every employee takes responsibility and ownership of the safety program. On our projects, some members of management will have specific responsibilities which are detailed for each position by clicking the links below.

District Safety Manager

Area Safety Manager

Project Manager

Project Safety Manager

Project Construction Manager

Superintendent

Stop Work Authority

Safety Procedures

The Safety Procedure Documents describe the key safety functions that must stay consistent across all KPC projects. Click the links below to find additional resources and information.

1.0 Management Leadership and Employee Involvement

Management Leadership and employee Involvement are integral components in performing safe operations. Below are procedures that will be implemented to help facilitate activate employee involvement and ownership of the Safety Program.

1.1 Safety Meetings - The purpose of this procedure is to outline the various safety-related meetings which are required to take place on each project. These meetings will serve as the minimum standard, to which projects may add additional meetings.

1.2 Safety Recognition- This procedure has been established to encourage employee participation in the Company's safety program. This is a great opportunity for management to set safety goals for individuals, groups, crews, or the project and celebrate their achievements.

1.3 Safety Inspections- This procedure has been established to outline the various safety inspections which are required to take place on each project.

1.4 Job Hazard Analysis- This procedure has been established to outline the requirements of The Job Hazard Analysis (JHA), which is a means whereby work practices are reviewed and potential safety concerns are uncovered before an operation begins.

1.5 Subcontractor Safety Management- This procedure has been established to ensure consistent requirements in order to ensure subcontractor involvement in, and compliance to our safety program.

1.6 New Employee Safety Orientation- This procedure has been established to outline the requirements of New Hire Orientation for all Company employees, subcontractors, and site visitors.

1.7 Management of Change - Policy for safety program administrative changes that may impact procedures in regards to health and safety.

1.8 Disciplinary Action Procedure- This procedure has been established to ensure that safety and health policies are being followed and employees are actively engaged in the safety program.



1.9 Drugs and Alcohol Policy- This procedure has been established to ensure that employees are not under the influence of drugs and alcohol in the workplace.

1.10 Injury Management – Incident Reporting - To ensure the Injury Management Process is implemented and maintained in accordance with our Corporate Purpose and Core Values, along with establishing uniform procedures for the investigation and completion of reports regarding occupational accidents, injuries, and illnesses.

1.11 Project Safety Planning and Execution - Strategic project planning and execution is a fundamental necessity in reaching our vision of Nobody Gets Hurt.

1.12 Access to Medical Records - The purpose of this section is to provide employees and their designated representatives a right of access to relevant exposure and medical records; and to provide representatives of OSHA a right of access to these records to fulfill responsibilities under the Occupational Safety and Health Act.

1.13 Documentation and Regulatory Compliance - Documentation is a basic component of a successful Safety Program, and is essential for compliance with federal, state, provincial and local regulatory agencies, as well as company regulations. Laws have been passed in every jurisdiction requiring employers to retain and produce records of various kinds.

1.14 Fatigue Management - The purpose of this document is to identify the safety procedures and requirements for fatigue management.

1.15 Fit for Duty - The Company has implemented this policy to help ensure that employees are physically fit and capable to perform the job duties assigned to them on projects sponsored by KPC.

1.16 Safe Process - To describe the elements of the Company's Safe Process and the expectations required of key roles in the implementation and maintenance of the overall process.

1.17 Short Service Employees - This program provides mentors the guidelines to appropriately supervise, train, and monitor new and inexperienced craft employees.

1.18 Safe Return to Work - The Company has implemented this policy to maintain ill or injured employees on the job and to return individuals with a disability to work soon as possible to best serve the employees that have a disability and to minimize liability and workers' compensation losses.

2.0 Worksite Analysis



2.1 Hazard Communication - The purpose of this Procedure is to provide minimum guidelines for the establishment and implementation of a project, or location, specific Hazard Communication Program and to provide guidance for Company employees when working with or in close proximity to certain specific toxic contaminants. Projects shall comply with the provisions outlined in OSHA 29 CFR 1910.1200 / OSHA 29 CFR 1926.59 for Hazard Communication.

2.2 Industrial Hygiene - This plan defines procedures and standards for Industrial Hygiene (IH) work and best practice while working with and around workplace hazards.

2.3 Incident Investigation Procedure- This procedure has been established to ensure that safety incidents are investigated and communicated properly.

2.4 Life Saving Actions - Focusing on the potential outcome of an incident or event to proactively improve our safety culture, keeping our employees, subcontractors, and visitors safe.

2.5 Safety Assessments - Projects will maintain Safety Inspection records. At a minimum, safety tours will be conducted daily on each project.

3.0 Hazard Prevention and Control

The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart C- General Safety and Health Provisions. These procedures “set the tone” for our commitment to safe operations.

3.1 Asbestos- This procedure has been established to eliminate or minimize the hazards that arise when disturbing Asbestos.

3.2 Benzene – This document provides guidelines to achieve compliance with the OSHA Benzene Standard for the construction industry which is identical to [OSHA 29 CFR 1910.1028](#) . This document does not address local, state, or contractual requirements that differ from the federal standard. This document does not replace site specific compliance programs that are required when exposures exceed the permissible exposure limit (PEL).

3.3 Bloodborne Pathogens - This procedure has been established to eliminate or minimize employee exposure to potentially infectious materials.

3.4 Compressed Gases / Cylinders - This document provides requirements for the use, transportation, and storage of compressed gas, to ensure hazards are mitigated minimizing the risk to employees, the public, and the environment.



3.5 Concrete and Masonry Construction - Procedure outlines specific policies, considerations, and requirements while performing this type of work.

3.6 Confined Space Procedure - This procedure has been established to ensure that employees entering confined spaces are protected from known hazards and exposures associated with confined space entry.

3.7 Demolition Work - This Procedure provides the safety and other general requirements to safely perform Demolition work activities and to ensure that hazards are controlled to minimize the risk to employees, the public health and welfare, and the environment. Any applicable regulatory or Company requirements shall be followed, with the most stringent being met.

3.8 Drinking Water and Sanitation - KPC is committed to providing a sanitary, adequate, and readily available supply of drinking water for employees.

3.9 Electrical Safety - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart K- Electrical.

3.10 Emergency Action Plan – This procedure has been established to ensure the safety and well-being of all employees in the event of an emergency.

3.11 Trenching and Excavation Procedure- This procedure has been established to eliminate or minimize the hazards associated with performing work in trenches and/or excavations. These procedures in this section are based upon the standards set forth in OSHA 1926 Subpart P- Excavations.

3.12 Housekeeping and Access- This procedure has been established to outline the requirements of Housekeeping and Access on our projects.

3.13 Fire Prevention - To establish guidelines that must be incorporated in the development of a Fire Protection and Prevention Program to be followed throughout all phases of a project; to detect, alleviate and control construction fire

3.14 General Gas Hazards - This document defines the procedures and guidelines for controlling and precluding exposures to hazardous gasses.

3.15 Hearing Conservation - This procedure has been established to eliminate or minimize employee exposure to noise levels exceeding allowable levels.



3.16 Heat Stress Prevention Program - This procedure is intended to inform KPC projects of practices that should be implemented to assist in reducing heat related illnesses.

3.17 Ladder Procedure - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart X- Ladders. Ladder Procedure- This procedure has been established to eliminate or minimize the hazards associated with working on ladders.

3.18 Lead - It is KPC policy that when employees are involved in work where they will be exposed to or disturb materials which may contain lead they will follow the requirements of this section.

3.19 Lock Out Tag Out Procedure - The scope of this LOTO (Lock-out Tag-Out) procedure describes the methods to properly lock and tag a system or component both before and after turnover of the system from Construction to Start Up.

3.20 Material Handling & Storage - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart H- Materials Handling, Storage, Use, and Disposal.

3.21 Mobile Equipment - This Procedure provides safety controls and requirements for the use of mobile equipment to protect workers from hazards while using this equipment by Company and subcontract employees on all Company projects. Any applicable regulatory or Company requirements shall be followed, with the most stringent being met.

3.22 Office Safety – The Health and Safety of employees shall be directed not only to those working within the elements of industrial and construction work areas, but also those employees assigned to office environments, in such a manner as to minimize the risk of accidents, injuries and illnesses.

3.23 Personal Protective Equipment - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart E- Personal Protective and Life Saving Equipment. PPE Procedure - This procedure has been established to ensure that employees are adequately protected from known hazards using personal protective equipment.

3.24 Personnel Lifts Procedure - This procedure has been established to eliminate or minimize the hazards associated with the use of personnel lifts.

3.25 Process Safety Management - This Procedure provides guidelines for complying with the OSHA Process Safety Management Standard OSHA 29 CFR 1926.64. The OSHA standard applies to projects performing work on or adjacent to a chemical processing facility. Contact your District Safety Manager to determine if the PSM standard applies to your work.



3.26 Protection of the Public - Although there are no specific regulations that address workplace security or protecting the public, Section 5(a)(1) of the Occupational Safety and Health Act (the General Duty clause), states that organizations are required to provide employees with a safe workplace. The Company also has a duty to provide protection to the general public from the hazards of construction activities.

3.27 Respiratory Protection - This policy defines and outlines the Company Respiratory Safety standard and how it applies to the Company employees working on Company locations or in owner facilities.

3.28 Rigging - This Procedure establishes the Company policy for protection of employees during crane and rigging operations.

3.29 Safe Cargo Loading and Unloading - This procedure has been established to ensure that we have clear guidance and direction when loading and or unloading trucks and/or trailers.

3.30 Scaffolding - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart L- Scaffolds. This procedure has been established to ensure the mitigation of the hazards associated with scaffolds through proper erection, tagging, and inspection practices.

3.31 Danger and Caution Barricades - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart G- Signs, Signals, and Barricades. This procedure has been established to ensure that employees are protected from and warned of known high hazard areas.

3.32 Silica Protection - This document defines the guidelines and procedures to use when performing work where there is a presence of silica at or above the 8 hour TWA. Silica is a natural constituent of the earth's crust and is a major component of sand and granite. Silica can be a hazard mainly as an airborne dust in its natural state or combined with other materials, as in paint. Other potential sources are inorganic Silica compounds and organic Silica soaps.

3.33 Simultaneous Operations (SIMOPS) - This document outlines the processes and general plan for conducting simultaneous operations (SIMOPS) to ensure the safety of personnel and the protection of the environment and equipment.

3.34 Tools and Equipment Procedure - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart I- Tools. This procedure has been established to ensure a safe work environment for employees using various types of tools.



3.35 Vacuum Truck - This section addresses issues associated with vacuum truck operations.

3.36 Vehicle Safety - Vehicle safety provides guidelines and requirements while using vehicles within the scope of work related activities.

3.37 Cutting and Welding Procedure - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart J- Welding and Cutting. This procedure has been established to eliminate or minimize the multitude of hazards associated with welding and cutting.

3.38 Dropped Object Prevention – This procedure has been established to ensure that dropped object prevention is at the forefront and provides guidance to our superintendents to minimize or eliminate dropped objects.

3.39 Severe Weather Procedures - Most our work here at Kiewit Power Constructors is performed outdoors and is affected by all types of weather. One of these weather events is lightning. Lightning can strike from 6 miles away. Our employees' exposure to lightning puts them at risk of being struck by a bolt, causing personal injury. This policy covers the minimum requirements required on this project to protect our workers.

3.40 Cold Weather Working Plan - To review the program's requirements of employees working in cold weather conditions.

3.52 Compressed Air - The Company has implemented this policy to help reduce the risk(s) associated with working with compressed air on projects sponsored by KPC.

4.0 Occupational Health/ Environmental Controls

The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart D- Occupational Health/ Environmental Controls.

4.1 First Aid and Medical - This procedure has been established to ensure preparedness for medical events which may arise at a company location.

4.2 Back Injury Prevention - This procedure has been established to reduce the potential for back injuries.

4.3 Knife Procedure- This procedure has been established to outline the requirements for using knives on projects.

4.4 Temporary Power - This procedure has been established to eliminate or minimize the hazards associated with the use of temporary power.



4.5 GFCI - This procedure has been established to ensure employee safety from electrical hazards using GFCI's or an assured grounding program.

4.6 Arc Flash - This procedure has been established to ensure that when work is to be performed within an Arc Flash Boundary or Limited Approach Boundary the proper steps are followed to protect employees from potential hazards.

5.0 Fall Protection and Overhead Work

The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart M- Fall Protection.

5.1 Fall Protection Procedure - This procedure has been established to ensure proper application and use of fall protection systems.

5.2 Open Holes - This procedure has been established to eliminate employee exposure to open holes.

5.3 Traffic Control - This procedure has been established to ensure that operations involving traffic control are executed properly.

5.4 Rollover Protective Structures - The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart W- Rollover Protective Structures. Reserved

5.5 Pipe Testing Procedure - This procedure has been established to eliminate to minimize the hazards associated with pipe testing.

5.6 Governmental Inspections - This procedure has been established to provide guidelines to any local, state or governmental inspection.

5.7 Rescue Planning (NEW) - This procedure has been established to provide guidelines to rescue planning.

5.8 Grounding Procedures (NEW) - This procedure has been established to provide guidelines to safe grounding of energized lines.

6.0 Cranes and Derricks

The procedures in this section are based upon the standards set forth in OSHA 1926 Subpart CC- Cranes and Derricks in Construction.



6.1 Corporate Crane Procedures Manual - The Corporate Crane Procedures Manual outlines the standards for crane operations as a Corporation.

6.2 KPC Additional Crane Policies - Additional crane policies which apply to all Kiewit Power sponsored projects.

7.0 KPC Safety Best Practices

Environmental Inspection Form

Environmental Inspection Services	Environmental Inspection Report Report Run Date:	
Record Information		
Inspection Report #:		
Inspector Name:		
Time Inspected:		
Date Inspected:		
Location & Activity Information		
Spread:		
Milepost Begin:	Crew Activity:	
Milepost End:	Task Activity:	
Stationing Begin:	Contractor:	
Stationing End:	Feature Associated (Y/N):	
Latitude Coordinate:	Feature ID:	
Longitude Coordinate:	Feature Type:	
Weather Information		
Weather:		
Temperature:	Wind Speed & Direction:	
Precipitation:	Rain Event (>0.5"/24hrs):	
Compliance Information		
Acceptable (Y/N):		
Problem Area Observed (Y/N):		
Non-Compliance Observed (Y/N):		
Stop Work Directive Ordered (Y/N):		
Serious Violation Observed (Y/N):		
Variance Required (Y/N):		
If yes to any of the above, please provide complete description below:		
Inspection Notes		
Specification Requirements:		
Inspector Notes:		
Resolution Statement (Follow-up Inspections Only):		

Environmental Inspection Services	Environmental Inspection Report		
Photos			
Location: Direction of Photo: Description:			
Location: Direction of Photo: Description:			
Location: Direction of Photo: Description:			