

Schumann Wind, LLC
Wind Turbine Facility Schumann Wind, LLC.
Emergency Response Procedures

Date: May 2017

APPROVAL DOCUMENT

Schumann Wind, LLC
Emergency Plan
Approval:

(approval name & title)

(approval signature)

(date)

Site/Facility
Plan Approval:

(approval name & title)

(approval signature)

(date)

Effective
Date:

May 22, 2017

Plan Review:

These wind turbine facility Emergency Response Procedures shall be reviewed and updated at an interval not to exceed 15 months, but at least once each calendar year. Also, when major revisions to the plan occur, the appropriate Managers/Supervisors shall re-approve this plan.

Purpose:

This Emergency Response Plan outlines the procedures and methods Schumann Wind, LLC will utilize in providing a safe place for operators or contractors while attending to the facility maintenance or operational needs.

Applies
To:

This Plan applies to the wind turbine facility "SCHUMANN WIND LLC" in Umatilla County Oregon.

Schumann Wind, LLC
WIND TURBINE FACILITY “SCHUMANN WIND, LLC.”
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Introduction and Scope

Scope of Manual:

The purpose of this manual is to provide procedures to be followed by wind turbine facility operators/personnel in any emergency involving the wind turbine facility “SCHUMANN WIND, LLC”. These procedures are written to assure the welfare and safety of the public and all emergency response personnel. Property is to be protected, but only after it is ascertained that the public is adequately protected from any consequences of the failure or accident. This plan is designed to facilitate the operator and local emergency responders in achieving the best and safest outcome should an emergency occur.

Description wind turbine facility

See attached “Fact Sheet.”

SCHUMANN WIND, LLC

Wind Turbine Facility Fact Sheet

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FACT SHEET

Basic Description:	<p>Schumann Wind project "SCHUMANN WIND, LLC." is a 4 or 5 turbine facility located in Umatilla County Oregon. The system consists of four "80 meter" tall towers each topped by GE wind turbine generators: 1 GE 1.79-100 and 3 GE 2.3-116, or five "80 meter" tall towers: 1 GE 1.79-100 and 4 GE 1.7-103. These wind turbines are fitted with a three (3) blade sweep system. The GE 1.7MW machines have a 103m blade sweep, the 1.79MW machines have a 100m blade sweep, and the 2.3MW machines have a 116m blade sweep.</p> <p>The system is located in the rolling landscape consistent with adaptation to a wind environment that facilitates optimum use of local topography. The localized wind features are suitable for consistent and reasonable use of the local environment to enhance the local communities need for additional GREEN POWER. A plus is the enhancement to the localized tax base and providing an additional income stream to the communities affected by the facilities output as well as local employment during and after the initial construction phase.</p> <p>The projects over all effect will be a needed addition to enhancing both local and regional GREEN ENERGY needs.</p>
Jurisdictional:	Local Agency, State of Oregon, Federal Public Utilities Commission
Type of Turbines:	GE 1.7-103, GE 1.79-100 or GE 2.3-116
# Facility Turbines:	4 or 5 Turbines
Size of Turbines:	Tower 80 Meters / Blades with either 100, 103 or 116 meter rotor sweep
Turbine Manufacturer:	GE
Turbine Type:	3 Bladed pitch regulated upwind turbine with active yaw
Turbine Facility Operator/Owner:	
Power Output:	1.7, 1.79 or 2.3 MW per unit
Facility ID #:	
Normal Operating Output:	
Max. Operating Potential/Output:	
Method Determined:	
Emergency Shutdown System:	Braking, Short Circuit Protections, Over speed Protection, Lightning Protections, Earthling, Corrosion Protection
Over Output Protection:	See Above
Facility Start Up Date:	

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Glossary of Terms and Acronyms

ACGIH	American Conference of Governmental Industrial Hygienists. This group is best known for developing TLV's for occupational chemical exposures.
AHM	Acutely hazardous material (CH & SC Sec. 25532 et seq.)
ANSI	American National Standards Institute
APWA	American Public Works Association
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
BLEVE	Boiling-liquid expanding-vapor explosion. The possible result of a Complex sequence of event involving the impingement of flame on the exterior of a container of liquefied gas.
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
CHEMTREC	Chemical Transportation Emergency Center
CHRIS	Chemical Hazards Response Information System
CMA	Chemical Manufacturers Association
CWA	Clean Water Act
DOHS	Department of Health Services ().
DOT	Department of Transportation (federal agency)
DEQ	Department of Environmental Quality
EHS	Extremely hazardous substance (SARA Title III). Any of 406 chemicals identified by EPA as toxic and listed under SARA Title III, 40 CFR 355, Appendix A. The list is subject to periodic revision.
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act of 1986. A.k.a. SARA Title III (42 U.S.C. Sec. 9601 et seq.)
ERPG	Emergency Response Planning Guide
ESD	Emergency Shutdown
FEMA	Federal Emergency Management Agency
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response 29 CFR 1910.120.
HCS	Hazard Communication Standard (HAZCOM)
ICS	Incident Command System. The organizational arrangement by which One person, normally the Fire Chief of the impacted district, is in charge of both an integrated, comprehensive emergency response organization and the emergency incident site and is backed by an Emergency Operations Center staff with resources, informational, and advice.
IDLH	Immediately Dangerous to Life or Health
LEPC	Local Emergency Planning Committee

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LEL	Lower explosive limit or lower flammable limit (LFL). By percentage, The lowest concentration of a substance in air, which will ignite.
LFL	See LEL .(Lower Flammable Limit)
MSDS	Material Safety Data Sheet
NACE	National Association of Corrosion Engineers
NCRIC	National Chemical Response and Information Center
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NIOSH	National Institute of Occupational Safety and Health
NRC	National Response Center.
NRT	National Response Team
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
OERS	Oregon Emergency Response System
OSP	Oregon State Police
OSFM	Oregon State Fire Marshal
OSHA	Occupational Safety & Health Administration (federal).
OWQ-GWPP	Oregon Water Quality- Ground Water Protection Plan
PPb	Parts per billion
Ppm	Parts per million
SARA	Superfund Amendments and Reauthorization Act of 1986
SPCC	Spill prevention, control, and countermeasures plan (from CWA).
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TPQ	Threshold planning quality (from EPCRA). A quantity designated for Each chemical on the list of extremely hazardous substances that triggers Notification by facilities to a State Emergency Response Commission that such facilities are subject to emergency planning requirements under SARA Title III.
TWA	Time-Weighted Average
UEL	Upper explosive limit or upper flammable limit (UFL). The maximum Percentage of substance in air which will ignite. (See also LEL).
UFC	Uniform Fire Code.
UFL	Upper Flammable Limit
ULCC	Utility Location and Coordination Council
USCG	U.S. Coast Guard
U.S. EPA	United States Environmental Protection Agency.
U.S.F.S.	United States Forest Service

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PRE-EMERGENCY PLANNING

This Emergency Response Plan shall be reviewed and updated at least once per calendar year not to exceed 15 months. In addition to updating the Plan, several additional activities shall be completed before responding to emergencies. Below is a summary list of these activities followed by a detailed description of these items.

Summary of Potential Pre-Emergency Activities

- Review and update emergency plan.
- Emergency drills and training.
- Liaison with public officials.
- Public education program.
- HAZWOPER training [29 CFR 1910.120]
- High Angle Rescue
- Emergency Utilization Rotary Wing Aircraft
- Roadway Maintenance-Annual Fire Prevention
- Facility Safety Zones
- Post Emergency Activities

Emergency Drills and Training

Periodically, a simulated emergency shall be conducted to test the Emergency Plan, train personnel, and test their competency in implementing the plan. These drills shall be as realistic as possible without endangering any lives or property or reducing services to any party at the wind turbine facility “SCHUMANN WIND, LLC.”. These drills may be field exercises, table top drill, or class room training, or a combination of these methods. Note that an actual emergency may be used as a drill or training method if the actual emergency is reviewed and documented as required.

Appropriate emergency response groups and agencies may be invited to partake in the drill when appropriate. These groups may include local fire departments, county emergency response agencies, State Police or Highway Patrol, U.S. Coast Guard, and local police departments. All aspects of the Emergency Plan shall be tested including inter-agency cooperation.

Facility Supervisors will verify that employee training is effective by administering a written exam, oral interviews, or table top drills. After verification is completed, a record of each person’s training shall be placed in the facilities files.

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PRE-EMERGENCY PLANNING (cont.)

Liaison With Public Officials & Other Emergency Response Agencies

The Company will establish and maintain liaison with appropriate fire, police and other emergency response agencies to enhance response communications as well as agency response capabilities. Face to face meetings with representatives from these agencies is the preferred method. The purpose of the meeting includes the following purposes:

- ❑ Learn the responsibility and resources of each government organization that may respond to a wind turbine facility emergency.
- ❑ Acquaint the officials with the operator’s ability in responding to a wind turbine facility emergency.
- ❑ Identify the types of emergencies of which the operator notifies the officials.
- ❑ Plan how the operator and officials can engage in mutual assistance to minimize the hazards to life or property.

The Company will provide the agencies with a copy of this Emergency Plan or an abbreviated version applicable to emergency response personnel.

Public Education Program

The Company will conduct a limited/informational continuing education program for the general public residing within the surrounding communities should one be required.

- Description of facts and information about the wind turbine facility
- Explanation on how to recognize and report a facility emergency.
- How to contact SCHUMANN WIND, LLC using the 24 hour number () to report an emergency or discovery of a possible facility problem.
- Importance of reporting any signs of a facility problem no matter how slight.

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PRE-EMERGENCY PLANNING (cont.)

HAZWOPER Training (Hazardous Waste Operations and Emergency Response)

Company contracted personnel who may be called upon to respond to emergencies involving releases of hazardous materials must comply with OSHA regulations in 29 CFR 1910.120. Company employees, who would be called upon to respond to emergencies involving a hazardous materials release, or substantial threat of release, will be suitably trained under the requirements of the HAZWOPER regulations. First Responder Awareness (FRA) a minimum.

HAZWOPER requirements also apply to contractors and sub-contractor personnel. Company personnel will ensure contract personnel have received proper HAZWOPER training appropriate for the job being performed.

PRE-EMERGENCY PLANNING (cont.)

HAZWOPER Training Levels

Company or contracted response employees shall never work beyond their level of training or capabilities during an emergency. Below is a summary of the expected training levels for each job title for the Company employees who may be expected to respond to a facility emergency situation. See federal regulations, 29 CFR 1910.120 for details.

Job Title	Hazwoper Training Level	Initial Training Required	Annual Refresher Training Required
General Manager or Contracted Responder Incident Commander	Incident Commander (IC)	24 hr	Whatever it takes to cover appropriate topics (See duties below)
Facility Supervisor or Maintenance Supervisor or Operations Supervisor or Contracted Responder	Incident Commander (IC)	24 hr	Whatever it takes to cover appropriate topics (See duties below)
Regulatory Compliance Advisor	Incident Commander (IC)	24 hr	Whatever it takes to cover appropriate topics (See duties below)
Facility Operator or Contracted Responder	1 st Responder Awareness (FRO)	8 hr	Whatever it takes to cover appropriate topics (See duties below)
Facility Technician	1 st Responder Awareness (FRA)	8 hr	Whatever it takes to cover appropriate topics (See duties below)

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Mechanic	1 st Responder Awareness (FRA)	8 hr	Whatever it takes to cover appropriate topics (See duties below)
Maintenance Worker	1 st Responder Awareness (FRA)	8 hr	Whatever it takes to cover appropriate topics (See duties below)

PRE-EMERGENCY PLANNING (cont.)

HAZWOPER: FRA First Responder Awareness

CBT Training for awareness level only:

- Identify
- Isolate
- Notify

HAZWOPER: FRO Description of Training Required

The First Responder needs to be trained in the following areas:

- Knowledge of the basic hazard and risk assessment techniques.
- Know how to select and use proper PPE provided to the first responder operational level.
- An understanding of basic hazardous materials terms.
- Know how to perform basic control, containment, and/or confinement operations and rescue injured or contaminated persons within the capabilities of the resources and PPE available with their unit.
- Know how to implement basic equipment, victim, and rescue personnel decontamination procedures.

HAZWOPER: IC Description of Training Required

The Incident Commander needs to be trained in the following areas:

- Know and be able to implement the employer’s incident command system.
- Know how to implement the employer’s emergency response plan.
- Know and understand the hazards and risks associated with employees working in chemical protective clothing.
- Know of the state emergency response plan and of the Federal Regional Response Team.
- Know and understand the importance of decontamination procedures.

HAZWOPER: Refresher Training

- Annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly.
- A statement shall be made of the training or competency; and if a statement of competency is made, the employer shall keep a record of the methodology used to demonstrate competency.

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- ❑ Classroom or Computer Based Training Modules will be utilized to insure facility employees retain the annual Hazwoper Refresher (First Responder Operational) FRO for the facilities emergency response needs.

PRE-EMERGENCY PLANNING (cont.)

Verification of Approved Contractors

The Company shall verify and approve emergency contractors before contractors are called upon at the scene of an emergency. Approved contractors shall meet the following compliance criteria:

- ****Drug Plan and testing *If required by local, state or federal regulation.
- ❑ Operator Qualification *See Hazwoper Training Levels (Page 3)
- ❑ HAZWOPER Certifications [29 CFR 1910.120]

High Angle Rescue @ Project “SCHUMANN WIND, LLC”

The turbines at project “SCHUMANN WIND, LLC.” due to their height may require the utilization of the rescue services that are termed “High Angle Rescue”. The nearest Fire Department will respond in the event of an emergency providing the required basic life support (BLS) the basic EMT or advanced life support (ALS) Paramedic EMT-P. High Angle Rescue may be performed by internal means or contracted personnel as well.

It has been determined the nearest certified “High Angle Rescue” availability would be dispatched from the Portland Oregon City Fire Department. The Portland City Fire Department timeframes would be determined by method of transport. The rotary wing aircraft has been determined to being the most viable means of expediting the transportation of qualified response personnel. Additionally, “SCHUMANN WIND, LLC”. reserves the right to contract said services.

Upon arrival of the first Emergency Medical Services (EMS) units which include local fire service personnel the on-scene fire service commander in conjunction with the facility operator shall make the determination for requesting these specialized services. Means of rescue will be determined at the time and based upon severity as assessed by rescuers. (A stokes rescue basket will be in storage in one of every five tower bases), possibly utilized by means of the on-board tool hoist mechanism installed in the tower nacelle.

Basic training will be provided to local responders on the climbing and hoist mechanisms as they apply to the facility. No facility operations will occur in the nacelle without two (2) persons in attendance in the nacelle and one (1) person on the ground for communications and monitoring of the personnel in the nacelle for safe work practices and the communication of an emergency should one occur.

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Emergency Utilization of Rotary Wing Aircraft

Emergency air resources may be requested for facility use based upon the determination by local responding fire or EMS services determining the severity of an injury and level of care facility required should an injury of significance occur at the facility. Landing and departure locations will be determined based upon safe inbound and outbound flight paths as determined at the time of rescue need.

Ground support services may be required to move an injured patient to the nearest and safest location for rotary wing aircraft should an incident call for such actions. Pre-planning of these locations should be undertaken to insure the safest means for patient transport by aircraft is insured and adapted to expediting patient care.

Roadway Maintenance-Annual Fire Prevention

The facility service roads will be maintained and kept in serviceable condition throughout the facility on an annual basis to insure safe access and egress during maintenance of equipment as needed. The roadways shall be maintained in such a manner as to negate pollution from loose soils, and may be treated for reduction of air born particulate as prescribed by Umatilla County Air Board restrictions should they be applicable. A minimal environmental foot-print will be maintained during all phases of the “project”.

The private access roads established and controlled by the Wind Power Facility “SCHUMANN WIND LLC.” will be gated to protect the facility and the landowners from illegal trespass, illegal dumping and illegal hunting. A Knox Box system shall be in place for emergency responders as well as operators for the facility as well as appropriate landowners being provided secure access as well.

All resources will be protected to the highest practicable standard, not to exclude vegetation, water resources, air resources, wildlife habitat, and other elements deemed significant natural resources as applicable to the roadways. The roadways shall also be deemed as significant fuel or fire breaks to the project location. To be inspected and reported upon semi-annually by operator personnel. Not to exceed 15 months for both. (See attachment A).

Facility Safety Zones

At the request of local fire agencies a minimum of two (2) crane pads (approximately 300’ feet by 300’ feet) centrally located to the turbine rows will be retained after initial construction has occurred as facility fire safety zones or high ground assembly points for firefighting crews insuring a fire safe zone in the event of dangerous or unusual fire behavior. An on-site water retention tank not to exceed 4,000 gallons shall be maintained upon one if not both of the safety zones for firefighter safety. The East Umatilla Rural Fire Protection District has agreed in principle to the filling the tanks prior to fire season and draining in the off fire season of the water retention tanks.

During facility maintenance all on-site maintenance vehicles shall have a fire extinguisher and shovel(s) for firefighting in operable condition. No cutting of metals or welding shall occur unless

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a fire safe location is determined by the lead facility operator at the time of the maintenance procedure requiring such action. During periods of peak fire season all local and regional fire prevention laws will be obeyed. It will be the responsibility of the facility operator or lead maintenance personnel to insure of those determinations. No exceptions.

POST EMERGENCY ACTIVITIES

Once the emergency has been stabilized and the hazards have been eliminated or controlled, the post emergency response phase begins. Below is a summary list of these activities followed by a detailed description of how to perform these items.

Summary of Potential Post Emergency Activities

- Reporting safety related condition
- Emergency response critique and report
- Updating and revising emergency procedures
- Training & verification of appropriate personnel
- Drug testing
- Facility Haz-Mat equipment
- Contractor Cleanup, disposal, and restoration

Reporting Safety Related Conditions

It is the obligation of all Company personnel or contracted personnel who are aware of an unsafe or potentially unsafe condition to immediately report the matter to the attention of the employee's supervisor. Please note that an emergency may or may not result in a safety related condition report. (See attachment B)

POST EMERGENCY ACTIVITIES (cont.)

Emergency Response Critique and Report

All major emergencies are to be critiqued by the key supervisors involved as soon as possible after the emergency is concluded. All aspects of the emergency shall be reviewed to determine if changes shall be made. A report shall be prepared which outlines the procedure followed in solving the emergency and forwarded to the general Manager for distribution to the appropriate employees should the Incident require this action.

Measures shall be employed to analyze the accident or failure and to determine the cause. In some instances, especially in the case of material failure, laboratory analysis may be required. Review “Failure Investigation” procedures as a guideline for reviewing the incident. Refer to the Company Operations and Maintenance Manuals for details on a failure investigation.

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In addition, after each emergency, the Company will conduct a post accident review of employee activities to determine whether the emergency response procedures were effective. If deficiencies are found in the emergency response plan or in the actions taken by employees, the Company will take appropriate action.

This review should be undertaken within the first twenty four (24) hours Post-Incident to insure accurate, timely information is obtained concerning the Incident and those actions undertaken to mitigate or manage the Incident.

Actions taken by other response groups shall be included in the post accident critique. Critique results should be discussed with these groups so they will be aware of any possible deficiencies or actions taken in their response affecting the outcome of the event.

The review shall be approved by the General Manager as soon as possible after the end of the emergency, the follow-up Investigation or applicable local state or federal requirements or laws should they apply.

Updating and Revising Emergency Procedures

After completion of the emergency response critique, emergency procedures shall be updated and revised as appropriate. Emergency response agencies and contractors shall be informed of any procedural changes that affect how they would respond to a facility event.

Training & Verification on Emergency Plan

After completion of the emergency response critique, the appropriate Company personnel will be trained to assure they are knowledgeable of the possible changed emergency procedures. Facility Managers or any applicable local, state or federal agency requirements may require verification that the employee training is effective by requesting the administration of a written exam and/or oral review.

POST EMERGENCY ACTIVITIES (cont.)

Drug and Alcohol Testing

In the event of an accident the facility operators may request the testing of employees for the presence of prohibited drugs after an accident. (Post-accident testing.) An operator shall make the determination to drug test each employee whose performance either contributed to the accident or cannot be completely discounted as a factor to the accident.

These drug tests shall be administered as soon as possible, but no later than 32 hours after an accident. An operator may decide not to test, but such a decision must be based on the best information available after the accident. This information must indicate that the employee's performance could not have contributed to the accident or, because of the time between that performance and the accident, a drug test would not be effective in determining whether that performance was affected by drug use.

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Cleanup, Disposal, and Restoration

Following any emergency involving a release of hazardous fluid (facility stored materials) from a turbine or transformer, the Company will clean up any damaged or polluted areas, dispose of any residual hazardous liquid, and restore the affected area to its pre-emergency condition. The amount of cleanup involved will depend largely on the properties of the released fluid, the quantity of fluid released, and the characteristics of the area in which the release occurred.

In general, low volatility liquids will cause the most soil and water pollution since they will not evaporate rapidly. Limited to no water impact is anticipated in the event of a release at the facility.

Much of the released liquid may be recovered directly by use of sorbent materials, boom materials or engineered retention facilities. However, these techniques are seldom 100% effective. Sorbent materials will be used on small releases and as a secondary liquid recovery technique. Any recovered liquid and materials contaminated with the liquid will be disposed of properly. It may be necessary to take contaminated soil, water, or absorbent materials to a licensed hazardous materials recovery or disposal facility.

Activities associated with emergency response, cleanup, and facility repair may alter the local soil contours, waterways, and vegetation. Following all cleanup and repair activities and effort shall be made to restore as much as practicable the affected area and its pre-emergency condition.

Facility Hazmat Equipment

Absorbent boom materials
Absorbent pads for oil based products
Diatomaceous Earth-absorbing materials (4) 25 lb bags
(2) 55-gallon over-pack haz-mat barrels
(2) Flat scoop shovels
(2) Oil resistant push brooms
PPE appropriate for level (D) clean up
Half Face or Full Face Respirator if required

Hazardous Materials Response & Clean up

County Haz-Mat Response
Umatilla County Fire Department-911

Safety Kleen Corp
814 East Ainsworth ST.
Pasco, Washington 99301-5826
1-509-544-6111

SCHUMANN WIND, LLC

Emergency Response Record Keeping Procedures

Date: May 2017

Record Keeping

General

The purpose of this procedure is to provide guidance when meeting the requirements of record keeping for Schumann Wind Turbine Facility. Maps, drawings, procedures and records shall be readily available to any person requiring these documents to perform the facilities duties. Additionally these records validate an on-going means of confirmation for regulatory review should the facility need to call up these items.

Process:

The appropriate person, as defined in the maintenance call up system, will generate the record for work performed. All records for reports, operations, maintenance, construction, repairs, and operator needs will be routed through the General Manager facilities Supervisor or Facility Advisor for review and signature. These records will then be placed into the Schumann Wind filing system as directed by the Facility Supervisor or General Manager or Facility Advisor. Only files directed by the General Manager "Schumann Wind will be allowed to be shipped to long term storage or destroyed.

Record Retention:

Each record will be retained for the time noted on the file index. Generally, routine operations, maintenance, and operator records will be kept for a minimum of five years. Construction, repair, and corrosion records will be kept for the life of the wind turbine facility

Records Location:

Generally, routine operations and maintenance records for project "SCHUMANN WIND LLC." will be kept in a wind turbine facility system binder by calendar year.

Records that require retention for life of the facility will be kept in the appropriate file location as noted in the Facility File Index. New construction, repairs, and other large projects should be combined into a project binder or file for placement into the project "SCHUMANN WIND LLC." filing system.

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Misc. Reports & Documents: Project "SCHUMANN WIND"

Description	Freq.	Record Retention	Record Location
1. Safety Related Condition	NA	Life of FACILITY	
2. Incident Report (telephone)	NA	Life of FACILITY	
3. Incident Report (written)	NA	Life of FACILITY	
4. Annual Report	*Annual	5 years	
5. Emergency Response Critique	*After incident	5 years	
6. Updates and Revisions to the Emergency Plan	*Annual Review, updates as needed	5 years	
7. Emergency Response Training	*Annual	5 years	
8. Operator Records	*Before and after task is preformed	5 years	
9. Drug Testing-if required post accident	Random	30 years	

* Recommended frequency

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First on Scene Response Activities

Date: May 2017

Overview: Regardless of the nature and /or severity of an incident, there are general tasks to be performed by the first company employee on the scene. These tasks are listed below and included in the “First On Scene Checklist”, Form #EM-2.

No two accidents or emergencies are identical. Therefore, it is not possible to write a checklist or procedure of responses for all emergency incidents, or even to a particular event. Appropriate action to be taken when an emergency situation occurs will be dictated by the conditions existing at the place and time of the incident. However, certain responses will be common to all emergencies. This section discusses only those responses that should be considered by the First Responder.

First Responder Responsibilities:

Scope and Assessment:

- Identify the type, form, nature, quantity and hazards involved in the incident.
- Protection of the public, responders, and company personnel are **1st Priority**

Notifications:

- Call 911 for any emergency, if not done already
- Call supervisor and appropriate company personnel

Mitigation

- Develop a proper course of action (evacuating, prevention of accidental ignition, etc.)
- Determine action needed to stop the incident (an emergency shutdown of all or part of the turbine, transformer, or on-site equipment, etc.)

First Responder Checklist:

“First On Scene Checklist”, Form #EM-2, is located at the end of this section or in the FORMS section of this Emergency Response manual.

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First on Scene Response Activities

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Scope and Assessment

Scope and Assessment Overview:

Upon arriving at the emergency scene, the First Responder should quickly assess the situation. This assessment would include the status of the emergency, an estimation of how the incident might progress, and an evaluation of the manpower, equipment, and materials needed to adequately cope with the situation.

The assessment must be based on the physical evidence, the behavior of the possible released fluid, and the results of the hazards analysis. The following questions illustrate the types of information you should be able to determine on-site.

Information Gathering:

- Is the fluid being released as a liquid, an aerosol, or a gas?
 - Is there a visible release, fire, smoke, odor?
 - Has a liquid pool started to form?
 - How large is the visible liquid pool?
 - Is the liquid pool likely to spread and enter a body of water?
 - Is the power shut down?
 - If already ignited, how large is the fire?
 - Is the situation immediately dangerous to persons or property?
 - Is the situation likely to get worse?
 - What can be done to reduce the risk to persons and property?
 - Are there ignition sources that need to be removed?
-

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First on Scene Response Activities

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Mitigation

Mitigation Overview:

Mitigation can be loosely defined as any procedure, practice, or act that decreases the likelihood of an accident causing injuries to persons or damage to property. There are several mitigation methods that may be of use during a release emergency, injury accident or fire. Training on possible mitigation methods will be conducted with all personnel who may be called upon to respond. This should be done before, not during, the emergency.

Evacuate or Shelter-in-Place

It is also possible to reduce risk to persons by removing them from a potentially hazardous area, or by shielding them from the effects of a particular hazard. When considering how best to protect people from a hazardous material release, a possible wild land fire at the facility, or a transformer or turbine based fire/emergency. One of the methods commonly suggested is evacuation. However, there are some disadvantages to evacuation.

Evacuation may take time and personnel. In some cases, such as release of flammable, non-toxic or toxic gas from a transformer, or within the Turbine Nacelle the time period of greatest danger is the first few minutes of the fire or release. After emergency shutdown and isolation, the vapor cloud, or smoke hazard zone should begin to decrease in volume. It is doubtful if evacuation can be accomplished quickly and safely enough to be of much help in this type of situation however. The number of persons needed to carry out the evacuation will rarely be available quickly enough.

Evacuation can expose people to the very hazard you are trying to protect them from. Due to the time required to begin an evacuation, the hazardous condition (fire, flammable vapor cloud, or toxic vapor cloud, energized equipment) may already pose a danger to persons who are either within the Nacelle or outdoors and have not sought shelter. In some cases, it is better to recommend shelter-in-place. With the shelter-in-place method, people are requested to remain indoors, and should not go outside unless absolutely necessary. A facility building fire safeguarded should one be available at the facility can provide a significant degree of protection from the heat effects of fires and even from the effects of toxic vapor clouds. The choice between

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evacuation and sheltering-in-place should be based on the results of a hazards analysis and the specific situation.

Mitigation (cont.)

**Ignition
Source
Control:**

A flammable, non-toxic vapor cloud may pose a danger to a large area. If ignited, the cloud might explode, or may simply burn back to the source of the flammable vapor. The explosion or burning cloud can injure exposed persons and cause a degree of property damage. If un-ignited, the vapor cloud will eventually be diluted below the lower flammable limit and dissipate harmlessly. The potential danger of a flammable, non-toxic vapor cloud is realized only if it is ignited.

Similarly, a release of flammable liquid that results in a liquid pool may cause some localized environmental damage, but will cause fire-related damage only if ignited. In many situations, it will be beneficial to prevent ignition of the released fluid.

To prevent ignition, it will be necessary to remove all potential ignition sources in or near the flammable vapor cloud or liquid pool, and prevent other potential ignition sources from entering the hazardous area. Potential ignition sources include automobiles, matches, cigarette lighters, internal combustion engines, electric motors, electric switches, static electricity, etc. Under some circumstances, it will be difficult to exclude all ignition sources from the hazardous area. Actually, it may be impossible under any set of circumstances since you cannot control all sources of static electricity. However, you should attempt to reduce the number of potential ignition sources to a minimum.

Be particularly careful when first responding to the scene so your vehicles or equipment do not ignite the release. The same precaution holds true for response personnel involved in hazard mitigation activities. Some of these activities, such as using vacuum trucks to collect spilled liquid, will introduce potential ignition sources to the area. Whenever possible, use intrinsically safe equipment or explosion-proof equipment during mitigation and cleanup activities. Intrinsically safe walkie-talkies and air powered tools are recommended.

If an emergency occurs near a road or highway, control of traffic may be desirable to prevent ignition.

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Mitigation (cont.)

**Emergency
Shutdown
And
Isolation:**

One method for reducing the area threatened by the release of a hazardous fluid is the prompt shutdown of pumps or compressors maintaining pressure in the turbine or transformer systems, and closing selected valves to isolate the release point. An emergency shutdown of pumps will cause the pressure at the release point to decrease, decreasing the release rate. Closing of valves will reduce the total quantity of fluid released. In some cases, it may not be possible to initiate emergency shutdown from the emergency scene. However, you should be able to contact the operations personnel and initiate the shutdown.

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 Form # EM-3

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Name of company person making calls: _____
 Title of company person making calls: _____

Agency Notifications:

Local Emergency Service: Fire or Medical Emergency	911, 24 hours/day EURFPD 1-(541)-566-2311 Milton-Freewater-1-(541)-938-7146
Persons Contacted:	_____
Person Title:	_____
Date and Time:	_____
Report #:	_____
Reporting Criteria: <ul style="list-style-type: none"> • Any facility emergency 	Comments:
Oregon State Police:	(541)-278-4090 24 hours/day - 911
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
NRC report #:	_____
Reporting Criteria: State related Incident-Aircraft down-Act of terrorism- Theft	Comments:
East Umatilla County Health District	911-Emergency 1-(541)-566-3813
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
Report #:	_____
Reporting Criteria: <ul style="list-style-type: none"> • Medical Emergency 	Comments:

Name of company person making calls: _____
 Title of company person making calls: _____

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Agency Notifications:

Oregon Department of Environmental Quality:	1-(503)-229-5696, 24 hours/day 1-(800)-452-4011
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
Reporting Criteria: <ul style="list-style-type: none"> • Actual or threatened release of any hazardous material that poses threat to public or the environment. • Release of hazardous substance to state waters • Spills or leakage of oil or liquid pollutant on state lands or waters • Release of hazardous material or waste upon any highway. [Vehicle Code] 	Comments:
OERS	1-(800) 452-0311 (oil spill hot line)
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
Reporting Criteria: Discharge or threatened discharge of oil/condensate greater than one barrel into marine waters.	Comments:

Name of company person making calls: _____

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Title of company person making calls: _____

Agency Notifications:

OSHA: (OREGON)	1-(503)-378-3573 or 1-(503)-378-3272 1-(800)-922-2689
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
Reporting Criteria: <ul style="list-style-type: none"> • Catastrophes, Fatality or over-night hospitalization accidents. 	Comments:
Oregon Public Utilities Commission	1-(503)-378-6634
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:

Name of company person making calls: _____

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Title of company person making calls: _____

Agency Notifications:

Agency Contacted:	
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:

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Scope:

This procedure covers the release reporting requirements for a release of natural a reportable quantity of oil based liquids. Multiple federal, state, and local authorities may require notification depending on the location and severity of the event. Agencies that may require notification include:

Federal:

1. National Response Center 1-(800)-424-8802
2. OSHA [29 CFR 1904.39]
3. National Response Center per USCG [33 CFR 153.203 & 40 CFR 110.10]

State:

4. OERS (ORS) 401 [CALL WILL SATISFY NOTIFICATION REQUIREMENTS IN RELEASE EVENT-ADVISE OERS OF SERC/LEPC NOTIFICATION]1-800-452-0311 OR 1-503-378-6377
5. OSP [ORS 466.635](State Police)
6. Administering agency for hazardous material releases[SERC/LEPC] advise duty officer of application
7. Mail Report within 30 days to:
c/o CR2K
4760 Portland RD NE,
Salem Oregon 97305-1760

Local 911 for any emergency

Reporting Procedures:

After the necessary emergency steps are taken to stop, contain, and control the release to protect public safety, environmental resources, and minimize damage:

- Determine whether there is a reporting requirement. Review the reporting criteria listed on the "Agency Notification and Reporting" form. (Form #Em-3)
 - Notify the appropriate agencies and document using the following "Agency Notification and Reporting" form. (Form #Em-3)
 - Conduct repairs and clean up measures as appropriate and document.
 - Submit follow up reports as appropriate.
-

Record Keeping:

All reportable releases shall be documented using the attached "Agency Notification and Reporting" form. Completed forms shall be forwarded to the Schumann Wind Compliance Supervisor for filing into the Schumann Wind record keeping system and appropriate Agency.

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General Emergency Response

General Information & Procedures

Purpose and Scope:

The purpose of this procedure is to provide guidance and information to company employees involved in emergency situations resulting from the wind turbine facility "SCHUMANN WIND LLC."

Although the types of emergencies that might occur in a wind generating system are widely varied, there are certain common actions, which can be taken regardless of the type of emergency. This Plan of Action for Emergencies specifies those actions deemed essential on various emergencies. The company will make safe any actual or potential hazard to life or property.

This plan is not intended to be an all-encompassing plan of action for emergencies, because certain types of emergencies may occur which would make it impractical to follow the guidelines established in this Plan. The necessary preparatory planning, procurement of certain equipment and supplies and training shall be completed. Each supervisor who may have duties and responsibilities in emergency situations should be furnished a copy of this Plan. Employees shall be trained in their areas of responsibility, and familiar with the total Plan. Employees shall attend annual review sessions, emergency drills, table top drills, or classroom training as noted in the pre-emergency planning section.

Types of Emergencies:

Five types of natural emergencies are defined and a plan for each type of emergency is established. The responsibility for declaring an emergency is defined. The liaison between the Company and public officials is outlined and guidelines for educating public officials and the general public are provided.

The company will provide prompt response to each of the following types of emergencies:

- Fire or medical emergency at the facility
- abnormal operating conditions
- fire or explosion
- natural disaster (including earthquakes, etc.)
- civil disturbance.

Lead Facility Operator / Contractor Responsibilities:

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The lead facility operator or facility contractor is responsible for the training and equipping of personnel in the general response to facility emergencies. The facility operator or on-site contractor has the primary responsibility for identifying each of the potential emergency situations, and when necessary, declaring an emergency. The facility operator or contractor also has the responsibility to ensure availability of personnel, equipment, instruments, tools, and material required at the scene of an emergency. When an emergency condition arises that could seriously affect the normal, safe operation of the facilities operating system, it is essential that a predetermined course of action be implemented to ensure protection to the public, Company employees, and protection of public and Company property. In an emergency, protection of people first and property second must receive paramount consideration.

The ability to adequately respond to potential emergency situations will be determined by the familiarity of the employees with emergency plans and the extent of preplanning. The facility operator or contractor is responsible to see that all employees in the Company are able to recognize what constitutes an on-site emergency, what information shall be obtained, and how, depending on the emergency conditions, the employee(s) shall report the situation.

The facility operator or management will ensure the failure/accident investigation is conducted as soon as is practicable. The company will follow general failure investigation procedures in the facilities general operating policies or direction given by local, state or federal regulatory over-site.

Facility Operator / Contractor Responsibilities:

The facility operator or contractor shall upon notification of a potential emergency, dispatch appropriate facility personnel to the scene to identify the extent of the emergency and to take those steps immediately necessary to protect people and property upon determination of an incident. The operator / contractor shall, when conditions warrant, notify the local police, fire, civil officials, and the company General Manager or his/her immediate supervisor.

Emergency Plan:

The Company will ensure it has sufficient copies of Emergency plan information and updated plans to use in solving the various types of emergencies outlined in this plan. Emergency information is contained in the specific sections at the end of this Plan and the appropriate employees shall have a thorough working knowledge of this information. For the purpose of emergencies, the system will include an Identification number of the affected turbine(s) or facility location.

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Receiving Information General

Leaks, fires, explosions, or other emergencies may be reported by the public 24 hours per day, seven days per week, by calling () which is listed on signs at the facility gate or fence, and facility equipment. A written record shall be maintained of all calls received and actions taken. The facility operating headquarters is responsible for maintaining the written log, reviewing all calls received and actions taken to ensure that no hazardous conditions exist at the close of each working day.

All personnel receiving complaints are trained in asking appropriate questions to determine the location and potential hazard of each event. Reports received might contain much of the information needed. However, in most instances, this information may not be volunteered; therefore, emergency calls shall be received by, or referred to, a person knowledgeable in reacting to such situations. This person shall attempt to obtain and record the following information:

Information to Obtain during Initial Notification (see Form #Em-1)

1. The address where the emergency has occurred. If the address is given as a rural route, box number of general area, obtain additional information to further identify the location.
2. The name of the caller.
3. The telephone number of the caller and location of the telephone
4. Personal estimate of the information from the caller as to the severity of the situation.
5. What is happening?
6. Types of structures or area are involved; i.e. wind turbine, facility building etc.
7. Action that has already been taken by persons at the emergency site.
8. An estimate of how long the problem has existed.
9. Any other information that might be helpful.
10. Time of the call and the date.

Determine the event:

Fire

Explosion

Natural Disaster

Civil Disorder

Sources of Emergency Calls:

After obtaining the above information, the appropriate personnel shall be notified so that emergency action will be taken immediately. Reports of emergencies or potential emergencies may be received from many sources. Some examples of these are as follows:

1. Public
2. Employees
3. Contractors

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- 4. Police/ Sherriff
- 5. Other Utilities
- 6. Fire Department

Advice to Caller:

Emergency reports from company personnel originate primarily from the On-site operator. The person receiving the call shall advise the caller, if the situation warrants, to:

- Insure Life Safety is the first priority.
- Take measures to protect facility property if the situation allows.
- Insure appropriate calls have been made to local response agencies.

Classification of Emergency:

The person/manager receiving the initial call shall identify and classify the potential emergency including events which require immediate response by the company. There is the possibility of a situation that could be classified under more than one type of emergency. Thus, personnel must be sufficiently familiar with the Emergency Plans to be able to combine the relevant requirements of the appropriate plans.

1. Minor Emergency: If the call appears to be "minor" (one that is not reportable), the facility operator should dispatch personnel to investigate the emergency call and report the findings. If the facility operator determines that the condition found could be remedied without assistance from other personnel, the facility operator or contractor will handle and document as required.

If additional personnel or assistance is required, the facility operator will notify the General Manager. The facility operator or contractor shall give all pertinent information so the General Manager may notify other personnel if applicable.

2. Major Emergency: A major emergency would be a reportable incident or any other incident in the judgment of the facility operator or contractor that required immediate response by the company and additional notification. If the facility operator or contractor has been notified of a call that appears to be "major" in nature, the information will be immediately relayed to Corporate management and the General Manager or designated employees will be dispatched to the scene. A supervisor will also be dispatched to take charge and evaluate the situation.

Notification of Local Emergency Units

Depending on the nature of the emergency, assistance may be requested of the Fire Department and/or Emergency Rescue, the Police/Sheriff Department, State Police, an Ambulance Unit, or Civil Defense; all of these can be reached by dialing 911. The type of emergency involved will dictate the type of assistance to be requested. We have informed these organizations of our abilities in responding to emergencies, identified the type of

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emergencies of which we will notify these organizations, and discussed how these organizations can assist us in minimizing hazards to life or property. These organizations have been informed of our planned responses and actual responses during an emergency.

Notification of Other Company Personnel and Contracted Personnel

In the event that additional information is needed on company facilities, the facility operator will furnish system information if requested. The use of contracted personnel in responding to or assisting in a facility event may be required. Refer to the telephone numbers listed in this Plan.

Emergency Communications

The facility operator shall designate one person at the emergency scene as an “Incident Commander” (IC). The IC will coordinate all of the field activities. The IC shall communicate with the Fire Department and other public officials to keep them informed about all work or specific actions to be taken or planned for. Refer to the Incident Command section of this Plan for more details.

When possible, a supervisor shall be designated, as Public Information Officer (PIO) to receive and transmit needed information to the corporate office and key personnel not on the scene. All contacts with persons on the scene shall be made through the PIO. In the absence of a person designated PIO, the IC will act as the public relations representative. The PIO shall make reports of activities at the emergency.

The IC shall ensure that communications are maintained until the emergency is past. All company personnel will avoid unnecessary radio traffic during an emergency condition. In the event radio communications are not available cellular telephones shall be used.

Log of Events

Depending on the scope of the emergency, a log of events shall be maintained as designated by the IC. Use Form #EM-5, Emergency Log of Miscellaneous Activities.

The IC shall be responsible for making certain that the all appropriate agencies are properly notified of reportable accidents, leaks or incidents. See the facility O&M Manual for specific procedures. The IC shall be responsible for reporting in writing, a summary of each accident or incident to the General Manager. The report shall be submitted as soon as practicable, but not more than 30 days after the incident. Facility personnel involved in an Incident and other employees as directed will complete a report. The immediate supervisor of each employee involved will assure that this report is submitted.

Description of Assignments during an Emergency

1. Telephone Contact Person: All emergency complaints called in by the public on the listed telephone number during normal hours originate with this section. The contact center is

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responsible for receiving and recording correct and adequate information from the caller. These personnel are trained to recognize an emergency and to relay the information as quickly as possible to the facility manager / operator.

2. Facility Operator or Contractor: When the facility operator or contractor receives or views an emergency condition while at the facility an immediate report to appropriate personnel should be undertaken. All emergency complaints received will be investigated. If an emergency exists, the facility operator or contractor will proceed to the area immediately or direct another operator to proceed to the area. After determining the type and scope of the emergency, the facility operator or contractor will notify supervisory and back-up personnel according to established or prescribed direction or practice.

The facility operator or contractor shall dispatch Fire, Police, and EMS to the scene if they are required. They may call for additional equipment, if the situation warrants. The facility operator or contractor monitors the emergency constantly. They work closely with the General Manager for any major event. The On-site operator or contractor monitors the emergency until order is restored.

The facility operator or contractor will do everything possible to ***protect life and property*** while help is arriving. He or she will advise the responders on-scene as to the appropriate safety measures to take, depending upon the nature of the emergency. The facility operator or contractor will work with agency emergency personnel until order is restored. On-site personnel will advise the General Manager of conditions as they progress.

3. Approved Contractors (Construction Persons): Contracted Construction Persons are equipped and staffed to provide support as needed. These persons along with supervisory personnel are available and will be used in an emergency and coordinated into the operation as needed.
4. Safety and Environmental Compliance Coordinator: Assist the On-Duty Person and/or IC and must understand the requirements of the regulations and procedures in this Plan.

Receiving Information and Notification. While these employees are in route to the emergency, they shall be given all available information about the emergency by cellular phone or radio so they can begin assessment of the danger involved as soon as they arrive at the job site. The Job-site Supervisor shall, when arriving at the job site, report to the Fire Department officials or other civil authorities that might be on the scene and become apprised of the situation. After this is accomplished, determination shall be made of the area affected by the uncontrolled conditions should they exist. The evaluation of the situation shall include the following:

- a. The first employees on the site shall determine the extent of the emergency and those actions most likely required to mitigate the emergency.

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- b. To the extent that on-site personnel can determine a call for specific contracted personnel, and equipment most likely to assist in managing the conditions at the time of the Incident should be undertaken.
 - c. Unification of Command should be sought with the responding agencies to facilitate command and control of an Incident should one require multiple agencies and responders for emergency mitigation measures at the facility.
 - d. Communication with the General Manager shall be utilized within the scope of events and timely updates or direction shall be sought to insure all necessary steps are undertaken to insure safe and effective operations for personnel the facility and local response agencies.
2. During an investigation, reports of conditions found and precautions taken will be communicated to the General Manager. Company personnel at the facility will describe the, probable hazards involved, determine the backup needed, such as welders, equipment operators and fire or police. The facility operator or contractor by contacting the General Manager will likely notify additional supervisory, Claims, and Public Relations personnel if the seriousness of the Incident warrants or when injury or personal property damage results.

If the Incident occurs after regular working hours, Schumann Wind, LLC's designated on-call manager will notify the on call site supervisor who shall contact the on-call overtime personnel in accordance with standard practice. Upon arrival, all personnel will be briefed by the supervisor on the situation and proceed with mitigative measures as applied to the specific emergency.

- a. The On-scene operator or responder shall determine the expected consequences of actions required to the Incident occurring. Before a decision is made to isolate a section of the system, an analysis will be made of the system maps or schematics to determine which turbine or transformer switching must be closed if that is a required action of the response. The facility operator or contracted operator will normally plan this.
- b. Should a determination be made to take specific action the General Manager shall be notified as soon as it is practical to do so.
- c. After the decision is made as to how the Incident will be controlled, the "Supervisor in Charge" will request any additional personnel, equipment, and materials needed for the mitigative steps undertaken.
- d. Upon the shut down or other mitigative measures are undertaken all safety measures shall be utilized. No exceptions.
- e. Upon completion of repairs, notification will be made to the "General Manager" the system may be restored to the affected area. In addition all previously notified public agencies, company personnel, and insurance representatives will be informed that emergency conditions have been corrected.

Emergency Response for Major Fires and Explosions [192.615(a)(3)]

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Emergency precautions must be taken after explosions and during major fires to protect system facilities and to ensure that the presence of energized systems should they be affected, will not create additional problems for fire-fighting and damage control personnel.

- a. When responding to a report of a major fire or explosion, the primary consideration shall be the safety of the public and employees. A fire or explosion resulting from equipment malfunctioning requires immediate and urgent attention by all the company personnel involved. A supervisor will be dispatched to the area immediately. The following actions and procedures shall be considered:
 - a. Immediately upon arrival, establish contact with any fire and police personnel on the scene. If company personnel precede fire and police arrival, verify with the supervisor or contractor on scene that proper notice has been given these agencies. The supervisor will describe the nature and scope of the emergency to the General Manager by cellular phone or radio and request emergency back-up crews and equipment to handle the emergency. The General Manager or designated manager will dispatch the requested personnel and equipment to the area and notify other supervisory, emergency, and interested personnel in accordance with standard practice.
 - b. It must be determined immediately as to the general nature of the fire or explosion. It is required to ensure the protection of the public and the affected facilities as well as protecting the responders from energized equipment.
 - c. If a determination cannot be made, request the Fire/Police Department's assistance in the evaluation efforts if needed. The general Manager, or his supervisor at the scene, will do what is necessary to eliminate any remaining hazard to persons or other exposures in the vicinity. Take every reasonable measure for safety if there is danger of additional fire or explosion or until the danger has cleared. Coordination and cooperation with the Fire and Police Departments by company personnel is imperative.
 - d. The supervisor at the scene of the emergency shall immediately attempt to locate the source of the fire or explosion if it is safe to do so. This should be done with the consent and co-operation of the local responders or agencies.
2. After initial action has been completed to assure the safety of the public, and to prevent damage to property, there are certain investigative actions that shall be considered by the supervisor in charge of the investigation.
 - a. Record all information concerning actions taken, so that necessary reports might be prepared. Refer to Checklist for Supervisors -- (Form EM-5).
 - b. Ensure that all persons necessary to conduct a completed investigation have been notified.
 - c. See that no action is taken that might disturb evidence necessary to conduct a completed investigation. Evidence shall be recorded with notes, photographs, and videotape, if possible. At times certain components may be taken under custodial order by local, state or federal Investigators
 - d. Review maintenance work and all relevant records as they apply to a specific piece of equipment. Determine if there has been recent construction work or activity in the area by the company or others, which may have contributed to the emergency.

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Emergency Response for Abnormal Conditions

Any condition that is found to be outside of normal operating conditions should be acted upon as soon as possible to insure the safety of operating personnel as well as preventing damage that may be preventable. The site supervisor should be notified upon discovery and actions undertaken to mitigate the condition(s) if safe to do so.

An emergency response should be considered upon discovery to insure employee safety if equipment is found to be malfunctioning and outside of normal operating parameters. Notification to management should occur as an immediate follow-up to these conditions.

Emergency Response for Natural Disasters

Disasters such as floods, tornadoes, **earthquake**, and extreme high winds might cause various operating problems within the system. Emergency procedures must be employed to survey the system and eliminate conditions that might endanger life or property.

1. Immediately upon learning of such an occurrence, the appropriate Supervisor shall assess the severity of the situation and decide whether it is necessary to initiate action. When a disaster does occur, civil authorities may declare a state of emergency. Under a state of emergency the civil authorities have control over the actions of all persons and equipment in the area. After the immediate hazardous conditions have been corrected, essential services shall be restored on the priorities established by the public officials.

Notification shall be given to the appropriate personnel to report for work and equip their vehicles with emergency tools and stand by for further instructions. It is most important to utilize radio-equipped vehicles and make maximum usage of portable radios or telephones.

2. Action shall be taken upon arrival at the scene of the emergency.
 - a. Communications shall be established with all rescue squads, police and fire departments, and the National Guard. Full advantage shall be taken of the services that these organizations can render.
 - b. One radio-equipped vehicle if available shall be staffed and located in a conspicuous and convenient location in the emergency area. The Supervisor will appoint an employee at the scene to locate the person or persons in charge of each emergency agency that is present, and establish communications with them. The Supervisor will inform them of the location of the radio-equipped vehicle and will request each agency to notify its members to report any facility problems to the employee at that location. The employee at this vehicle then will relay all information to the Supervisor and/or General Manager.
3. A survey shall be conducted as soon as possible to assess damage to our facilities.
 - a. During this survey, inspect wind turbines for damages, paying particular attention to the base bolting for deformities, buckled materials, tower alignment or any cracking to tower or turbine blades
 - b. In certain instances, it will be advisable to station someone at a primary location to insure facility continuity or operations.

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- c. Survey crews shall be utilized to check the areas involved. After an estimate of the severity of the situation is ascertained, a decision must be made as to facility operability shutting them off completely, or leaving on the system. Refer to Procedures for Emergency Shutdown, if necessary.
- c. Consideration shall be given as to whether additional personnel and/or equipment will be needed. If in doubt, it is preferable to have extra crews standing by on the scene even though they may not be needed. This will allow more flexibility for unexpected requirements and also will be an aid in putting the system back on line if needed.

Emergency Response for Civil Disturbance

Civil Disturbance is an unlawful act of a group of people whereby life and property are endangered or may be endangered and company facilities may be sabotaged.

1. The company facilities and work crews will require physical protection in areas of civil disorder. Persons may attempt to disrupt company operations and sabotage company equipment. The facility Operations Person shall:
 - a. Establish communications with appropriate civil authorities.
 - b. Determine the extent of the area affected and prepare to isolate the section.
 - c. Monitor the operation of the system at a safe location. Watch for signs of major changes that would indicate problems with system operations
 - d. Report all incidents of sabotage to civil authorities.

2. The facility Operations Person shall request police protection for any personnel dispatched into the affected area. Company personnel shall not physically resist potential saboteurs or unruly persons. Company personnel threatened by such persons shall secure if possible the facilities and withdraw from the area. Under no circumstances shall company personnel carry firearms. The facility Operations Person shall make all arrangements for security guards. The facility Operations Person shall consider the following actions to prevent disruption of service:
 - a. Install locking devices on all fenced enclosures and buildings.
 - b. Provide 24 hour guard service if available for facility security.
 - c. Provide local law enforcement assistance by access to video feed if available to assist in apprehension or Identification of persons involved in civil disturbance.

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Public Communications

One person shall be designated as the company spokesperson. The following are dos and don'ts for the designated spokesperson when talking with reporters.

Dos	Don'ts
Be Calm	Don't speculate on cause of crisis or accident
Be Truthful	Don't estimate damages
Identify yourself as the designated company spokesperson	Don't discuss identities or medical conditions of injured or missing
Speak only for the company, not contractors or clients	Don't guess about number of victims
Give a brief list of facts	Don't allow reporters or "sightseers" to wander around the scene
End interviews promptly after giving brief facts	Don't say anything you don't consider media material
Advise other employees to refer all inquiries to you	Remember that nothing is off the record
Set up a safe secure area where reporters can be briefed	

SCHUMANN WIND

Emergency Response Procedures

Incident Command and Emergency Response

Date: May 2017

Incident Command Description

The Incident Command System (ICS) is an organization system widely used for emergency management by federal, state, and local emergency response organizations. The Company Schumann Wind, LLC has adopted ICS as the base organizational system for responding to facility emergencies.

ICS Flexibility

ICS allows the base organization structure to be adapted for different situations depending on the type and complexity of the incident. Two situations may occur that rely upon this flexibility when determining needed ICS positions.

The first situation involves “first responders.” A fundamental premise of ICS is that positions are initially filled based upon available personnel. Position replacements occur as more experienced, trained, and qualified personnel become available. The replacement transition requires briefings and exchange of incident status information.

The second situation that relies upon the flexibility of ICS occurs when more than one legal entity has responsibility for managing the incident. This often occurs in most situations but can occur in other emergency situations such as a fire that impacts public areas. ICS accommodates these situations through implementation of a Unified Command. The Unified Command can include various agency and regulatory groups in addition to Schumann Wind, LLC personnel.

ICS Responsibilities

At each emergency, a company staff employee will be responsible for directing and coordinating the overall emergency response, referred to as Incident Commander. For emergencies that do not involve a fire or explosion, the ranking employee at the scene will be designated the Incident Commander. If a fire, explosion, or major event is involved, this position is usually assigned to the local fire department.

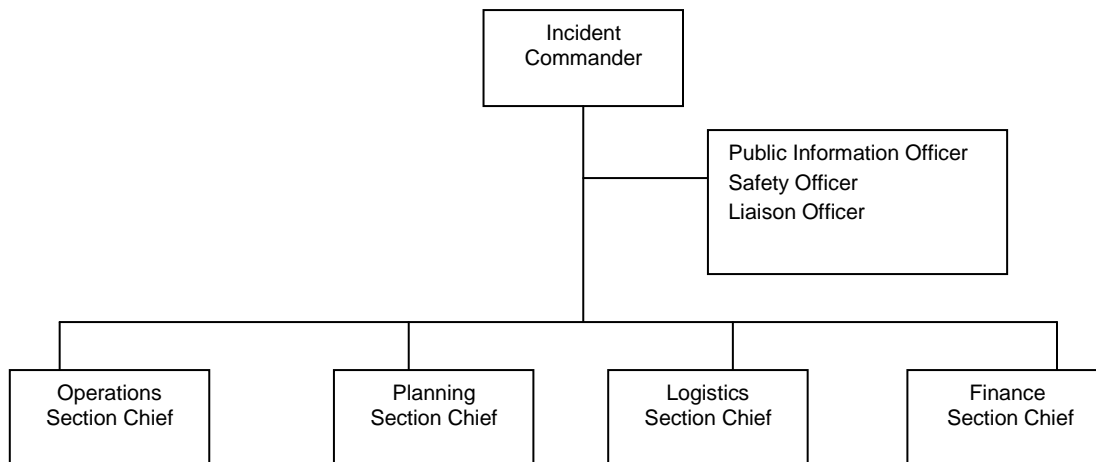
Incident Command Authority

During a declared emergency, the company staff employee acting as the Incident Commander or contracted responder with I/C authorities will have the authority to take required immediate actions to protect the public and the environment. As soon as more personnel arrive at the scene, Incident Commanders duties can be shifted to more qualified personnel.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

INCIDENT COMMAND SYSTEM (ICS)



The following Position Descriptions and Task Checklists for the ICS provide general guidance to fulfill organizational roles:

Included are:

- 1. General Role Definitions**
- 2. Listing of Suggested Candidates**
- 3. Critical Task Checklist**

Position Descriptions for:

- **Incident Commander (IC)**
- **Public Information Officer (PIO)**
- **Safety Officer**
- **Liaison Officer**
- **Operations Section Chief**
- **Planning Section Chief**
- **Logistics Section Chief**
- **Finance Section Chief**

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Incident Commander

IC Role: The Incident Commander is responsible for overall incident response and control of all activities. The IC establishes the “Command Post” at the incident location or other appropriate location. Authorization of action plans and resources are key activities of the IC.

IC Position Candidate Examples:

- Initial Responder
- Facility Manager
- Facility Operator
- Maintenance persons
- OPUC Compliance Supervisor
- EHS Specialist

IC Checklist:

- Identify and isolate incident area; establish perimeters and control points.
- Establish a command post and staging areas.
- Notify and request assistance from corporate management, immediate facility supervisor, or appropriate higher ranking company officials.
- Initiate incident command system and coordinate scene activities.
- Appoint command staff – safety liaison and information officers- and begin operations.
- Implement standard operating procedures or emergency response plan; develop and release incident action plan; revise and disseminate operational plans.
- Provide policy, direction, and control for emergency operations; set priorities and establish response strategies.
- Implement site safety plan; revise and disseminate plan.
- Establish site perimeter and control points.
- Reroute traffic and control access to site
- Establish work zones
 - Exclusion zone (hot zone)
 - Contamination reduction zone (decontamination- zone)
 - Support zone
- Conduct operations; eliminate potential for airborne dispersion, terminate release of hazardous materials, reduce exposure of personnel and equipment.
- Monitor and sample site
- Determine type of evacuation if required: immediate, precautionary, and scheduled.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Public Information Officer

Information Officer Role:

The Public Information Officer is responsible for providing on-site contact with news media and furnishing the media with Schumann Wind, LLC approved news release information.

Information Officer Position Candidate Examples:

- Company Public Affairs Manager
- Public Affairs Consultant
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist

Information Officer Checklist:

- Obtain briefing from incident commander.
- Contact the jurisdictional agency to coordinate public information activities.
- Establish single-incident information center whenever possible.
- Arrange for necessary work space, material, telephones, and staffing.
- Prepare initial information summary as soon as possible after arrival.
- Obtain approval for release from incident commander.
- Release information to news media.
- Post information in command post and other appropriate locations.
- Attend meetings to update information releases.
- Arrange for meetings between media and incident personnel.
- Provide escort service to the media and VIP's
- Respond to special request for information.
- Maintain log.

SCHUMANN WIND

Emergency Response Procedures

Incident Command and Emergency Response

Date: May 2017

Information Officer

Hints:

Specifically, the Information Officer should address the following:

- Name, title, and what the Info Officer function is.
- What has happened in simple terms.
- Injuries (no names unless family has been notified).
- Major concerns (Safety of people and protection of environment)

Watch for Red Flag questions:

- What is the cause? Who is at fault?
- How much will it cost?
- How much was released?

Do not speculate. Stick to the known facts.

Safety Officer

Safety Officer Role:

The Safety Officer is responsible for providing a "Site Safety Plan" and assessing activities for hazardous and/or unsafe situations and developing means for assuring the safety of response personnel.

Safety Officer Position Candidate Examples:

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

Safety Officer Checklist:

- Obtain briefing from incident commander.
 - Identify hazardous situations associated with the incident
 - Identify control measures(engineering/Administrative/PPE).
 - Initiate evacuation procedures.
 - Develop decontamination procedures.
 - Conduct safety meetings.
 - Participate in planning meetings.
 - Review incident action plan.
 - Review and approve medical plan
 - Investigate accidents that have occurred within incident areas.
 - Maintain a log.
-

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Note: Exercise emergency authority to stop and prevent unsafe acts.

Liaison Officer

**Liaison Officer
Role:**

The Liaison Officer is responsible for conducting initial regulatory contacts and coordinating required government reports and inquires. Ensure that The Company is tracking regulatory agency response and potential for incidents of non-compliance.

**Liaison Officer
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Liaison Officer
Checklist:**

- Obtain briefing from incident commander.
- Provide a point of contact for agency representatives.
- Identify agency representative from each agency.
- Establish communications link and location.
- Provide inter-organizational contacts for incident personnel.
- Monitor incident operations for inter-organizational problems.
- Maintain log.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Operations Section Chief

**Operations
Section Chief
Role:**

The Operations Section Chief is responsible for directing tactical emergency response, incident control actions, and recovery/clean-up operations. Also, request needed resources and prepares operational plans if needed.

**Operations
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Operations
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Develop operations portion of Incident Action Plan.
- Brief and assign operations personnel in accordance with Incident Action Plan.
- Supervise Operations.
- Determine need and request additional resources.
- Review suggested list of resources to be released and initiate recommendation for release of resources.
- Assemble and disassemble strike teams assigned to operations section.
- Report information about special activities, events, and occurrences to incident commander.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Planning Section Chief

**Planning
Section Chief
Role:**

The Planning Section Chief is responsible for development of "Incident Action Plans" and management of incident status reports. Role includes assessing the situation, predicting outcomes and resource status, and initiating planning meetings.

**Planning
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Planning
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Activate planning section units.
- Reassign initial attack personnel to incident positions as appropriate.
- Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the incident action plan.
- Establish a weather data collection system when necessary.
- Supervise preparation of incident action plan.
- Assemble information on alternative strategies.
- Assemble and disassemble strike teams not assigned to operations.
- Identify need for use of specialized resources.
- Provide periodic predictions on incident potential.
- Compile and display incident status summary information.
- Advise general staff of any significant changes in incident status.
- Provide incident traffic plan.
- Supervise planning section units.
- Prepare and distribute incident commander's orders.
- Insure that normal agency information collection and reporting requirements are being met.
- Prepare recommendations for release of resources for submission to the incident commander.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Logistics Section Chief

**Logistics
Section Chief
Role:**

The Logistics Section Chief is responsible for identifying needed resources and supplies and on-scene delivery and management of supply facilities, services, and materials.

**Logistics
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Logistics
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Plan organization of logistics section.
- Assign work locations and preliminary work tasks to section personnel.
- Participate in preparation of Incident Action Plan.
- Identify service and support requirements for planned and expected operations.
- Provide input to and review communications plan, medical plan, and traffic plan.
- Coordinate and process request for additional resources.
- Review incident action plan and estimate section needs for next operational period.
- Insure incident communications plan is prepared.
- Advise on current service and support capabilities.
- Prepare service and support elements of the incident action plan.
- Estimate future service and support requirements.
- Receive demobilization plan from planning section.
- Recommend release of unit resources in conformity with demobilization plan.

Insure general welfare and safety of logistics section personnel.

SCHUMANN WIND
Emergency Response Procedures
Incident Command and Emergency Response

Date: May 2017

Finance Section Chief

**Finance
Section Chief
Role:**

The Finance Section Chief is responsible for management of cost control and critical manpower planning.

**Finance
Section Chief
Position Candidate
Examples:**

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

**Finance
Section Chief
Checklist:**

- Obtain briefing from incident commander.
 - Attend briefing with responsible agency to gather information.
 - Attend planning meeting to gather information.
 - Identify needs, order supplies, and support needs for finance section.
 - Develop an operating plan for finance function on incident.
 - Prepare work objectives for staff.
 - Determine need for commissary operation.
 - Inform command staff and general staff when section is fully operational.
 - Meet with agency representatives as required.
 - Provide input in all planning sessions on financial and cost analysis matters.
 - Maintain daily contact with agency(s) administrative headquarters on finance matters.
 - Insure that all personnel time records are transmitted to appropriate locations.
 - Participate in all demobilization planning.
 - Insure that all obligation documents initiated at the incident are properly prepared and completed.
 - Brief agencies on all incident related business management issues needing attention and follow-up prior to leaving incident.
-

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Incident Commander

IC Role: The Incident Commander is responsible for overall incident response and control of all activities. The IC establishes the "Command Post" at the incident location or other appropriate location. Authorization of action plans and resources are key activities of the IC.

IC Position Candidate Examples:

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist

IC Checklist:

- Identify and isolate incident area; establish perimeters and control points.
- Establish a command post and staging areas.
- Notify and request assistance from dispatch, immediate supervisor, or appropriate higher ranking officials.
- Initiate incident command system and coordinate scene activities.
- Appoint command staff – safety liaison and information officers- and begin operations.
- Implement standard operating procedures or emergency response plan; develop and release incident action plan; revise and disseminate operational plans.
- Provide policy, direction, and control for emergency operations; set priorities and establish response strategies.
- Implement site safety plan; revise and disseminate plan.
- Establish site perimeter and control points.
- Reroute traffic and control access to site
- Establish work zones
 - Exclusion zone (hot zone)
 - Contamination reduction zone (decontamination zone)
 - Support zone
- Conduct operations; eliminate potential for airborne dispersion, terminate release of hazardous materials, reduce exposure of personnel and equipment.
- Monitor and sample site
- Determine type of evacuation: immediate, precautionary, and scheduled.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Public Information Officer

Information Officer Role:

The Public Information Officer is responsible for providing on-site contact with news media and furnishing the media with Company approved news release information.

Information Officer Position Candidate Examples:

- Public Affairs Manager
 - Public Affairs Consultant
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
-

Information Officer Checklist:

- Obtain briefing from Incident Commander.
 - Contact the jurisdictional agency to coordinate public information activities.
 - Establish single-incident information center whenever possible.
 - Arrange for necessary work space, material, telephones, and staffing.
 - Prepare initial information summary as soon as possible after arrival.
 - Obtain approval for release from incident commander.
 - Release information to news media.
 - Post information in command post and other appropriate locations.
 - Attend meetings to update information releases.
 - Arrange for meetings between media and incident personnel.
 - Provide escort service to the media and VIP's
 - Respond to special request for information.
 - Maintain log.
-

Information Officer Hints:**Specifically, the Information Officer should address the following:**

- Name, title, and what the Info Officer function is.
- What has happened in simple terms.
- Injuries (no names unless family has been notified).
- Major concerns (Safety of people and protection of environment)

Watch for Red Flag questions:

- What is the cause? Who is at fault?
- How much will it cost?
- How much was released?

Do not speculate. Stick to the known facts

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Safety Officer

**Safety Officer
Role:**

The Safety Officer is responsible for providing a "Site Safety Plan" and assessing activities for hazardous and/or unsafe situations and developing means for assuring the safety of response personnel.

**Safety Officer
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Safety Officer
Checklist:**

- Obtain briefing from incident commander.
- Identify hazardous situations associated with the incident
- Identify control measures: (engineering administrative/PPE).
- Initiate evacuation procedures.
- Develop decontamination procedures.
- Conduct safety meetings.
- Participate in planning meetings.
- Review incident action plan.
- Review and approve medical plan
- Investigate accidents that have occurred within incident areas.
- Maintain a log.

Note: Exercise emergency authority to stop and prevent unsafe acts.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Liaison Officer

Liaison Officer Role:

The Liaison Officer is responsible for conducting initial regulatory contacts and coordinating required government reports and inquires. Ensure that the Company is tracking regulatory agency response and potential for incidents of non-compliance.

Liaison Officer Position Candidate Examples:

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

Liaison Officer Checklist:

- Obtain briefing from incident commander.
- Provide a point of contact for agency representatives.
- Identify agency representative from each agency.
- Establish communications link and location.
- Provide inter-organizational contacts for incident personnel.
- Monitor incident operations for inter-organizational problems.
- Maintain log.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Operations Section Chief

**Operations
Section Chief
Role:**

The Operations Section Chief is responsible for directing tactical emergency response, incident control actions, and recovery/clean-up operations. Also, request needed resources and prepares operational plans if needed.

**Operations
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Operations
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Develop operations portion of Incident Action Plan.
- Brief and assign operations personnel in accordance with Incident Action Plan.
- Supervise Operations.
- Determine need and request additional resources.
- Review suggested list of resources to be released and initiate recommendation for release of resources.
- Assemble and disassemble strike teams assigned to operations section.
- Report information about special activities, events, and occurrences to incident commander.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Planning Section Chief

**Planning
Section Chief
Role:**

The Planning Section Chief is responsible for development of "Incident Action Plans" and management of incident status reports. Role includes assessing the situation, predicting outcomes and resource status, and initiating planning meetings.

**Planning
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Planning
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Activate planning section units.
- Reassign initial attack personnel to incident positions as appropriate.
- Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the incident action plan.
- Establish a weather data collection system when necessary.
- Supervise preparation of incident action plan.
- Assemble information on alternative strategies.
- Assemble and disassemble strike teams not assigned to operations.
- Identify need for use of specialized resources.
- Provide periodic predictions on incident potential.
- Compile and display incident status summary information.
- Advise general staff of any significant changes in incident status.
- Provide incident traffic plan.
- Supervise planning section units.
- Prepare and distribute incident commander's orders.
- Insure that normal agency information collection and reporting requirements are being met.
- Prepare recommendations for release of resources for submission to the incident commander.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Logistics Section Chief

**Logistics
Section Chief
Role:**

The Logistics Section Chief is responsible for identifying needed resources and supplies and on-scene delivery and management of supply facilities, services, and materials.

**Logistics
Section Chief
Position Candidate
Examples:**

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

**Logistics
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Plan organization of logistics section.
- Assign work locations and preliminary work tasks to section personnel.
- Participate in preparation of Incident Action Plan.
- Identify service and support requirements for planned and expected operations.
- Provide input to and review communications plan, medical plan, and traffic plan.
- Coordinate and process request for additional resources.
- Review incident action plan and estimate section needs for next operational period.
- Insure incident communications plan is prepared.
- Advise on current service and support capabilities.
- Prepare service and support elements of the incident action plan.
- Estimate future service and support requirements.
- Receive demobilization plan from planning section.
- Recommend release of unit resources in conformity with demobilization plan.

Insure general welfare and safety of logistics section personnel.

SCHUMANN WIND

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Finance Section Chief

**Finance
Section Chief
Role:**

The Finance Section Chief is responsible for management of cost control and critical manpower planning.

**Finance
Section Chief
Position Candidate
Examples:**

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

**Finance
Section Chief
Checklist:**

- Obtain briefing from incident commander.
 - Attend briefing with responsible agency to gather information.
 - Attend planning meeting to gather information.
 - Identify needs, order supplies, and support needs for finance section.
 - Develop an operating plan for finance function on incident.
 - Prepare work objectives for staff.
 - Determine need for commissary operation.
 - Inform command staff and general staff when section is fully operational.
 - Meet with agency representatives as required.
 - Provide input in all planning sessions on financial and cost analysis matters.
 - Maintain daily contact with agency(s) administrative headquarters on finance matters.
 - Insure that all personnel time records are transmitted to appropriate locations.
 - Participate in all demobilization planning.
 - Insure that all obligation documents initiated at the incident are properly prepared and completed.
 - Brief agencies on all incident related business management issues needing attention and follow-up prior to leaving incident.
-

**SCHUMANN WIND
Emergency Response Procedures
Wind Turbine Facility Emergency Equipment List**

Date: May 2017

Item:

Location:

Cell phones, pagers, radios	Each Company or em. Contractor vehicle
Fire extinguishing equipment	Each Company or em. Contractor vehicle
Em. Breathing units and/or respirator	Each Company or em. Contractor vehicle
Safety harness and lines	Each Company or em Contractor vehicle
Emergency Communications Equipment	Emergency Contractor
Barricades, rope, signs, for mark Hot Zone	Emergency Contractor
Rescue rope	Emergency Contractor
Potable water	Emergency Contractor
Shovels and rakes	Emergency Contractor
Hand tools	Emergency Contractor
Portable welding equipment	Emergency Contractor
Portable pumps	Emergency Contractor
Sorbent materials	Emergency Contractor
Earth moving equipment	Emergency Contractor
Vacuum truck	Emergency Contractor
Lighting	Emergency Contractor
Back-hoe	Emergency Contractor
Shoring	Emergency Contractor
Compressor	Emergency Contractor
Generator	Emergency Contractor
Blowers	Emergency Contractor
Portable Generator	Emergency Contractor
Emergency Lighting	Emergency Contractor

Recording and Reporting Occupational Injuries and Illnesses - 29 CFR Part 1904 REVIEWED SEPTEMBER 2010

The Occupational Safety and Health Act of 1970 requires most private sector employers to prepare and maintain records of work related injuries and illnesses. These records include the OSHA Form No. 200, Log and Summary of Occupational Injuries and Illnesses, and the OSHA Form No. 101, Supplementary Record of Occupational Injuries and Illnesses.

Employers Required to Keep Records

All employers with 11 or more employees in the following industries, as determined by their Standard Industrial Classification (SIC), must keep injury and illness records:

- Agriculture, Forestry and Fishing (SIC's 01-02 and 07-09)
- Oil and Gas Extraction (SIC 13)
- Construction (SIC's 15-17)
- Manufacturing (SIC's 20-39)
- Transportation, Communications, and Public Utilities (SIC's 41-42 and 44-49)
- Wholesale Trade (SIC's 50-51)
- Building Materials, Hardware, Garden Supply and Mobile Home Dealers (SIC 52)
- General Merchandise Stores (SIC 53)
- Food Stores (SIC 54)
- Hotels, Rooming Houses, Camps, and Other Lodging Places (SIC 70)
- Repair Services (SIC's 75 and 76)
- Amusement and Recreation Services (SIC 79)
- Health Services (SIC 80)

Employers Normally Exempt, but Periodically Required to Keep Records

The following employers are normally exempt from these recordkeeping requirements unless notified in advance by the Bureau of Labor Statistics (BLS) that they have been selected to participate in the mandatory Annual Survey of Occupational Injuries and Illnesses:

- Employers who had no more than ten employees (full- and part-time) at any time during the previous calendar year; or
- Employers who conduct business primarily in one of the following SIC's, regardless of the number of employees:

Retail Trade

55 Automotive Dealers and Gasoline Service Stations

56 Apparel and Accessory Stores

57 Furniture, Home Furnishings and Equipment Stores

58 Eating and Drinking Places

59 Miscellaneous Retail

Finance, Insurance and Real Estate

60 Banking

61 Credit Agencies other than Banks

Recording and Reporting Occupational Injuries and Illnesses - 29 CFR Part 1904 REVIEWED SEPTEMBER 2010

62 Security and Commodity Brokers, and Services

63 Insurance

64 Insurance Agents, Brokers and Services

65 Real Estate

67 Holding and other Investment Offices

Services

72 Personal Services

73 Business Services

78 Motion Pictures

81 Legal Services

82 Educational Services

83 Social Services

84 Museums, Botanical and Zoological Gardens

86 Membership Organizations

87 Engineering, Accounting, Research, Management, and Related Services

88 Private Households

89 Miscellaneous Services

These exemptions do *not* excuse any employer from coverage by OSHA or from compliance with all applicable safety and health standards (which may include other types of recordkeeping requirements).

The recordkeeping exemptions apply to all eligible workplaces under the jurisdiction of Federal OSHA. However, 25 states and territories operate their own OSHAs. Employers in the following areas should contact the state agency to determine if it has or intends to adopt the exemptions: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Virgin Islands, Washington, and Wyoming. Connecticut and New York cover state and local government employees only.

Records That Must Be Kept

OSHA requires the use of OSHA Form No. 200, the Log and Summary of Occupational Injuries, or an equivalent form. On the OSHA Log, employers provide some brief descriptive information and then use a simple check-off procedure to maintain a running total of occupational injuries and illnesses for the year. Authorized Federal and State government officials, employees, and their representatives are guaranteed access, upon request, to the injury and illness log for the establishment.

Recording and Reporting Occupational Injuries and Illnesses - 29 CFR Part 1904 REVIEWED SEPTEMBER 2010

Employers are required to post an annual summary of occupational injuries and illnesses for the previous calendar year. The summary must be posted no later than February 1 and must remain in place until March 1.

OSHA Form No. 101 is used to supply supplementary information regarding each injury and illness entered on the log. This form names the person and describes the circumstances on his or her injury or illness. Substitute forms (such as workers' compensation reports) may be used if they contain all the specified information. Authorized government officials shall be provided access to these records also.

Injury and illness records shall be maintained at each workplace. In the absence of a regular workplace, records shall be maintained at some central location. The records shall be retained and updated for five years following the calendar year they cover.

Each workplace, regardless of the number of employees or type of business, must:

1. Display either an OSHA or State poster containing information for employees, and
2. Report to the nearest OSHA office within 8 hours all accidents which result in a work-related fatality or the hospitalization of three or more employees.

The BLS Survey

Each year BLS selects about 280,000 firms to take part in a survey used to calculate the job injury and illness rates for various industries nationwide. All employers selected for the survey are required by law to participate. As noted previously, employers that are normally exempt from OSHA recordkeeping are notified of their selection for the survey prior to the calendar year to which the survey relates.

The survey is used to monitor OSHA's progress and to assist the agency in setting standards, evaluating existing standards, scheduling inspections, and evaluating the performance of states and territories which operate their own OSHA-approved safety and health programs.

For More Information

For official instructions on recording occupational injuries and illnesses please refer to the *Recordkeeping Guidelines for Occupational Injuries and Illnesses, 1986*. You may obtain copies of the Guidelines and OSHA forms by calling the OSHA Area Office or the State OSHA Office in your jurisdiction.

**Recording and Reporting Occupational Injuries and Illnesses - 29 CFR
Part 1904
REVIEWED SEPTEMBER 2010**

Intro to 29 CFR Part 1904, Reporting of Fatality or Multiple Hospitalization Incidents

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1904

[Docket No. R-01]

Reporting of Fatality or Multiple Hospitalization Incidents

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Final rule.

SUMMARY: This final rule revises regulation on Reporting of Fatality or Multiple Hospitalization Accidents. Along with numerous clarifications and several minor modifications, this revision makes three major changes to the former reporting requirements: First, whereas the former regulation applied to employment accidents which resulted in one or more fatalities or hospitalizations of five or more employees, the regulation is expanded to require the reporting of work related incidents resulting in the death of an employee or the hospitalization of three or more employees. Second, the regulation requires the employer to verbally report such incidents within 8 hours after the employer learns of it, instead of 48 hours by either written or verbal communication. Third, whether or not an incident is immediately reportable, if it results in the death of an employee or the in-patient hospitalization of 3 or more employees within 30 days of the incident, OSHA requires that the employer report the fatality/multiple hospitalization within 8 hours after learning of it.

The materials upon which OSHA has relied in drafting this final rule are available for review and copying in the OSHA Docket Office.

DATES: The new regulation will become effective on May 2, 1994.

ADDRESSES: In compliance with 28 U.S.C. 2112(a), the Agency designates for receipt of petitions for review of the regulation, the Associate Solicitor for Occupational Safety and Health, Office of the Solicitor, room S4004, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210.

Recording and Reporting Occupational Injuries and Illnesses - 29 CFR Part 1904

REVIEWED SEPTEMBER 2010

FOR FURTHER INFORMATION, CONTACT: Mr. James F. Foster, U.S. Department of Labor, Occupational Safety and Health Administration, Office of Information and Consumer Affairs, room N-3647, 200 Constitution Avenue NW., Washington, DC 20210, phone (202) 219-8148.

SUPPLEMENTARY INFORMATION: In this preamble, OSHA identifies sources of information submitted to the record by an exhibit number (Ex. 2). When applicable, comment numbers follow the exhibit in which they are contained (Ex. 2: 1). If more than one comment within an exhibit is cited, the comment numbers are separated by commas (Ex. 2: 1, 2, 3). For quoted material, page numbers are cited if other than page one (p. 2).

[59 FR 15594, April 1, 1994; 59 FR 16895, April 8, 1994]

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Incident Commander

IC Role: The Incident Commander is responsible for overall incident response and control of all activities. The IC establishes the "Command Post" at the incident location or other appropriate location. Authorization of action plans and resources are key activities of the IC.

IC Position Candidate Example s:

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist

IC Checklist :

- Identify and isolate incident area; establish perimeters and control points.
- Establish a command post and staging areas.
- Notify and request assistance from dispatch, immediate supervisor, or appropriate higher ranking officials.
- Initiate incident command system and coordinate scene activities.
- Appoint command staff – safety liaison and information officers- and begin operations.
- Implement standard operating procedures or emergency response plan; develop and release incident action plan; revise and disseminate operational plans.
- Provide policy, direction, and control for emergency operations; set priorities and establish response strategies.
- Implement site safety plan; revise and disseminate plan.
- Establish site perimeter and control points.
- Reroute traffic and control access to site
- Establish work zones
 - Exclusion zone (hot zone)
 - Contamination reduction zone (decontamination zone)
 - Support zone
 - Conduct operations; eliminate potential for airborne dispersion, terminate release of hazardous materials, reduce exposure of personnel and equipment.
 - Monitor and sample site
 - Determine type of evacuation: immediate, precautionary, and scheduled.

Public Information Officer

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Information Officer Role:

The Public Information Officer is responsible for providing on-site contact with news media and furnishing the media with Company approved news release information.

Information Officer Position Candidate Examples:

- Public Affairs Manager
- Public Affairs Consultant
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist

Information Officer Checklist:

- Obtain briefing from Incident Commander.
- Contact the jurisdictional agency to coordinate public information activities.
- Establish single-incident information center whenever possible.
- Arrange for necessary work space, material, telephones, and staffing.
- Prepare initial information summary as soon as possible after arrival.
- Obtain approval for release from incident commander.
- Release information to news media.
- Post information in command post and other appropriate locations.
- Attend meetings to update information releases.
- Arrange for meetings between media and incident personnel.
- Provide escort service to the media and VIP's
- Respond to special request for information.
- Maintain log.

Information Officer Hints:**Specifically, the Information Officer should address the following:**

- Name, title, and what the Info Officer function is.
- What has happened in simple terms.
- Injuries (no names unless family has been notified).
- Major concerns (Safety of people and protection of environment)

Watch for Red Flag questions:

- What is the cause? Who is at fault?
- How much will it cost?
- How much was released?

Do not speculate. Stick to the known facts.

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Safety Officer

**Safety Officer
Role:**

The Safety Officer is responsible for providing a "Site Safety Plan" and assessing activities for hazardous and/or unsafe situations and developing means for assuring the safety of response personnel.

**Safety Officer
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Safety Officer
Checklist:**

- Obtain briefing from incident commander.
- Identify hazardous situations associated with the incident
- Identify control measures: (engineering administrative/PPE).
- Initiate evacuation procedures.
- Develop decontamination procedures.
- Conduct safety meetings.
- Participate in planning meetings.
- Review incident action plan.
- Review and approve medical plan
- Investigate accidents that have occurred within incident areas.
- Maintain a log.

Note: Exercise emergency authority to stop and prevent unsafe acts.

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Liaison Officer

**Liaison Officer
Role:**

The Liaison Officer is responsible for conducting initial regulatory contacts and coordinating required government reports and inquires. Ensure that the Company is tracking regulatory agency response and potential for incidents of non-compliance.

**Liaison Officer
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Liaison Officer
Checklist:**

- Obtain briefing from incident commander.
- Provide a point of contact for agency representatives.
- Identify agency representative from each agency.
- Establish communications link and location.
- Provide inter-organizational contacts for incident personnel.
- Monitor incident operations for inter-organizational problems.
- Maintain log.

SCHUMANN WIND, LLC
Emergency Response Procedures
ICS Checklists

Form #EM-6

Date: May 2017

Operations Section Chief

**Operations
Section Chief
Role:**

The Operations Section Chief is responsible for directing tactical emergency response, incident control actions, and recovery/clean-up operations. Also, request needed resources and prepares operational plans if needed.

**Operations
Section Chief
Position Candidate
Examples:**

- Initial Responder
- Facility Operations Manager
- General Manager
- Maintenance Foreman
- OPUC Compliance Supervisor
- EHS Specialist
- EHS Consultant

**Operations
Section Chief
Checklist:**

- Obtain briefing from incident commander.
- Develop operations portion of Incident Action Plan.
- Brief and assign operations personnel in accordance with Incident Action Plan.
- Supervise Operations.
- Determine need and request additional resources.
- Review suggested list of resources to be released and initiate recommendation for release of resources.
- Assemble and disassemble strike teams assigned to operations section.
- Report information about special activities, events, and occurrences to incident commander.

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Planning Section Chief

Planning Section Chief Role:

The Planning Section Chief is responsible for development of "Incident Action Plans" and management of incident status reports. Role includes assessing the situation, predicting outcomes and resource status, and initiating planning meetings.

Planning Section Chief Position Candidate Examples:

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

Planning Section Chief Checklist:

- Obtain briefing from incident commander.
 - Activate planning section units.
 - Reassign initial attack personnel to incident positions as appropriate.
 - Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the incident action plan.
 - Establish a weather data collection system when necessary.
 - Supervise preparation of incident action plan.
 - Assemble information on alternative strategies.
 - Assemble and disassemble strike teams not assigned to operations.
 - Identify need for use of specialized resources.
 - Provide periodic predictions on incident potential.
 - Compile and display incident status summary information.
 - Advise general staff of any significant changes in incident status.
 - Provide incident traffic plan.
 - Supervise planning section units.
 - Prepare and distribute incident commander's orders.
 - Insure that normal agency information collection and reporting requirements are being met.
 - Prepare recommendations for release of resources for submission to the incident commander.
-

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Logistics Section Chief

Logistics Section Chief Role:

The Logistics Section Chief is responsible for identifying needed resources and supplies and on-scene delivery and management of supply facilities, services, and materials.

Logistics Section Chief Position Candidate Examples:

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

Logistics Section Chief Checklist:

- Obtain briefing from incident commander.
- Plan organization of logistics section.
- Assign work locations and preliminary work tasks to section personnel.
- Participate in preparation of Incident Action Plan.
- Identify service and support requirements for planned and expected operations.
- Provide input to and review communications plan, medical plan, and traffic plan.
- Coordinate and process request for additional resources.
- Review incident action plan and estimate section needs for next operational period.
- Insure incident communications plan is prepared.
- Advise on current service and support capabilities.
- Prepare service and support elements of the incident action plan.
- Estimate future service and support requirements.
- Receive demobilization plan from planning section.
- Recommend release of unit resources in conformity with demobilization plan.

Insure general welfare and safety of logistics section personnel.

SCHUMANN WIND, LLC

Emergency Response Procedures

ICS Checklists

Form #EM-6

Date: May 2017

Finance Section Chief

**Finance
Section Chief
Role:**

The Finance Section Chief is responsible for management of cost control and critical manpower planning.

**Finance
Section Chief
Position Candidate
Examples:**

- Initial Responder
 - Facility Operations Manager
 - General Manager
 - Maintenance Foreman
 - OPUC Compliance Supervisor
 - EHS Specialist
 - EHS Consultant
-

**Finance
Section Chief
Checklist:**

- Obtain briefing from incident commander.
 - Attend briefing with responsible agency to gather information.
 - Attend planning meeting to gather information.
 - Identify needs, order supplies, and support needs for finance section.
 - Develop an operating plan for finance function on incident.
 - Prepare work objectives for staff.
 - Determine need for commissary operation.
 - Inform command staff and general staff when section is fully operational.
 - Meet with agency representatives as required.
 - Provide input in all planning sessions on financial and cost analysis matters.
 - Maintain daily contact with agency(s) administrative headquarters on finance matters.
 - Insure that all personnel time records are transmitted to appropriate locations.
 - Participate in all demobilization planning.
 - Insure that all obligation documents initiated at the incident are properly prepared and completed.
 - Brief agencies on all incident related business management issues needing attention and follow-up prior
-

SCHUMANN WIND, LLC
Emergency Response Procedures
ICS Checklists

Form #EM-6

Date: May 2017

to leaving incident.

SCHUMANN WIND, LLC
Emergency Response Procedures
Agency Notifications and Reporting
 Form # EM-3

Date: May 2017

Name of company person making calls: _____
 Title of company person making calls: _____

Agency Notifications:

Local Emergency Service: Fire or Medical Emergency	911, 24 hours/day EURFPD 1-(541)-566-2311 Milton-Freewater-1-(541)-938-7146
Persons Contacted:	_____
Person Title:	_____
Date and Time:	_____
Report #:	_____
Reporting Criteria: <ul style="list-style-type: none"> • Any facility emergency 	Comments:
Oregon State Police:	(541)-278-4090 24 hours/day - 911
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
NRC report #:	_____
Reporting Criteria: State related Incident-Aircraft down-Act of terrorism- Theft	Comments:
East Umatilla County Health District	911-Emergency 1-(541)-566-3813
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
Report #:	_____
Reporting Criteria: <ul style="list-style-type: none"> • Medical Emergency 	Comments:

Name of company person making calls: _____
 Title of company person making calls: _____

SCHUMANN WIND, LLC
Emergency Response Procedures
Agency Notifications and Reporting
 Form # EM-3

Date: May 2017

Agency Notifications:

Oregon Department of Environmental Quality:	1-(503)-229-5696, 24 hours/day 1-(800)-452-4011
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
Reporting Criteria: <ul style="list-style-type: none"> • Actual or threatened release of any hazardous material that poses threat to public or the environment. • Release of hazardous substance to state waters <ul style="list-style-type: none"> ○ Spills or leakage of oil or liquid pollutant on state lands or waters ○ Release of hazardous material or waste upon any highway. [Vehicle Code] 	Comments:
OERS	1-(800) 452-0311 (oil spill hot line)
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
Reporting Criteria: <ul style="list-style-type: none"> Discharge or threatened discharge of oil/condensate greater than one barrel into marine waters. 	Comments:

SCHUMANN WIND, LLC
Emergency Response Procedures
Agency Notifications and Reporting
 Form # EM-3

Date: May 2017

Name of company person making calls: _____
 Title of company person making calls: _____

Agency Notifications:

OSHA: (OREGON)	1-(503)-378-3573 or 1-(503)-378-3272 1-(800)-922-2689
Person Contacted:	_____
Person Title:	_____
Date and Time:	_____
Report #:	_____
Reporting Criteria: <ul style="list-style-type: none"> • Catastrophes, Fatality or over-night hospitalization accidents. 	Comments:
Oregon Public Utilities Commission	1-(503)-378-6634
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
Report #:	_____
	Comments:
Agency Contacted:	
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
Report #:	_____
	Comments:
Agency Contacted:	
Agency Person Contacted:	_____
Agency Person Title:	_____
Date and Time:	_____
Report #:	_____
	Comments:

SCHUMANN WIND, LLC
Emergency Response Procedures
Agency Notifications and Reporting
 Form # EM-3

Date: May 2017

Name of company person making calls: _____
 Title of company person making calls: _____

Agency Notifications:

Agency Contacted:	
Person Contacted:	
Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:
Agency Contacted:	
Agency Person Contacted:	
Agency Person Title:	
Date and Time:	
Report #:	
	Comments:

SCHUMANN WIND, LLC
Emergency Response Procedures
Agency Notifications and Reporting
Form # EM-3

Date: May 2017

SCHUMANN WIND, LLC
Emergency Response Procedures
Emergency Drill Documentation
Form # EM-8

Date: May 2017

Date: _____
Em. Drill Start Time: _____
Em. Drill Finish Time: _____
Location of Drill: _____

DESCRIPTION OF EMERGENCY DRILL:

Evaluator Checklist:

Immediate Actions: (Actions, Knowledge, Documentation, Available Tools/Info)

- Em call handling
- Agency Notification
- Company Notification
- Em. Contractor Notification
- Gas company notifications
- First on scene actions

Ongoing Actions: (Actions, Knowledge, Documentation, Available Tools/Info)

- On scene command or ICS
- On scene air monitoring
- On scene leak isolation
- Company staff mobilization
- Em. Contractor mobilization
- Containment & isolation of area
- Agency notifications and reports

Overall Evaluation of Emergency Systems and Knowledge:

- Efficient, accurate, and updated Info (phone list, checklist, forms, etc.)
 - Accurate procedures
 - Em Resources readily available (equipment, contractors, Co. employees, etc.)
 - Communication Systems
 - Public protection
 - Employee protection and PPE
 - Roles and Responsibilities understood
 - Training (Hazwoper, Em. Manual, PPE, ICS, etc.)
 - Knowledge of wind turbine facility & equipment
 - Documentation
 - ICS (Incident command, planning, operations, logistics, finance)
-

SCHUMANN WIND, LLC

Emergency Response Procedures

FORMS INDEX

Date: May 2017

Form Number	Form Title/Description:	Em. Plan Tab #:	Form To Be Used By:
EM-1	Initial Notification Document	6	First person to receive emergency notification.
EM-2	First Responder On Scene Checklist	6	First company pipeline person capable of performing First Responder function.
EM-3	Agency Notification Log	6-8	Company On-duty supervisor or designated company employee
EM-4	Company Notification Log	6	Company On-duty supervisor or designated company employee
EM-5	Emergency Log of Miscellaneous Activities	6	Any person performing emergency response activities
EM-6	Incident Command System Checklist by ICS Job Title	6-14	Any person performing Incident Command response activities
EM-7	Post Incident Response Critique Checklist	6	Company supervisor performing emergency response critique review
EM-8	Emergency Drill Documentation	6	Company supervisor performing emergency response drill review
	Emergency Plan Notification Record		
	Telephone Report of Incidents	8-EM # 3	Facility Supervisor or Facility Compliance Supervisor reporting incidents to the appropriate agency
	Safety Related Condition Report	(TBD)	Facility Supervisor or Facility Compliance Supervisor reporting safety related condition to the appropriate agency.
	Follow Up Written Incident Report	(TBD)	Facility Supervisor or Facility Compliance Supervisor reporting incidents to the appropriate agency.
	Annual Report	CES LLC.	Facility Supervisor with Condor Energy Services LLC. completing the annual report.
	Schumann Wind, LLC required documentation	(SW)	Facility Directives, Safety Management Directives
	Training Documentation	(SW)	Facility Supervisor or Facility Compliance Supervisor / Contractor performing emergency response training.

(TBD) To be determined

SCHUMANN WIND, LLC
Emergency Response Procedures
First on Scene Checklist
Form # EM-2

Date: May 2017

1st Priority: Protect the public, responders, company personnel.

Responsibilities: **Scope, Assessment, and Mitigation:**

- Identify the type, form, nature, quantity and hazards involved in the incident.
- Develop a proper course of action (prevention of accidental ignition, runaway turbine rpm's, etc.)

Checklist: **Assessment:**

- Is a fluid being released?
- Is there a visible vapor cloud?
- Has a liquid pool started to form?
- How large is the visible cloud or pool?
- Is the liquid pool likely to spread and enter a body or water?
- Is a vapor condition likely to enter nearby buildings?
- If already ignited, how large is the fire?
- Is the situation immediately dangerous to persons or property?
- Is the situation likely to get worse?
- What can be done to reduce the risk to persons and property?
- Are there ignition sources that need to be removed?

Mitigation:

- Evacuate or shelter in place.
- Ignition source control.
- Emergency shutdown or isolation.

Other Activities To Consider:

- Interact with other response agencies.
 - Start documentation with emergency log of misc. activities (form #EM-5)
 - Notify local emergency response agencies (911).
 - Notify other agencies (federal, state, other local agencies)
 - Notify appropriate personnel within the pipeline Company:
 - Manager, and/or Duty supervisor
 - Facility operator
 - General Manager
 - SCHUMANN WIND, LLC Environmental and Safety Coordinator
 - Other personnel needed to respond to the scene (repair crew, operators, supervisors, etc.)

SCHUMANN WIND, LLC
Emergency Response Procedures
Initial Notification Document
Form # EM-1

Date: May 2017

Caller Information: 1) Date: _____
2) Time: _____
3) Name of Caller: _____
4) Telephone # of Caller: _____

Emergency Information: 5) Emergency Location (include directions if needed) _____

6) Status of the Event: Check all that apply explain in comments section

<input type="checkbox"/> Fire?	<input type="checkbox"/> Special considerations?
<input type="checkbox"/> Explosion?	(RR, sewer, waterway,
<input type="checkbox"/> Natural disaster?	electrical power lines, other)
<input type="checkbox"/> Civil disorder?	
<input type="checkbox"/> Visible damage?	

7) Emergency action already taken by civilians or public officials (fire, police, Hwy patrol, etc.)? _____

Comments And Other Pertinent Information: _____

Call Receiver Information: _____
Print Name of Person Receiving Call: _____

Signature: _____

SCHUMANN WIND, LLC
Emergency Response Procedures
Initial Notification Document
Form # EM-1

Date: May 2017

Caller Information: 1) Date: _____
2) Time: _____
3) Name of Caller: _____
4) Telephone # of Caller: _____

Emergency Information: 5) Emergency Location (include directions if needed) _____

6) Status of the Event: Check all that apply explain in comments section

<input type="checkbox"/> Fire?	<input type="checkbox"/> Special considerations?
<input type="checkbox"/> Explosion?	(RR, sewer, waterway,
<input type="checkbox"/> Natural disaster?	electrical power lines, other)
<input type="checkbox"/> Civil disorder?	
<input type="checkbox"/> Visible damage?	

7) Emergency action already taken by civilians or public officials (fire, police, Hwy patrol, etc.)? _____

Comments And Other Pertinent Information: _____

Call Receiver Information: _____
Print Name of Person Receiving Call: _____

Signature: _____

SCHUMANN WIND, LLC
Emergency Response Procedures
POST-INCIDENT RESPONSE CRITIQUE
 Form #EM-7

Date: May 2017

Date of Critique: _____
 Title: _____
 Signature: _____

Issue:	Response Actions:	Recommendations For Improvement: (Consider procedures, forms, training)
Initial Action And Deployment:	<input type="checkbox"/> Was initial information handled accurately, quickly, and completely? <input type="checkbox"/> Did the On-Duty Person receive notification in a timely manner? <input type="checkbox"/> Did the first person on-scene arrive in a timely manner? <input type="checkbox"/> Did the First Responder take the correct action? (scope, assessment, evacuation, etc.)	
Initial On-Scene Activities:	<input type="checkbox"/> Were isolation zones setup if appropriate? <input type="checkbox"/> Was ICS setup properly and in a timely manner? <input type="checkbox"/> Did ICS function properly? <input type="checkbox"/> Was mitigation handled properly? <input type="checkbox"/> Was containment handled properly? <input type="checkbox"/> Were emergency events and actions documented? <input type="checkbox"/>	
Reporting And Notifications:	<input type="checkbox"/> Were all agency notifications made in a timely manner? <input type="checkbox"/> Were Company personnel notified? <input type="checkbox"/> Were emergency contractors notified? <input type="checkbox"/> Were gas supply companies notified?	

SCHUMANN WIND, LLC
Emergency Response Procedures
POST-INCIDENT RESPONSE CRITIQUE
Form #EM-7

Date: May 2017

Issue:	Response Actions:	Recommendations For Improvement: (Consider procedures, forms, training)
Communications:	<input type="checkbox"/> ICS roles clearly communicated? <input type="checkbox"/> Proper communication between all appropriate response personnel (radios, cell phones, etc.) <input type="checkbox"/> Messages clear and concise.	
Media And Public Affairs:	<input type="checkbox"/> Public information released? <input type="checkbox"/> Did IC approve released info? <input type="checkbox"/> Was interface with public satisfactory?	
Site Safety:	<input type="checkbox"/> Was a site safety plan developed? <input type="checkbox"/> PPE used? <input type="checkbox"/> Was hazard info available?	
Logistics And Planning:	<input type="checkbox"/> Was emergency equipment readily available? <input type="checkbox"/> Was emergency equipment appropriate?	
Finance:	<input type="checkbox"/> Were monetary funds available when needed?	
Other:	<input type="checkbox"/> Were there any problem areas not previously discussed?	

Facility Mgr Signature:

Date:

PART C - ORIGIN OF THE INCIDENT

- | | |
|--|--|
| <p>1. Incident occurred on</p> <p><input type="radio"/> Tower System</p> <p><input type="radio"/> Generation System</p> <p><input type="radio"/> Transmission Line of Distribution System</p> <p>2. Failure occurred on</p> <p><input type="radio"/> Body of tower <input type="radio"/> Blades</p> <p><input type="radio"/> Nacelle</p> <p><input type="radio"/> Component</p> <p><input type="radio"/> Other: _____</p> | <p>3. Material involved</p> <p><input type="radio"/> Steel</p> <p><input type="radio"/> Plastic (If plastic, complete all items that apply in a-c)</p> <p>Plastic failure was: <input type="checkbox"/> a.ductile <input type="checkbox"/> b.brittle <input type="checkbox"/> c.joint failure</p> <p><input type="radio"/> Material other than plastic or steel: _____</p> <p>4. Part of system involved in incident</p> <p><input type="radio"/> Tower <input type="radio"/> Regulator/Metering System</p> <p><input type="radio"/> Generation Station <input type="radio"/> Other: _____</p> <p>5. Year the Turbine or component which failed was installed: / / / / /</p> |
|--|--|

PART D – MATERIAL SPECIFICATION (if applicable)

1. Nominal damage size / / / / / in.
2. Nominal damage size in feet / / / / / ft.
3. Specification / / / / / / / / /
4. Generator type _____
5. System type _____
6. SYSTEM manufactured by _____ in year / / / / /

PART E – ENVIRONMENT

1. Area of incident
- In open ditch
- Under pavement Above ground
- Under ground Inside/under tower
- Other: _____
2. Depth of cover: _____ inches

PART F – APPARENT CAUSE

Important: There are 25 numbered causes in this section. Check the box to the left of the **primary** cause of the incident. Check one circle in each of the supplemental items to the right of or below the cause you indicate.

F1 – CORROSION

If either F1 (1) External Corrosion, or F1 (2) Internal Corrosion is checked, complete all subparts a – e.

- | | | |
|---|--|--|
| <p>1. <input type="checkbox"/> External Corrosion</p> <p>2. <input type="checkbox"/> Internal Corrosion</p> | | <p>Component</p> <p>Coating</p> <p><input type="radio"/> Bare</p> <p><input type="radio"/> Coated</p> <p>b. Visual Examination</p> <p><input type="radio"/> Localized Pitting</p> <p><input type="radio"/> General Corrosion</p> <p><input type="radio"/> Other: _____</p> <p>c. Cause of Corrosion</p> <p><input type="radio"/> Galvanic <input type="radio"/> Stray Current</p> <p><input type="radio"/> Improper Cathodic Protection</p> <p><input type="radio"/> Microbiological</p> <p><input type="radio"/> Stress Corrosion Cracking</p> <p><input type="radio"/> Other: _____</p> <p>d. Was corroded part of turbine system considered to be under cathodic protection prior to discovering incident?</p> <p><input type="radio"/> No <input type="radio"/> Yes, Year Protection Started: / / / / /</p> <p>e. Was TURBINE previously damaged in the area of interest/corrosion?</p> <p><input type="radio"/> No <input type="radio"/> Yes, How long prior to incident: / / / / / years / / / / / months</p> |
|---|--|--|
9. Third Party Excavation Damage (complete a-d)
- a. Excavator group
- General Public Government Excavator other than Operator/subcontractor
- b. Type: Road Work Water Electric Phone/Cable Landowner
- Other: _____
- c. Did operator get prior notification of excavation activity?
- No Yes: Date received: / / / / / mo. / / / / / day / / / / / yr.
- Notification received from: One Call System Excavator Contractor Landowner
- d. Was location marked?
- No Yes (If Yes, check applicable items i – iv)
- i. Temporary markings: Flags Stakes Paint
- ii. Permanent markings: Yes No
- iii. Marks were (check one) Accurate Not Accurate
- iv. Were marks made within required time? Yes No

F4 – OTHER OUTSIDE FORCE DAMAGE

10. Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause: Man made Natural
11. Car, truck or other vehicle not relating to excavation activity damaging facility
12. Vandalism

F5 – MATERIAL AND WELDS

Material

14. Body of Tower ⇒ Dent Gouge Wrinkle Bend Arc Burn Other: _____
15. Component ⇒ Valve Fitting Vessel Extruded Outlet Other: _____
16. Joint ⇒ Gasket O-Ring Threads Other: _____

Weld

17. Butt ⇒ Pipe Fabrication Other: _____
18. Fillet ⇒ Branch Hot Tap Fitting Repair Sleeve Other: _____

Complete a-g if you indicate **any** cause in part F5.

a. Type of failure:

- Construction Defect ⇒ Poor Workmanship Procedure not followed Poor Construction Procedures
- Material Defect

b. Was failure due to damage sustained in transportation to the construction or fabrication site? Yes No

c. Was defective part tested before incident occurred? Yes, complete d No

d. Date of test: ___/___/___ mo. ___/___/___ day ___/___/___ yr.

e. Test medium: NDT X-RAY Other: _____

F6 – EQUIPMENT AND OPERATIONS

20. Malfunction of Control/ Equipment ⇒ SWITCHING Instrumentation Power Regulator Other: _____
21. Threads Stripped, Prior to Coupling ⇒ Nipples Valve Threads Mechanical Couplings Other: _____
22. Ruptured or Leaking Seal/Pump Packing of Hydraulic system

F7 – OTHER

24. Miscellaneous, describe: _____
25. Unknown
 Investigation Complete Still Under Investigation (submit a supplemental report when investigation is complete)

PART G – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT (Attach additional sheets as necessary)

