



COVID-19

Safety Protocols for the Renewable Energy Sector

A compilation of four safety protocols to ensure health and safety during the COVID-19 pandemic.



SAPVIA would like to thank the following people for their contributions towards putting these protocols together:

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Disclaimer:

At the time of development, South Africa was under lockdown level-4. Please note that the protocols are guidelines, and are not considered regulations. In general, the following precautions should always be adhered to.

All personnel:

All personnel should be trained on COVID-19 preventative measures including:

- Wear a well-fitting mask that covers your mouth and nose, and avoid touching eyes, nose and mouth. Practice respiratory hygiene (cover mouth & nose when coughing / sneezing);
- Cleaning of hands frequently with an alcohol-based hand rub or washing with soap and water.
- Maintaining social distance of at least 1.5m;
- use sanitizer in all strategic locations on site, practice respiratory hygiene (cover mouth & nose when coughing / sneezing);
- Open doors with the back of hands rather than using your fingers / palm where possible. Wear disposable gloves if work requires regular hand contact with objects (disposable gloves to be disposed of in bagged bins;
- Avoid all forms of contact greetings;
- Employees should stay at home should they show any symptoms of illness.

All offices/sites:

- Conduct non-contact-based screening on sites;
- Place hand sanitisers or washing stations at strategic locations at offices and on-site;
- Implement a more frequent cleaning regime focusing on frequently touched surfaces (door handles, lift buttons, handrails etc.);
- Supply appropriate PPE to all workers on site and conduct a COVID-19 safety protocol induction for every person on site to ensure adherence to protocols;
- Ensure workspaces allow 1.5m distance to be maintained, and avoid physical meetings as far as possible.



COVID-19 PROTOCOL 1: Large Scale Renewable Energy Plant Operation

1

Risk

Access to/from site
(all contractors and
visitors)

Responsibility



Employer



Owner



Transport shuttle
Personal Vehicle
Drivers

Mitigation plan/Action:

- **Important Notice:** No breathalysing shall be carried out during the COVID-19 epidemic.
- **For Contractors:** All entrants to register at entry, and checked for mandatory PPE and body temperature. Screening questionnaire to be completed and disinfectant applied.
- **For all security staff:** provide compliant PPE training and safety procedures.
- **For Visitors:** Visitors to fill out questionnaire to measure their risk. The information on the questionnaire should ideally be uploaded to an app by the security which will inform them if they are to grant access or not.
 - No non-essential or uninvited visitors allowed in facility.
- **For Staff:** all personnel on site will adhere to health and safety COVID-19 regulations issued by the government.
 - Transport services will adhere to COVID-19 regulations issued by the government.
 - Alternatives to public transport will be sought for all employees if possible.
 - All rules stipulated by the government must be followed to ensure the hygiene and safety of all.

2

Risk

Non-compliance and shortage of prescribed
PPE (hand sanitizers, face masks, etc)

Responsibility



Employer



Employee



office manager



Site manager



Contractor

Mitigation plan/Action:

- **Signage:** PPE signs visible to all at main points.
 - **Employee PPE Training:** Employer & contractor to provide and train employees on compliance of PPE.
- Non-compliance:**
- Non-compliant employees will be removed from site.
 - No work will be scheduled if the PPE is inadequate.

3

Risk

Activities and hygiene on site

Responsibility



Employer



Contractor



Sub contractor



Employer & Consultants (through government)

Mitigation plan/Action:

Office Employees

- Essential staff to work in shifts.
- No gatherings in communal site areas (kitchen/cafeteria, tables where staff have lunch); or ensure staggered break times.

On-Site Employees

- Only management meetings via online platforms.
- Induction will be carried out in a room that allows (1.5m) apart between occupants.

Awareness and Training:

- Provide training on new compliant hygiene procedures for cleaning staff including COVID-19 regulations and establish an awareness campaign.

4

Risk

Poor ventilation inside wind turbines

Responsibility



Contractor



Sub contractor

Mitigation plan/Action:

- Open all hatches in wind turbine.
- Open back of nacelle (hoist hatch covers) to allow air to flow in.
- No more than 2 people inside the hub.
- Increase ventilation as much as possible where this can be achieved.

5

Risk

Communication breakdown with key stakeholders

Responsibility



Employer



Contractor

Mitigation plan/Action:

- Establish a COVID-19 compliant communication protocol and share at strategic points.
- Ensure security have radios and all contractors with 2-way radios.
- Establish WhatsApp groups for all contractor's team leaders.
- Official COVID-19 communication plan will be carried out by the General Manager.

COMMERCIAL & SUPPLY CHAIN

6

Risk

Curtailments

Responsibility



Employer

Mitigation plan/Action:

- Follow curtailment procedure.
- Engage with the SBO to find a solution.

7

Risk

Site shut down due to COVID-19 case

Responsibility



Employer



Contractor



Human Resources

Mitigation plan/Action:

For Employee: Employee to report diagnosis to employer. Engage with employee expressing sympathy and support.

For Employer: Follow infection protocol per COVID-19 regulations issued by government and ensure payroll and leave consequences to be communicated to employees

8

Risk

Unavailability of subcontractors/ service providers due to infected person(s)

Responsibility



Employer



Contractor

Mitigation plan/Action:

- Ensure contractors have risk mitigation measures in place.
- Where contractual obligations will be impacted, notify affected parties (DEFF, DMRE, NERSA, SBO and system operator etc.) in writing and within time as stipulated in the contracts.

9

Risk

Supply chain disruptions

Responsibility



Contractor

Mitigation plan/Action:

Plan risk mitigation measures together with subcontractors entailing:

- Increased spares (place orders) of items with long lead time immediately, issue required permits for contractors where restrictions may still be in place, suppliers identified and engaged that will be needed to keep essential operations and maintenance of plant going and screening and disinfectant appliances (Temp reader, Mist Blower) being procured.

COVID-19 PROTOCOL 2:

Large Scale Renewable Energy Plants Under Construction

1

Risk

Travel to/from site and travel to site from another province (required to re-establish site operations)

Responsibility



Contractor

Mitigation plan/Action:

- Isolation of 14 days required from personnel who come from areas/ provinces where there are cases of COVID-19. Access to site permitted once tested and declaration form filled out at the main gate.
- Site Manager to ensure to separate task teams during travel and record names of employees traveling together to the project (in one car, plane) to ensure tracking of a contact persons if someone develops COVID-19 symptoms. Standard travel rules apply to Vestas and subcontracting companies' employees.
- A separate register will be kept on site for all personnel coming from other locations that are not Wesley.
- All transportation mediums to have sanitizer and employees and transport to be sanitized before and after picking up employees by the respective drivers (**will be screened by the Safety Officer prior**) and it will be recorded and file for proof.
- Local workers should make use of alternative transport such as bicycles if possible.
- Taxis to follow taxi COVID-19 regulations as per government.
- **Shifts will be staggered to accommodate the quantity of employees that need to be transported.**
- **Seating arrangements within transport to comply with lockdown regulations.**

2

Risk

Lack of awareness of COVID-19 risks and protective measures within the workforce

Responsibility



Contractor

Mitigation plan/Action:

For Employees: All employees to be issued face masks to be used during work (either one per day, or two reusable masks that are used interchangeably and washed in between use). No employee is allowed on site without adequate and relevant PPE. **Employees to follow best practices for hygiene and ways of behaviour in public places, as required by WHO and local regulations.**

Awareness and Training:

- All employees are required to be trained on the COVID-19 Risk Assessment and attend Awareness Talks of Coronavirus COVID-19 (WHO and DOH websites updates) to be held daily/ weekly basis with the employees to make them aware of all the new developments and updates from the republic.
- On return to work, all employees will be re-inducted on COVID-19 in smaller grounds and an attendance registered will be returned for the same. Posters will be place on site notice boards and vehicles loading personnel for awareness training in vernacular languages.
- Single use PPE should be properly disposed of so that it cannot be re-used again.

Risk

Site Deliveries

Responsibility



Contractor

Mitigation plan/Action:

During loading, the driver and loaders (who should both wear all mandatory PPE) must maintain social distance, declare if they come across infected personnel and sanitise themselves and materials to ensure the material is not a carrier of the COVID19. Drivers not to take hitchhikers en-route to site.

Risk

Activities and hygiene on Sites

Responsibility



Contractor



employees



Consultants



third parties

Mitigation plan/Action:

- Teleconferences or online events should take preference over physical meetings. Meetings or toolbox talks to be scaled down so that fewer people attend. Project level will be held off-site.
- For essential face to face meetings with necessary attendees, all attendees to wear face masks, seating should be 1.5metres apart from each other, take place in open areas (if room doesn't allow seating requirements) and meetings room to be well ventilated.
- Non- essential visitors will not be allowed to site, all visitors coming to site will be subject to approval by the Site Manager and Safety Officer.
- Registration of all personnel with contact details that will be shared with local public health authorities if any participant becomes infected/suspected with the virus. If they will not agree to this, they cannot attend the event or meeting.

Hand Washing

- Encourage employees through posters and multiple hand wash stations to continue with the washing of hands before eating and after every toilet visit.
- Sanitizers hand rub dispensers and hand wash sanitisers must be in prominent places on site and will be regularly refilled. Site camp to have designated bins for hand towels that will be regularly removed and disposed.

Toilet Facilities

- Limit crowding in the bathroom area, wash hands before and after using the facilities.
- Registers for the cleaners (to be signed with full details daily after cleaning) to enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush and rubbish emptied more frequently (twice daily).

Office Hygiene

- Daily signed registration of cleaners who will assist in cleaning twice daily with disinfectant products, fumigation once every week and telephones, doorknobs, keyboards, photocopiers to be cleaned twice a day.
- Contractors will ensure that face masks and / or paper tissues are available at all workplaces, for those who develop a runny nose or cough at work, along with closed bins for hygienically disposing of them in the office space.

...continued

Risk

Activities and hygiene on Sites

- Boardroom seats will be pre-marked, and chairs placed to ensure minimum personal space on 1.5m apart.
- Limit uncontrolled access into the office space by keeping them locked
- Security onsite
- Security officer will sign in for employees entering site, a pre-populated register for all companies will be made available to the security team.
- Maximum of 2 people per 6m2 office container will be permitted.
- Working in groups monitored with face masks being used constantly.

4

Risk

Testing of Employees and suspected infections

Responsibility



Contractor

Mitigation plan/Action:

All employees to be screened and tested (thermometer) by security, prior to accessing the site. All personnel with a **high temperature** (37.5°C +) and/or presenting any flu-like symptoms **or a persistent cough at work, should:**

- Return home immediately,
- Avoid touching anything,
- Cough or sneeze into a tissue and put it in a sealed bin, or if they do not have tissue, cough and sneeze into the crook of the elbow,
- **Speak to a doctor/clinic/hospital before you go in person to a testing/healthcare facility.**
- If employee is placed under monitoring, a letter should be obtained clearing them before they can return to work. If new symptoms developed, the same procedure to be followed. Whilst the Construction Regulations 7(g) refers to the Contractor ensuring that all employees are fit to the specific work they perform, the COVID-19 outbreak, deem any person who is infected or potentially infected, with COVID-19 incompetent.

On-site confirmed cases

Site Manager/ Safety Officer will provide advice to:

- Any worker that has been in close contact, cleaned up any bodily fluids or living with a confirmed case, need to self-isolate (14 days). They will be actively followed up by the designated contractors/ company of that employees and Vestas will always be kept informed.

A confirmed case of COVID-19 in the workplace will cause anxiety among co-workers and some may become stressed. Clear communication is important, directing workers to reliable sources of information about COVID-19. Managers should be supportive and understanding and as far as possible flexible on work arrangements.

COVID-19 PROTOCOL 3:

Small Scale Embedded Generation (SSEG) of Electricity

1

Risk

Travel to/from site

Responsibility



Installer



EPC

Mitigation plan/Action:

- As far as possible, both main contractors and sub-contractors to assist with the transportation of employees, in-line with transportation rules and regulations.
- Supply sufficient and appropriate PPE to ensure safe usage of public transport.
- Limiting travel to geographic location within residential province and usage of public transport as far as possible.

2

Risk

Access Control on Site

Responsibility



Installer



EPC

Mitigation plan/Action:

- Limit number of essential employees on a site and enforce social distancing of no less than 1.5m.
- Registration with contact details at entry and for all meetings (including number of occupants in the vehicle), ensure mandatory PPE (for employees and additional for all visitors without), full screening and body temperature to be checked using a no-contact thermometer, and apply disinfectant on all occupants entering site.
- Conducting a COVID-19 safety protocol induction for every person on site and notifying all visitors (about required PPE and safety protocols for transmission control) prior to attendance at the premises, ensure adherence to protocols.

3

Risk

Regulations for sub-contractors and third parties

Responsibility



Installer



EPC

Mitigation plan/Action:

- Each sub-contractor compelled to submit their own safety plan and become signatory to that of main contractor before being allowed to carry out work. Failure to do so will result in removal from site.
- Carry out continuous risk assessment and adjustment of protocols.
- Printed notices will be erected at every entrance to site further advising enforced protocols and required PPE.

4

Risk

On site activities and meetings

Responsibility



Installer



EPC

Mitigation plan/Action:

- All meetings and activities are to be carried out outdoors, ensuring social distancing of 1.5m. Essential indoors activities and meetings to be conducted with social distancing and proper ventilation.
- Educate cleaning staff about COVID-19 safety regulations and continuous disinfectant of all door handles, taps etc. and communal spaces.
- The Employer shall further educate the employees of the proper usage of requisite PPE, cleaning and disposing thereof.

5

Risk

Management of emotional and mental wellness of infected workers and co-workers

Responsibility



Installer



EPC

Mitigation plan/Action:

- Task team to be formed for the review, management and enforcement of protocols.
- Isolation of infected/suspected employees and support and guidance on management of infection as per COVID-19 regulations.
- Maintaining of proper confidentiality and legal collection and retention of information and financial stability in terms of salary provision and providing planning and budgeting tools.
- Full support and guidance on implementation and management of protocols with continuous (virtual) observation by managers, project managers, and sub-contractors of workers and supply of required support materials.

COVID-19 PROTOCOL 4: Local Solar Manufacturing and Distribution

The solar PV essential client database comprises of the following clients that are reliant on the operation of local manufacturing and distribution: schools, airports, clinics, hospitals, security and safety services, petroleum industry and others. The operation of local solar manufacturing, distribution and installation plays a crucial role in providing essential services for other major industries, it is therefore vital for the solar PV industry to remain operational throughout all levels of the national lockdown.

IN MANUFACTURING FACILITIES

NATURE & PROFILE OF WORK: Sales and engineering design of systems, manufacturing, procurement of components, and all administrative support required.

GEOGRAPHIC LOCATION OF WORKFORCE: From home as far as possible, or from the office within geographic location of residence where absolutely critical.

1

Risk

**Travelling to/
from work -Ex-
posure to the
virus (medium
risk)**

Responsibility



Employer



Employees

Mitigation plan/Action:

- Provide employees with information on the virus and precautions to take during travel. Analyse the risk of employees using public transportation and ascertain critical functions to form a staggered workforce.
- Limit / Postpone travel where possible (work from home if you can). Where you cannot avoid travelling (including using public transport):
 - If possible, maintain social distancing (at least 1.5m / 3ft) between yourself and anyone else when travelling, frequently clean hands by using alcohol-based hand sanitizer or wash using soap and water, wear a suitable face mask, and avoid touching eyes, nose or mouth, limit conversation with fellow passengers, avoid carrying excess baggage and ensure that shoes are kept clean at all times.
- Employees with COVID-19 symptoms are discouraged from travelling to work

2

Risk

**Meetings with other
organizations (medium risk)**

Responsibility



Employer



Employees

Mitigation plan/Action:

- Eliminate requirement for face to face meetings, if possible, arrange for meetings to be carried out virtually.
- For face to face meetings that cannot be avoided, conduct screening prior to meeting, ensure all attendees are wearing a mask, use a hand sanitizer when entering/exiting a room, maintain social distancing (e.g. keep 1 chair distance between each meeting attendees), avoid contact greetings.

3

Risk

Activities and hygiene at the office - exposure to the virus (low risk)

Responsibility



Employer



Employees

Mitigation plan/Action:

- If employees can work from home, implement home working policies until further notice.
- Ensure all employees are made aware of preventative measures as per government rules.
- Implement a more frequent cleaning regime, focusing on frequently touched surfaces (door handles, lift buttons, handrails etc.).
- The sharing of office stationery and equipment should be avoided.
- The employer is encouraged to create a well-spaced and ventilated working environment.

COMPONENT HANDLING AND TRANSPORTATION

NATURE & PROFILE OF WORK: design, procurement of components, construction and operation of embedded generation of solar PV systems which are small to medium scale power production plants connected within the electricity distribution network, which plants are usually located close to point of consumption.

GEOGRAPHIC LOCATION OF WORKFORCE: Country wide throughout South Africa, however work will be carried out within geographic restrictions advised by government.

1

Risk

Meetings with other organisations (medium risk)

Responsibility



Employer



Employees



Client

Mitigation plan/Action:

- Limit number of workers on-site to the essential employees.
- Maintain attendance register to assist with contact tracing if required.
- Eliminate requirement for face to face meetings, if possible, arrange for meetings to be carried out virtually.

2

Risk

Working in offices / on site or factories etc. - exposure to the virus (low to medium risk)

Responsibility



Employer



Employees



Client

Mitigation plan/Action:

- Employees to stay at home if they experience a fever, a new cough or difficulty breathing (seek medical care)
- Report any persons that may be showing signs of illness to management and the company
- Employees to avoid holding door handles, lift buttons and handrails, when going up and down the stairs
- Before leaving to site, the customer should be contacted, and a telephonic consultation should take place.
- Place information posters at strategic locations (site entrance, canteen etc.).
- Maintain a record of all persons on site via signing in and signing out systems
- Suitable and sufficient amount of cleaning materials to be available at all times to maintain the cleaning regime
- Printed notices will be erected at every entrance to site further advising enforced protocols and required PPE

3

Risk

Accommodation - hotels etc. - used by staff exposure to the virus (medium risk)

Responsibility



Employer



Employees

Mitigation plan/Action:

- Minimize use of accommodation such as hotels and B&B's.
- Employees with COVID-19 symptoms are discouraged from travelling to work.
- Employees to self-isolate for at least 7 days if they experience a fever, a new cough or difficulty breathing (seek medical care).

