

# Shaping International Best Practice Process Safety



For over 40 years, NGC has been a domestic operator servicing the local industrial consumer base in the heavy industrial, light industrial, power generation and LNG production industries. In this new era of energy, NGC and the wider NGC Group have set sights on becoming a recognised energy brand with an international footprint.

Expanding its presence outside of Trinidad and Tobago, the Group has illustrated its home-grown energy expertise, building its thought leadership at international conferences and engagements as well as through other opportunities.

Internationally, NGC's brand profile was elevated significantly when the Company initiated and collaborated on a monograph with the Centre for Chemical Process Safety (CCPS) – a technical group of the American Institute of Chemical Engineers. This monograph, for use by companies around the world, outlines fundamental guidelines to manage process safety during times of disruption.

## Project origin

In the usual course of operations, Risk-Based Process Safety (RBPS) guidelines are used by energy and chemical companies to manage and mitigate risk of process safety incidents due to human error, failures of technology, weaknesses in management systems, external circumstances, or natural events. With COVID-19 disrupting routines, reducing manpower and forcing companies to manoeuvre in a restricted operating environment, risk management must now factor in a host of new conditions and constraints.

Recognising the importance of sustaining the energy sector and the need for process safety measures that respond specifically to the new COVID-19-impacted reality, NGC moved to partner with CCPS to produce response guidelines and insights that could help companies across the world manage new risks and continue operating safely.

In April 2020, NGC and CCPS Projects mobilised a team of CCPS and international contributors. Within one



*Risk management is critical to ensuring employee safety*

week of collaboration, the monograph was produced and disseminated for use by industry professionals worldwide.

## RBPS During Disruptive Times

The COVID-19 crisis has presented several challenges to operations and process safety managers. Global shutdowns and border closures have interrupted supply chains, forced persons indoors and limited the availability of key subject matter experts and resources. Production has slowed and businesses are losing money. Frontline workers who are required to physically report for duty are grappling with novel anxieties, pressures and adjustment to new ways of working.

What this means is that existing risks must now be re-evaluated, and new emerging risks assessed and managed with capital and human resource limitations – companies may have less access to money for PSM; tools and materials to execute preventative maintenance work may be unavailable; personnel may be forced to isolate at home, reducing employee numbers and increasing the burden of work on a few; heightened stress levels may increase the likelihood of human error.

The new CCPS monograph considers all these factors and proposes specific actions that can help companies mitigate the associated risks during this and similar crises. It is built around the Pillars and Elements of CCPS' original RBPS guidelines and includes insights from the experiences of a number of contributing companies, including NGC.

At the NGC Group, these guidelines have been used to ensure business continuity

and operational safety amid current challenges. They have informed several response actions implemented over the past few weeks:

- Work from home measures have been enforced with employee safety at the forefront;
- Core staff has been rostered and work on a shift basis to reduce field exposure and risk of burnout;
- Work programmes have been prioritised so that critical maintenance work continues while non-critical work has been deferred;
- COVID-19 specific personal protective equipment has been procured and deployed to field crews;
- Risks assessments are being conducted on deferred activities with identified response actions to manage the changing risks;
- Real-time co-ordination with CEOs of upstream, midstream and downstream companies, the Trinidad and Tobago Emergency Mutual Aid Scheme (TTEMAS) and Point Lisas Energy Association (PLEA);
- Communication around risks and new developments is constant and comprehensive, both internally and between NGC and other stakeholders in the sector, so that collective informed decisions can be made.

## Shaping best practice

To the credit of the task force behind

its publication, the CCPS monograph is now a foundational resource for times of crisis. It has been published in four languages (English, Chinese, Spanish and Portuguese) as part of its international outreach.

Process safety assurance is critical for all companies involved in managing highly hazardous facilities. NGC recognised early that the COVID-19 pandemic could have an impact on process safety and all energy sector stakeholders globally as changes were being made to resourcing strategies and operations. The Company, therefore, saw an opportunity for knowledge-sharing and collaboration in this critical area. We are happy to have been able to contribute in a meaningful way and help companies around the world operate safely in times of challenge.

For NGC, our seminal role in the production of this document reflects the capacity of the Company to shape thought and practice at the level of international industry. It is indicative of the resourcefulness, spirit of collaboration and expertise resident in the Company. Importantly, it is also an achievement that moves the Company further along on its journey to become a global energy leader.

To read the full monograph, visit:  
<https://www.aiche.org/sites/default/files/html/544906/RBPS-during-COVID-19-and-Similar-Disruptive-times.html>

**AT THE FOREFRONT OF** *Energy*