White Paper on Repsol Safety Culture
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Introduction

This document aims to describe, in a simple and precise manner, what a Safety Culture represents for Repsol and how we can face the challenge of continuously improving it, involving everyone who works at our facilities and on our activities.

Repsol’s priority is to avoid accidents and people getting hurt, as well as to facilities and its surroundings. Fortunately, we are in a society that requires safety standards and a growing concern for sustainability, safety and the environment.

As a leading company in the Oil & Gas sector with an international presence, we are required to coexist with the diversity of environments, businesses, countries and laws on the one hand, and to advance in the generation of a common culture, on the other. We must find a way of moving beyond all these differences and position Repsol as a leading company based on excellence wherever we operate.

At Repsol, we understand that our Safety Culture is an inseparable part of our Organizational Culture which is based on the same values, and is evident in shared behaviors and attitudes.
The introduction of the Safety Culture concept is the result of serious past accidents, both in other sectors and in our own, which unfortunately led to fatalities and irreversible damage. The same main causes were identified: deficiencies in people’s attitudes and behaviors as a result of other organizational weaknesses.

Although the concept of Safety Culture was born in the 50s and 60s, the term was not officially used until the end of the 80s, after the investigation of the Chernobyl disaster. Its inclusion occurred when the International Committee concluded in its report that the main factors were design errors and deficiencies in Safety Culture at all levels of the organization:

- Prioritizing production over Safety.
- Institutional deviation in compliance with procedures.
- A lack of supervision and communication.
- Poor work environment.

The Chernobyl disaster marked the beginning of the concept of Safety Culture.
However, 2010 was a turning point, due to the Deepwater oil platform accident in the Gulf of Mexico, and the concept of Safety Culture began to develop more widely in the Oil & Gas sector.

Human error is never a cause, but a consequence of something deeper.

Until now, the sectors in which most progress has been made in terms of Safety Culture are Nuclear Energy and Aeronautics, which have generated specific regulation requirements due to the high consequences and media impact of their accidents.

The aviation sector, the International Civil Aviation Organization (ICAO), and the nuclear energy sector, the International Atomic Energy Agency (IAEA), require the development of systematic programs in Human Factors and Safety Culture.
At Repsol our greatest commitment is to ensure the integrity of people as well as the protection of the environment and so we work every day to improve safety in our operations wherever we are.

For a long time, the industry focused its efforts on improving the safety of facilities, equipping them with better technology, and implementing and maintaining an integrated Management System (regulations, training, procedures, etc.).

However, although these two lines of work are necessary, it has been observed that there is a point, no matter how significant the investment is, where the substantial improvement is not achieved and therefore the company target of "0 accidents" isn’t either.

Despite the improvement of these aspects, we must remember that people are behind it all, and are the only ones capable of making decisions that adjust to the circumstances of each situation and who are deeply influenced by the Organizational Culture.

A robust Safety Culture is an essential element to achieve our goal of "0 accidents".
The effective implementation of a solid Safety Culture generates competitive advantages for the organization:

- Improvement in safety performance which is directly reflected in its accident rates.
- It increases the reliability of our facilities and the continuity of operations, allowing us to reach our production objectives and business results.
- Positive effects on the work environment and the employees’ sense of belonging, resulting in a lower staff turnover and the reduction in absenteeism rates, consequently improving productivity.
- Insurers, auditors, and stakeholders in general, have a better perception of companies with a good Safety Culture.

A weak Safety Culture can lead to accidents with irreversible consequences.
Various definitions of what is understood to be Safety Culture have been proposed and these are some examples of how leading organizations define it:

- ICSI (Institut pour une Culture de Sécurité Industrielle): “Safety Culture is a set of practices (ways of doing) and a mindset (ways of thinking) shared by the stakeholders of an organization, on the control of the most significant risks related to their activities.”

- IOGP simplifies the definition referencing Deal and Kennedy (1982) that defines it as “The way we do things around here,” giving value to the real way in which the employees do things regarding Safety.

- CCPS (Center for Chemical Process Safety): “The combination of group values and behaviors that determine the manner in which Process Safety is managed,” or “How we behave when no one is watching.”

At Repsol we understand Safety Culture as:
A group of behaviors, beliefs, and values shared by all the employees of the Organization to control risk in our activities.
Since leadership is the engine to transform culture, and culture, in turn, is capable of changing people’s behavior, Repsol has taken this aspect as a starting point for working on Safety Culture, since leaders’ behavior should be the example to follow throughout the Organization.

In 2010, a benchmark analysis of Safety Leadership was carried out regarding our positioning with respect to other companies. A questionnaire of team leaders “DuPont Perception of Safety Leadership” was conducted. Thanks to this work, we were able to identify where we were at and the path to follow to improve.

In 2011, eight Safety behaviors that all leaders must put into practice were defined.
In 2012, to implement these eight behaviors in the organization, a Safety Leadership Plan was designed, consisting of various actions.

- An awareness program in Safety Leadership for all team leaders called PRISMA (Safety and Environment First), which was a benchmark of success due to its innovative format and wide-range, with more than 3,000 participants around the world.
- This deployment was extended to the rest of the personnel through the EOS program in Exploration and Production and through tailored editions of PRISMA to the reality of each Business.
- S&E Objectives and evaluation criteria were introduced in the performance tools, so that the commitment to Safety would be consolidated as a key factor to be considered in the development of our professionals.
- An extensive communication campaign was carried out at work centers under the slogan “More committed, 0 accidents”.

A good safety culture requires everyone’s commitment, at all levels.
For this reason, in addition to continuing to work on local and business initiatives, we have decided to support a more global and structured approach to improving our Safety Culture, which is based on the following elements:

- **The definition of our own culture model**, described below, in which the desired attributes and associated work practices are explicitly stated. This model was developed in collaboration with the ICSI (Institut pour une Culture de Sécurité Industrielle) and is the result of an analysis of the best industry and risk sector practices, benchmarking organizations and consolidated models such as J. Reason's.

- **Deployment and communication** of the aforementioned model to all levels of the organization, to accelerate its implementation.

- **Evaluation and measurement** mechanisms in all of our assets and activities, with a local focus, involving all the groups that participate in our operations.

After the efforts made, in 2014 the DuPont questionnaire was returned to team leaders and significant improvements were noted. In particular, what stood out was the inclusion of Safety and Environment criteria in decision-making at all levels, and the increased conviction that all accidents are avoidable. This reduction of the fatalistic view of Safety is essential so that the goal of zero accidents, although ambitious, is seen as achievable.

However, despite these improvements, we are still below the leading companies or Safety benchmarks and there are still significant differences between the many areas and businesses of the Company.
As established in our Health, Safety, and Environmental Policy, in order to progressively advance towards excellence, Repsol is committed to promoting all aspects that contribute to strengthening the Safety Culture. So, in 2014 the Safety Culture Model was developed, based on 7 fundamental attributes related to each other:

- Fair recognition
- Trust in reporting
- Adaptable
- Shared information
- Sense of vulnerability
- Organization that learns
- Leadership

Our principles
6.2. Fair recognition

A robust Safety Culture must be based on trust that all members of the organization identify and report unsafe conditions or situations without fear of reprisal. To create this environment, it’s necessary to have clear criteria that are known and shared, that allow us to recognize appropriate behaviors and discourage inappropriate ones, and processes to apply them in a homogeneous, coherent, and transparent manner.

With these criteria in place it’s possible to clearly distinguish between error and negligence and avoid the fear of being sanctioned which generates a lack of transparency in aspects of safety.

Establishing clear and known rules encourages transparency and trust within the Organization.
6.3. Trust in reporting

Having confidence in the action criteria related to Safety encourages everyone to report the relevant information, not only on incidents with actual consequences or damage, but those that only had potential consequences, as well as any anomaly or risky situation.

Likewise, in order to obtain a quality report, capable of generating knowledge in the Company, it is necessary to implement communication channels and tools that help manage the information.

Finally, this information should serve to analyze the root causes of the incidents in an objective way by multidisciplinary teams, propose corrective measures, implement them in reasonable terms and communicate them to the entire Organization, mainly the person who brought it to our attention.

What is not known cannot be measured and therefore cannot be managed or improved.

6.4. Shared information

As a result of the report and the conclusions obtained in the investigations and through other sources, we have valuable information that is necessary to share with all the members of the Company. In this way the communication of good practices is encouraged, and it helps to make more better decisions in the future.

The information must flow in all directions through established channels:

- **Top-Down:** sets objectives, guidelines, plans, projects, indicators, report incidents that have occurred and the corrective measures that have been implemented, etc.
- **Bottom-Up:** communicates possible deficiencies or unsafe situations that are seen or detected in work environments, as well as suggestions for improvement.
- **Horizontal:** shares operational experiences and improve collective learning.

Sharing information and experiences is key to making the best decisions and move forward.
6.5. An organization that learns

The direct consequence of sharing the information of what happened should be to learn from our surroundings and avoid making the same mistakes again. Therefore, the Organization should promote learning through:

- Anticipative learning: through continuous training programs that provide a broad knowledge of the risks associated with our activity. We must also avoid the loss of knowledge as a result of organizational changes.
- Reactive learning: arising from lessons learned after an incident.

To ensure that everything learned is incorporated into the usual practices in a sustainable manner, it must be supported by processes, procedures, and work instructions.

6.6. Sense of vulnerability

The fact of thoroughly knowing our activity shouldn’t let us underestimate operation risks. We must maintain a critical and alert attitude in familiar surroundings so that we can respond to unusual situations.

In addition, we must maintain a desire for continuous improvement and correctly use the operational (facility safety systems), administrative (standards, procedures, etc.) or personal (PPE) safety systems that are available.

Too much reliance on how well things are done can be negative, if it leads to complacency or indifference.

6.7. Adaptability

Everyone must have the ability to anticipate and diagnose possible failures to avoid incidents, as well as the initiative to propose improvements in this regard, and the Organization must provide the means to implement them.

In addition, to control or minimize the risks we need to be flexible and adapt to the different potential situations that may arise due to organizational or operational changes.

Approximately 80% of the most serious incidents occur in changing environments.

The only way to avoid repeating the same mistakes is learning from them.
Safety Culture Evolution Plan

Given that the processes of cultural change require an effort that takes several years, it is important to ensure the coherence and consistency of the initiatives and messages so they become sustainable.

To achieve a level of excellence in Safety Culture, Repsol is committed to work during the following years on these issues:

- **Local diagnostics**: performed on the Company’s assets in order to assess their degree of maturity with respect to the Safety Culture model and to establish development plans adapted to each one, as they are influenced by various factors (the country’s political situation, legislation, local culture, typical installation and operational risks, etc.). These diagnoses are made using many tools:
  - **Questionnaires**: provide insight on the existing perception of asset safety and on the organization’s beliefs and values. All personnel and large number of contractors are invited to take part.
  - **Focus groups and interviews**: explain the reasons of the aforementioned views and offer a greater degree of detail about the effectiveness of the work processes by those who are involved.
  - **Document analysis**: provides information on the systematization of the actions.
  - **Task Observation**: allows direct observation of the main work processes.
• **Dissemination measures**: workshops, communications, etc., that make it possible to spread the word about the Safety Culture Model and the aspects of the areas that should be addressed, as well as making people more aware of the issue.

• **Transformation projects**: are wide-ranging initiatives whose objectives are to create new processes, transform existing ones to strengthen the focus on the human factor, deploy global training programs or take actions at company level on issues that have been considered systemic weaknesses in previous diagnoses.

• Strengthening and alignment of the **Safety aspects in the company leadership model** and in the people evaluation and development processes.

• **Identification and availability of a best practices catalog for the Organization** and initiatives that help improve the attributes of culture and accelerate its implementation.

Only with the commitment and involvement of everyone who works at our facilities will it be possible to achieve an excellent sustained level of safety performance.