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GLOBAL-Management of IMS for contractors

1. Objective

Establish guidelines to guide companies proposing health, safety and environmental standards (SSMA) in the preparation of technical and commercial proposals for Vale's Exploration and Mineral Projects Department.

2. Applicability

It applies to all companies that are in the process of competition for contracts with controlled activities (with direct supervision and meeting Vale's H&S standards) in the areas of Exploration and Mineral Projects, regardless of the type of contracting.

This document can also be used to guide companies that already have a contract in progress, in formal contract update / renegotiation processes.

3. Definitions

Behavioral Dialogue: This is an established conversation between the observer and the observed, based on the joint reflection and exchange of ideas with the objective of evaluating the behavioral aspects of the people, compliance with established rules and procedures, safety in the practice of the work and the conditions of workplaces.

Briefing HSE: Basic guidance with the general EHS rules of the unit, including the risks of the area that will be carried out the activity, as well as basic access information and emergency procedure of the Department/Area.

Controlled Activities: These are the activities where Vale can establish its Health and Safety standards, have direct supervision and reinforce its application. Such activities do not necessarily have to be on site, however, typically, most of these are conducted on the site. It is simply a requirement that all activities be carried out according to Vale standards and must be met in the internal normative documents of their service providers. The activities carried out outside the site and considered as controlled are those in which Vale is able to establish and reinforce its standards.

Corrective Action: action to eliminate the cause of an identified nonconformity; it is performed to prevent repetition.

Critical Activity: Activity considered to be at high risk of fatalities.

Good HSE Practices: Practices implemented, recognized and with proven results in reducing risks of activities and / or minimizing environmental impacts.

HSE: Health, Safety and Environment

HSE Basic Training: Minimum guidelines on HSE so that the employees of the Contractors and Subcontractors can provide services in Vale's area. This training does not replace the local legal obligations covered by the "Introductory HS" training. It may be recognized in some areas as Welcome Training or Integration.

Introductory Training HS: Legally obligatory training for all Third Parties who carry out Vale activities that meet local legal requirements.

Nonconformities: Not meeting a requirement.

Nothing Pending of HSE: An evidence that no pending HSE was identified.

Occupational Exam: Occupational exams are examinations that have as objective the individual evaluation of the impact of the health-work relation on health and the definition of the aptitude for the performance of certain tasks. They include admission examination, periodic examination, return to work examination, change of function exam and dismissal.

Preventive Action: action to eliminate the cause of potential nonconformity; it is performed to prevent the occurrence; it is based on a risk assessment where potential nonconformities can be identified.

Proactive Indicators: These are the indicators used to evaluate the organization's activities / controls that avoid losses. This type of metric is predictive, that is, it precedes or indicates future events and allows for preventive actions.

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Reactive Indicators: These are the consequence indicators used to measure performance and allow the leader to monitor them. This type of metric is retrospective, that is, it measures data on situations / failures that have already occurred and require corrective action.

Right of Refusal: An instrument that assures the worker to interrupt a work activity because it considers that it involves a serious and imminent risk to his or her safety and health or of other people.

Time of execution of the expected activity in contact: The duration of the service must be done based on the days present in the Unit. For example: If a contractor comes to perform a service lasting one day a month, over a year of contract, it is classified as less than one month (considering running days).

Uniform: Clothing with specific characteristics, worn by the members of an institution or a service.

Vale's IMS: Set of 12 Requirements that comprise it, from Policy, Objectives and Milestones to Monitoring, Performance Indicators and continuous improvement.

4. Management Model for Suppliers

The HSE Management Model for Suppliers aims to establish HSE guidelines to ensure uniformity and transparency in the relationship between Vale and Suppliers regarding the effective implementation and respective oversight of HSE practices, procedures and minimum standards. This model is composed of 5 (five) stages and applies to all service contracts, regardless of the form of hiring.



Certification

Suppliers wishing to be eligible to participate in contracting processes for the supply of goods, products and services to Vale must be certified. This step is carried out by the Supplies Department or the delegated area of the Exploration and Mineral Projects Department.

Hiring

For hiring, it must be considered the performance result in HSE in the previous contracts of the participating companies, being prioritized the hiring of Suppliers with high performance.

The proposing company must prepare the Technical Proposal in accordance with all the HSE requirements of the Technical Specification and guidelines of this document.

Notice that all requirements and recommendations are extended to Subcontractors and the Contractor is responsible for all events involving its Subcontractors.

Mobilization

All documents and deadlines required for mobilization will be described in the Technical Specification.

Initial Meeting: It aims to reinforce and clarify to the Contractor the requirements of HSE, tools, forms, local programs, access authorization and items relevant to the contract. Specific information for the meeting will be described in the Technical Specification.

HSE Basic Training: Third parties must receive basic guidance before starting activities according to applicable legal requirements for the locality including the minimum content below:

- a) Guidelines in case of emergency;
- b) Risks of the unit and the operational processes.
- c) Rules of circulation of the unit - signaling, Maximum speed allowed, internal displacement, safe way, clothing, footwear, accessories, etc .;

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- d) Information Security - use of mobile phones, cameras or camcorders;
- e) Code of Ethics and Conduct;
- f) Sustainability Policy;
- g) Integrated Management System (IMS) - HSE tools and programs;
- h) Communication in case of incidents;
- i) Fatality Prevention Program;
- j) Golden Rules;
- k) **CCR** - overview;
- l) Environmental Requirements - eg: conditioners.

HSE Basic Training must have a minimum work load of 4 hours. Third parties who are absent for more than 6 months of Vale's activities/areas must re-train or receive the local HSE Briefing containing the risks of the area and the activity to be carried out, as well as basic information on access and emergency procedure.

The Contractor may provide the HSE Basic Training since the material provided by Vale is used as minimum material and the contractor is authorized by the local HSE team.

HSE Introductory Training: Legally required training for all third parties who perform activities in Vale locations that meet local legal requirements and have HS training as a must. Aiming the optimization, all of the HSE Basic Training items that are not covered by legal requirements may be included in the content of the training. In this way the content of the HSE Basic Training will be already being met. It can be carried out by the Contractors.

Management

Contractors performing activities for the Exploration and Mineral Projects Department may use their own Management Systems, tools and HSE documents, as long as they meet the minimum requirements described in the Technical Specification and in that document, in addition to the following IMS Vale's documents which the Contractor must meet in full:

- POL-0019-G- Sustainability Policy
- RAC Training Guideline
- Critical Activities Requirements - PTP-000813

At the time of the evaluation of the proposals, the focus will be directed to the understanding of how the company performs the HSE management and if it is aligned with the requirements described below. The descriptions provided must reflect the conditions that the proponent considered for the preparation of his proposal.

The selected company must present the details of the Health, Safety and Environmental Management System up to 60 days after the issuance of the service order.

During the execution of the contract, following the Annex of this Guide (Annex 5 - Evaluation of Performance in HSE for Contractors), there will be periodic audits in order to verify the adherence of the HSE Management System presented by the company.

The proposer company must describe their health, safety and environmental management processes in order to ensure the management of the requirements described below during the execution of the contract:

Requirement 1 - Policy, Objectives and Goals

The proposer must present its policy, its objectives and goals, as well as the results achieved in the last 12 months. The contracted companies must ensure that their Policy is aligned with the commitment to meet applicable legal requirements, ensuring the preventive character, management aspects, risks and impacts to health, safety and environment. They must also ensure that it is communicated and available to all its employees.

Requirement 2 - Hazards and Risks, Aspects and Impacts and Change Management

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The proponent should describe its methodology and provide the model (tool) used to identify, evaluate, control, prevent and minimize hazards / risks and aspects / impacts.

The change management process should also be described.

Requirement 3 - Legal Requirements and Other

The proponent shall describe its methodology to identify and keep up to date the legal requirements for HSE applicable to the scope of the contract and other requirements that the company has subscribed to. In the absence of local legislation, international technical standards must be followed.

Requirement 4 - Leadership, Roles and Responsibilities

The proponent must present a matrix of responsibilities for the health, safety and environmental management system. It must consider, in addition to leadership, the key functions that ensure system performance and meeting the minimum HSE Management requirements defined in the hiring steps.

In addition to the matrix, present the table with the number of HSE professionals, their respective qualifications and expected areas of action.

Requirement 5 - Competence, Training and Behavioral Development

The Contractor shall ensure that all employees under their responsibility have their training needs identified by position / function, that they are properly trained and qualified in accordance with Vale's internal legal requirements and standards, in accordance with the applicability, validity, workload and need for Recycling.

Proof of qualification must be available at any time for mobilizations, verifications, inspections and audits during contractual term.

Specific HSE training is required by Vale according to the risk classification indicated at the end of this item and includes:

- *Introductory HS* - Training that aims to meet local legal requirements directed to third parties who carry out activities in or on behalf of Vale's units and that comply with local laws. In order to optimize, it is possible to include in the content of this training, the Basic Training items in HSE that are not contemplated in Legal Requirements. Recycling must comply with local legislation.
- *Basic HSE Training* - Training with a 4 hour workload.
Employees of the Contractors and Subcontractors must receive basic guidelines before entering and starting their activities in Vale's facilities or in third party / remote areas.
The Contractor may provide the Basic Training in HSE, as long as it is authorized by the HSE staff of the locality and applies at least the material provided by Vale, containing:
 - a) Code of Ethics and Conduct;
 - b) Sustainability Policy;
 - c) Emergency procedures;
 - d) Personal presentation - Clothing, shoes, ornaments and accessories;
 - e) Reporting incidents;
 - f) Information Security - Use of cell phones, cameras or camcorders;
 - g) Integrated Management System HSE - HSE tools;
 - H) Golden Rules of the Department/ Area;

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- i) Risks of the Unit and Vale's operational processes;
- j) RAC - overview;
- k) Notions of Ergonomics;
- l) Vale's HSE programs;
- m) Unit Circulation Rules - Signaling, maximum permissible speed and internal displacement - safe path;
- n) Environmental Requirements

The Basic Training in HSE is accepted in other areas of Vale with a complementary workload of 2 hours containing the specific local requirements of the other Area.

Third parties who are absent for more than 6 months of Vale's activities / areas should carry out new Basic Training in HSE with a reduced workload or HSE Briefing.

Application guidelines according to the HSE risk classification of contracts:

1. Low Risk:

- Execution Time of expected Activity in contact less than one month: Basic HSE Training will not be carried out, but Safety Briefing must be applied;
- Expected Lead time for contact activity over one month: Basic HSE Training may be replaced by Safety Briefing according to Local Valley criteria;

2. Average Risk:

- Execution time of expected contact activity less than one month: Basic HSE Training can be replaced by Safety Briefing according to Vale's local criteria;
- Execution time of expected Activity in contact for more than one month: Basic Training in HSE is mandatory;

3. High/Very High Risk

- Execution time of expected contact activity less than one month: Basic HSE Training can be replaced by Safety Briefing according to Vale's local criteria;
- Time of execution of the expected Activity in contact for more than one month: Basic Training in HSE is mandatory;
- **RAC Critical Activities Requirements** - It is the Contractor's responsibility to conduct training in accordance with the RAC Training Action Guidelines.

Some RAC training may be replaced by legal training as long as it contains the same minimum content required for each RAC. The HSE area must validate the equivalence between legal training and RAC training.

The Training Materials and the RAC Training Actions Guidelines for Brazil are available on the Vale's Suppliers Web Page.

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Link: <http://www.vale.com/brasil/PT/suppliers/sustainable-supplier>

For the international areas, it is recommended to use this document as a parameter for the development of training guidelines adhering to local legislation.

Requirement 6 – Communication, Participation and Consultation

All HSE incidents (personal, material and environmental), as well as any notices of infractions, fines or notifications received from authorities, as well as complaints from interested parties, must be immediately recorded and communicated to Vale and the omission of such occurrences is unacceptable.

The proposer must describe how the communication process with the employees, contractor manager and other interested parties will be, of at least:

- HSE incidents of contracted communication;
- Dissemination of good practices;
- HSE indicator;
- Programs and information for disease and accident prevention under local legislation

Can be used as communication way:

- Awareness campaigns;
- HSE meetings;
- HSE dialogues, among others.

The Contractor may use its own methodology and forms of HSE Dialogues as long as it presents the proper systematization of this process and the approval by the Contract Manager and HSE Vale professionals. For contracts classified as Medium, High or Very High risk for HSE and lasting more than one month, the HSE dialogue must be daily.

Requirement 7 – Documents, Registers and Information

The proposer shall describe the recording, archiving, traceability and confidentiality systematic of information related to HSE Management System and ensure that HSE documents and records, as well as updates and information on compliance with HSE legislation and standards, applicable to contract scope, are available (physical or electronic) and controlled during the activities execution and for inspection / auditing purposes during the contractual term.

Requirement 8 – Operational Control

The contractor must establish its operational controls based in risks and aspects evaluation, applicable legal requirements and Vale's standards ensuring the implementation of effective actions for risk mitigation and control of identified aspects.

The main HSE operational controls of Vale are as follows:

- CRITICAL ACTIVITIES REQUIREMENTS (RAC)

The Critical Activities Requirements (RAC) – Figure 1, are minimum Health and Safety regulations established by Vale with the purpose of ensuring the Zero Damage and must be followed by the Contractors and their employees.

The Contractor shall analyze the scope of its agreement to map the RACs applicability and define their actions and

control measures for each RAC according to PTP-000813.

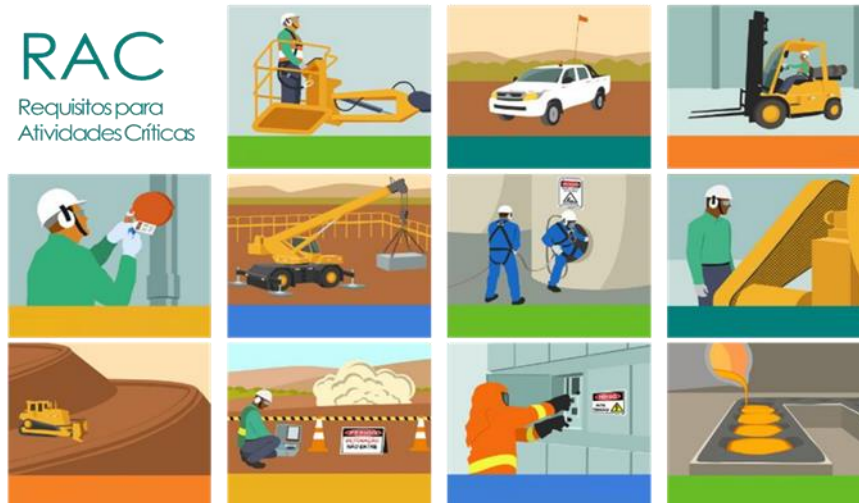


Figure 1 – Vale's Critical activities requirements (RAC)

The Critical Activities Requirements 01 (Working at Heights), 04 (Lockout and Tagout), 05 (Lifting of Loads), 06 (Confined Spaces), 07 (Machine Guarding), 08 (Ground Stability), 09 (Explosives) and 10 (Working with electricity) are requirements that are already contemplated at Brazilian legislation (NR and NBR).

In Brazil, the trainings specified in Regulatory Rules (NR) 10, 33 and 35 replace, in full and in equivalence, the training curriculum specified for RAC 10, 06 and 01, respectively. For the others, the training guidelines and didactic material of the RAC training should be used.

For projects outside Brazil whose local legislation does not contemplate the critical activities mentioned in PTP-000813, they must be fulfilled in their entirety according to the contract scope.

The proposer must declare that all RACs applicable to the contract scope will be fulfilled throughout its execution.

- FATALITY PREVENTION PROGRAM

Considering the preservation of the life of all employees working in Vale's areas, contracted companies should have initiatives in their Health, Safety and Environmental Management System focused on Fatality Prevention.

Initiatives should consider blocking actions, good practices and safety guidelines that aim to prevent fatal accidents and incidents with potential severity classified as critical (permanent disabling incidents or 01 (one) fatality) or catastrophic (incident resulting in multiple fatalities), considering the contract activities.

- GOLD RULES

The Golden Rules established by Exploration and Mineral Projects Department must be full followed by contracted companies.

The Golden Rules consist of ten simple, tangible behaviors designed to save lives. The employees of the contractors should be trained in these rules and, later, sign the "term of commitment to life".

The Gold Rules do not replace the Health, Safety and Environment Management System requirements of the proposers and represent the inviolable principles that must be applied at exploration's projects and for all contracted companies.

The gold rules are:

RULE # 1 – Always conduct a risk analysis and obtain relevant task specific work permits;

RULE # 2 – Always comply with isolation & tagging safe work procedures;

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RULE # 3 – Always wear appropriate task and workplace specific PPE;

RULE # 4 – Never perform tasks unless you have been appropriately trained, authorized and assessed as fit to do so;

RULE # 5 – Never work under the influence of alcohol or other drugs;

RULE # 6 – Never enter an area that has been isolated with signage / barricades without proper authorization;

RULE # 7 – Never work at heights unless your safety harness is secured to a suitable anchor point;

RULE # 8 – Never use defective or improvised equipment, spare parts and tools;

RULE # 9 – Wear your seat belt and keep within speed limits when driving light vehicles and mobile equipments;

RULE # 10 – Always comply with health and safety guidelines as detailed in Vale's travelers health protocol;

NOTE: For the Golden Rules English version, some adjustments have been made, respecting the characteristics and specificities of the respective localities that will use them. Therefore, the Golden Rules should not be literally translated to the English language.

- *PERSONAL PROTECTION EQUIPMENT (PPE)*

The proposer must present his PPE management model: mapping, delivery, custody, maintenance, training, return, in accordance with current legislation. The contracted company must use PPE appropriate to the risks existing in its activities in Vale's projects, in accordance with applicable local legislation.

For services in Vale's operational areas, specific PPE to access the area will be indicated in the technical specification of the contract.

- *HEALTH, SAFETY AND ENVIRONMENT*

The contracted company is responsible for the records of its employees and / or formalization of the contracts with subcontracted companies that are will be used in the activities.

The proposer must detail how it will manage the items requested in the Technical Proposal, such as and not limited to:

- Waste;
- Water resources;
- Atmospheric emissions;
- Environmental noise and vibrations;
- Recovery of degraded areas;
- Demobilization of temporary facilities;
- Chemical products;
- Health programs (Occupational hygiene, ergonomics, fatigue, chemical dependency, absenteeism management, vocational rehabilitation, health and wellness promotion, endemic disease control, and traveler health);
- Collective and personal protection equipment;
- Maintenance of the integrity of hand tools, installations, machinery, equipment and motor vehicles.

Most of the controls cited above are requirements that are already covered by legislation.

Annex 4 - HSE guide for Exploration and Mineral Projects Department Suppliers



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The proposer must ensure that in his proposal there is use of chemicals that are prohibited in Vale, according to the List of Prohibited Products available on Vale's website (www.vale.com).

Requirement 9 – Preparedness and Response to Emergency

Vale will inform in the Technical Specification / Technical Requisition the need to prepare the Emergency Assistance Plan - PAE of the Contractor or if it will be inserted in the PAE Vale. Vale will also inform the resources made available for emergency services and the specialized resources that the Contractor must provide.

When applicable, the proposer must present in his proposal the items that were considered for health, safety and environmental emergencies response.

Requirement 10 – Incidents Treatment and Nonconformities

The proposer must present the methodology for analysis and treatment of incidents and nonconformities, considering registration, classification and communication.

Requirement 11 – Inspections and Audits

The proposer should describe their audit program with the actions and frequencies foreseen.

Vale will periodically inspect HSE and IMS of the contractor in the facilities and activities to verify, through this guide's Annex (Annex 5 – Service Providers' HSE Performance Assessment Form), the compliance with applicable requirements and standards.

Nonconformities addressed to the Contractor must be properly handled.

Requirement 12 - Monitoring, Performance Indicators and Continuous Improvement

The proposer must present the performance indicator in HSE (reactive and proactive) and their levels of service provided for contract execution, as well as its monitoring / management methodology, aiming the continuous improvement.

The HSE indicator listed below must be implemented, followed and informed monthly to Vale, and additional indicator may be inserted depending on the area where the contract will be executed.

Type	Indicator	Calculation formula	Periodicity
Proactive	% of adherence to the contractor's HSE Management System	$(\sum [\# \text{ of points achieved in the IMS integrated protocol}] / [\text{applicable points in the integrated IMS protocol}]) * 100\%$	Defined in contract
	% of adherence to RAC	$(\sum [\# \text{ of items of RAC protocol served}] / [\text{applicable itens in RAC protocol}]) * 100\%$	Defined in contract
	% of reduction of fatality risks	$(\# \text{ of actions taken} / \# \text{ of proposed actions}) * 100$	monthly
Reactive	Frequency Rate of incidents with critical or catastrophic potential severity for Health and Safety	Not applicable	monthly
	TRIFR	$\{([\text{FAT}] + [\text{LWC}] + [\text{RWC}] + [\text{MTC}]) / \text{HHT}\} * 1.000.000$	monthly
	Number of recorded incidents (at SAP-IM)	Not applicable	monthly

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4.2 Demobilization

At the end of the contract or in case of dismissal of an employee, the Contractor shall request the demobilization through a systematic of Local Vale.

In contracts executed in Brazil, the return of the Vale badge is mandatory if the employee is not sent to another contract and must be delivered to the Contract Manager.

Demobilization of equipment, construction sites and other temporary facilities of the Contractor in Vale areas is entirely the responsibility of the Contractor, and must deliver service fronts free of any type of waste and / or material in order to avoid any type of environmental liability.

After the end of the contract, an evaluation is performed considering the records of inspection's results, verifications, audits, meetings and critical analyzes carried out during the contract, in addition to a demobilization inspection and if it is evidenced that all actions have been remedied, a term of HSE Nothing Pending is issued.

The payment of the final measurement is conditional upon the HSE Nothing Pending, when applicable.

5. General Comments

The contracted companies, when executing activities for Vale, they are responsible for management, service management, people and equipment used in the fulfillment of the object of their contracting, answering for safety and physical integrity of their own employees and environment.

The compliance with the HSE obligations set forth herein shall not exempt the Contractors from adopting, respecting and complying with other measures, including legal order or not, that may prevent risks and ensure the health, safety and physical integrity of their employees and the Environment.

The examples cited in this guide do not compose an exhaustive list. Other techniques, methodologies, controls and processes should be analyzed and implemented.

Vale may seize or prohibit the services, in whole or in part, whenever a situation of "serious and imminent" risk is characterized or a condition that endangers the life of another or yet for non-compliance with legislation and / or HSE standards adopted by Vale, as well as those described in this document.