

Date of printing: 7. 6. 2022



Scope of validity:

ORLEN Unipetrol RPA s.r.o. (without branches)

OPERATING RULES, OPERATOR MANUALS AND TECHNOLOGY CARDS / REGLEMENTS

Approved by:

Executive Director

Valid from:

23. 5. 2022

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English version prepared by:

External translation services

For internal use only

List of Changes

Change No.	Page No.		Subject of change	Valid from	Approved by (title, signature)
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Notice: The change management of this document is carried out according to Directive 821.

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1 Purpose

The Directive describes the use, content, designation, approval and change management of operating rules, operator manuals, technology reglements and cards. It is intended primarily for employees responsible for the creation, approval and implementation of these documents.

2 Scope of Validity

The document is valid for the following designated companies/branches:

- ORLEN Unipetrol RPA s.r.o. BENZINA, odštěpný závod
 POLYMER INSTITUTE BRNO, odštěpný závod

This edition replaces Directive 842 'Operating Rules, Operator Manuals and Technology Cards/Reglements', 1st edition, dated 04/01/2019.

Furthermore, the document is binding on the company's contractors in the area of OTD processing within investment projects (primarily paragraphs 4.1.11 and 4.1.12), however, the documentation identified in chapter 6 'List of Related Documentation' does not apply to them.

The document is available for contractors on the website of ORLEN Unipetrol RPA s.r.o. in the section "[Binding Regulations and Information](https://www.unipetrolrpa.cz/CS/sluzby-areal/chempark-zaluzi/Stranky/zavazne-normy-a-informace.aspx)" (<https://www.unipetrolrpa.cz/CS/sluzby-areal/chempark-zaluzi/Stranky/zavazne-normy-a-informace.aspx>).

The Directive shall not apply to the formalisation of documentation issued before the entry into force of this Directive. However, whenever existing documents are changed or updated, the new edition must already comply with this Directive.

3 Terms, Definitions and Abbreviations

Business Owner	The person who is the main beneficiary of the investment project and who is responsible for the effect of the work performed within the investment project in the individual companies of the ORLEN Unipetrol Group. Directors of units, sections or heads of departments directly subordinate to the company's statutory body or its members may be nominated as the Business Owner.
EPD	Explosion protection documentation
ENU	Environmental Unit
Local operating rules for gas equipment	Work instructions for operation and maintenance of gas equipment.
HCHM	Hazardous chemicals and mixtures
PPE	Personal protective equipment
DIPPQ	Department of Integrated Prevention and Product Quality
MSD	Management Systems Department
ED	Environmental Department
CP in RP	A competent person in risk prevention, a competent employee of the Safety and Risk Prevention Department.

Operator Manual (OM)	<p>A document containing a description of the technological process and the plant, conditions for carrying out work activities, safety criteria, protection of the workplace and environment, clear instructions and principles applicable to the operation of the technological complex in both production and non-production areas.</p> <p>The Operator Manual is prepared for test and permanent operation.</p>
Project Business Manager (PBM)	<p>A person designated by the Business Owner who is responsible for completing all phases of the investment project, except for the Implementation Phase, during which he/she provides support to the Project Execution Manager and monitors his/her activities.</p>
Project Execution Manager (PEM)	<p>An employee of the department reporting to the Director of Capital Investment who is responsible for the execution of the Implementation Phase. During the other phases he/she provides support to the Project Business Manager (PBM).</p> <p>A detailed description of the role of the PEM is given in Directive 027 'Investment Project Management'.</p>
Operational and Technological Documentation (OTD)	<p>Documentation regulating in particular technological, work, operating rules and manuals for the use of production and storage plants, operation of control and monitoring systems, including local operating and handling rules.</p>
P&ID (PEFS)	<p>Piping and Instrumentation Diagram / Process Engineering Flow Schemes.</p>
Operating Rule (OR)	<p>A clear work instruction for both production and non-production activities, including ensuring protection of the workplace and the environment. It complements and elaborates the data given in the technology regulation (in individual work operations, work organisation and manipulation of production plant).</p>
Operating Rule related to the Basic Operating Rule (OR-BOR)	<p>A clear work instruction for production and non-production activities. It determines the correct performance of work and handling activities in various conditions and work operations. It does not contain the information specified in the Basic Operating Rule (chapters on occupational safety and hygiene, environmental protection). It follows the Basic Operating Rule.</p>
Interim Operating Rule (IOR)	<p>Usually a manual that is part of the delivered technological unit or part thereof and is drafted up to comply with this Directive. It contains clear work instructions for both production and non-production activities, including ensuring the protection of the workplace and the environment. It must be available before the start of the test operation.</p>
Document Administrator (Administrator)	<p>A designated employee responsible for ensuring the comment and approval procedure, issuing, recording, publishing/allocating and storing documentation including amendments. In terms of formality, he/she guides the author, commenter, verifier and approver of the documentation.</p> <p>For the area of operating rules, operator manuals and technology reglements/cards, the Administrator is appointed by the unit director, under whose authority the subject matter of the document falls.</p>
Company	<p>ORLEN Unipetrol RPA s.r.o.</p>

Technology Reglement (TR)	A basic technical document of the relevant production unit (production plant), which obligatorily determines the operation of the technological process, including the indicators of the technological regime and production economy.
Technology Card (TC)	<p>It contains data related to the production of the type of product specified. It replaces the TR in test operation. In permanent operation, it complements the TR where frequent changes in the technological regime occur, e.g. in batch production of various product modifications.</p> <p>The definitions and rules for the TC in this Directive do not apply to the Refinery units where the technology cards are not an operational document but a set of operational limits and optimal values of technological, operational and analytical parameters for production control, which is placed in the form of an application on the Intranet.</p>
TES	Technical and economic standard
SD	Safety Department
Maintainer	A unit or otherwise designated employee who is responsible for the technical condition of designated individual groups of tangible and intangible assets, including maintenance, repairs, revisions and testing.
Basic Operating Rule (BOR)	A document containing the conditions of work activity and basic criteria of safety and protection of the workplace and environment, occupational hygiene, instructions and principles generally applicable to the operation of a technological complex (production plant, building).
Representative of the relevant production unit	A member of the project team appointed by the relevant Business Owner (usually the Production Unit / Section Director) who communicates with the relevant Administrator and/or author during the investment process to cover the requirements for the creation/update of the OTD.
Author	The employee/department responsible for processing the document. He/she is responsible for its content and latest version.

4 Use, Creation, Editing, Content and Management

4.1 Use

- 4.1.1 For test operation, the IOR or OM, TC and, if applicable, other documentation must be available, see Table 1. Based on the operational findings, the IOR is revised into the form of the OR or the BOR and the OR-BOR. The OM is updated based on operational findings. The data from the TC may be subsequently revised into the TR if their continued existence is not necessary.

Table 1 – Documentation for Test Operation

Type of documentation
Interim Operating Rule / Operator Manual
Technology Card
Other documentation related to the operation of the plant (changes to technological process and production plant, local operating rules for gas equipment, handling schedules, operating procedures, lubrication instructions, calibration procedures, records, etc.)*

*They shall be drawn up if required by the nature of the production plant

- 4.1.2 Operating rules and technology reglements/cards must be drawn up and updated by OM for all production units (production plants) within six months after production is put into permanent operation, unless this deadline is otherwise addressed by public-law negotiations. The production is considered to be a permanent operation after successful completion of the test operation (if prescribed) or after issuance of the approval decision/consent.
- 4.1.3 The technology regulation may only contain elements of the process that have been practically verified and at the same time guarantee production in terms of quality and cost-effectiveness. For test operation, therefore, the reglements are not drawn up and are replaced by the TC.
- 4.1.4 In permanent operations where there are frequent changes in the technological regime (change of product range or frequent change of parameters of one product), TC are drawn up.
- 4.1.5 In the case of technological units, it is usually possible to draw up the BOR for the entire complex, in which general criteria and conditions of work activities, safety, occupational and environmental protection, occupational hygiene and generally applicable instructions and principles are indicated and elaborated.
- 4.1.6 In the event that a production plant (production technological complex) is issued with the BOR, the OR-BOR is drawn up for the operation of the plant (work activity).
- 4.1.7 In the event that the BOR is not issued, OR are drawn up for all production plants.
- 4.1.8 It is forbidden to operate production plants and individual facilities without the prescribed operational and technological documentation. The prescribed operational and technological documentation for test and permanent operation is given in Table 1 and Table 2. According to the nature and division of technological units, documentation according to Variant A or B can be used in permanent operation, see Table 2.

Table 2 – Documentation for Permanent Operation

Variant A	Variant B
Technology Regulation / Technology Card	
Basic Operating Rule	Operating Rule / Operator Manual
Operating Rule related to the Basic Operating Rule	
Other documentation related to the operation of the plant (changes to technological process and production plant, local operating rules for gas equipment, handling schedules, operating procedures, lubrication instructions, calibration procedures, records, etc.)*	

* They shall be drawn up if required by the nature of the production plant

- 4.1.9 The author is responsible for drawing up, compliance with the prescribed editions and content of operating rules, OM and technology cards / reglements.
- 4.1.10 When changes are made to the technological process or production plant, an amendment is made in accordance with Directive 843 'Changes to Technological Process and Plant' with subsequent incorporation into the relevant OTD type.
- 4.1.11 The following procedure is applied to changes resulting from the implementation of investment projects:
- The PBM together with the Representative of the relevant production unit defines the requirements for the creation/update of the documentation within the Technical Specification of the Investment Project (TSIP).
 - The PEM will request an up-to-date document from the Representative of the relevant production unit, who will forward it to the Supplier for updating / proposing changes.
 - After the change proposal has been processed, the Supplier (via PEM) forwards the document to the Representative of the relevant production unit, who verifies the method of processing the update or agrees with the Supplier on the necessary changes.
 - After final editing by the Representative of the relevant production unit / Supplier, the author of the document shall send the updated document to the Administrator for comment procedure.
- 4.1.12 When creating a new OTD resulting from the implementation of investment projects, the Supplier is obliged to contact the Representative of the relevant production unit through the PEM, who will provide information and documents for the creation of a new OTD.

4.2 Editing

- 4.2.1 The editing of operating rules, OM and technology reglements shall comply with the requirements of Directive 821 'Internal Documentation'.
- 4.2.2 The annexes to the operating rules, OM and technology reglements may be different from A4 format. However, they must contain the prescribed top and bottom headers according to Directive 821 'Internal Documentation' or they must contain the information shown in Fig. 1 (sample of possible stamp for annexes).

Fig. 1 – Stamp Sample

ORLEN Unipetrol RPA – [unit name]	
Document:	Issue:
Annexe:	Amendment:
Valid from:	Copy No.:
Verified by:	Signed by:

Explanation of terms in Fig. 1:

<i>Document</i>	– designation of an operating rule (e.g. R – 6000) / technology regulation
<i>Issue</i>	– issue number of the document (e.g. 1)
<i>Annexe</i>	– designation of an annexe (e.g. A)
<i>Amendment</i>	– serial number of the amendment to the annexe
<i>Valid from</i>	– date of validity of the change, to be filled in only when the annexe is changed
<i>Copy No.</i>	– serial number of the copy assigned by the Administrator
<i>Verified by</i>	– last name of the employee who performed the verification
<i>Signed by</i>	– signature of the employee who performed the verification

- 4.2.3 Technology cards are drawn up in A4 format. They shall contain the prescribed top and bottom headers in accordance with Directive 821 'Internal Documentation' and contain the following data: TC designation, issue, validity, name and signature of the verifier and approver.
- 4.2.4 Diagrams, drawings, designations of functional and control elements and plants shall be in accordance with the relevant standards (legal units of measurement, marking of measuring control and automation circuits, drawing of piping in diagrams and layout drawings, production of mechanical drawings, diagrams, etc.).

4.3 Content of the Operating Rules (IOR, BOR, OR, OR-BOR)

4.3.1 General Information

- 4.3.1.1 The content of the different types of operating rules is given in chapters 4.3.3, 4.3.4, 4.3.5 and 4.3.6. In justified cases, the issues of one chapter of the outline of the operating rules may be presented in another chapter.
- 4.3.1.2 At workplaces where activities are carried out which do not pose a risk to the environment, the chapter on Environmental Protection shall not be included in the Basic Operating Rules or Operating Rules.

4.3.2 Interim Operating Rule (IOR)

The outline and specification of the individual chapters is identical to the requirements for the Operating Rule in Article 4.3.3.

4.3.3 Operating Rule (OR)

Table 1 provides an outline of the Operating Rule with reference to the content of each chapter.

Table 1 – Outline of the Operating Rule

Number and name of the chapter		The content in the article
Introductory Provisions		4.3.6.1
1	Purpose of the Plant (activity)	4.3.6.2
2	Description of Production (activity)	4.3.6.3

Number and name of the chapter		The content in the article
3	Occupational Safety and Hygiene	4.3.6.4
3.1	General Safety Risks	4.3.6.5
3.2	Chemicals and Mixtures	4.3.6.6
3.3	Explosion Protection Documentation (EPD)	4.3.6.7
3.4	Special Instructions	4.3.6.8
3.5	Additional Safety Instructions	4.3.6.9
4	Description of the Plant	4.3.6.10
5	Start-up (activity preparation)	4.3.6.11
6	Operation and Control during Operation (activity performance)	4.3.6.12
7	Failures and Critical Factors	4.3.6.13
8	Shutdown (cessation of activity)	4.3.6.14
9	Periodical Works	4.3.6.15
10	Emergency Instructions	4.3.6.16
10.1	Indications of an Accident	4.3.6.16.1
10.2	Causes of the Accident and their Occurrence	4.3.6.16.2
10.3	Removal of the Accident	4.3.6.16.3
10.4	Instructions / Emergency Procedures in Case of Power Failure	4.3.6.16.4
11	Environmental Protection	4.3.6.21
11.1	Air	4.3.6.22
11.2	Water Management	4.3.6.23
11.3	Waste Management	4.3.6.24
	Annexes	4.3.6.17

4.3.4 Basic Operating Rule (BOR)

Table 2 provides an outline of the Basic Operating Rules with reference to the content of each chapter.

Table 2 – Outline of the Basic Operating Rule

Number and name of the chapter		The content in the article
	Introductory Provisions	4.3.6.18
1	Purpose and Importance of the Plant	4.3.6.19
2	Description of the Technological (technical) Process	4.3.6.20
3	Occupational Safety and Hygiene	4.3.6.4
3.1	General Safety Risks	4.3.6.5

Number and name of the chapter		The content in the article
3.2	Chemicals and Mixtures	4.3.6.6
3.3	Explosion Protection Documentation (EPD)	4.3.6.7
3.4	Special Instructions	4.3.6.8
3.5	Additional Safety Instructions	4.3.6.9
4	Environmental Protection	4.3.6.21
4.1	Air	4.3.6.22
4.2	Water Management	4.3.6.23
4.3	Waste Management	4.3.6.24

4.3.5 Operating Rule related to the Basic Operating Rule (OR-BOR)

Table 3 shows the outline of the Operating Rule related to the Basic Operating Rule with reference to the content of each chapter.

Table 3 – Outline of the Operating Rule related to the Basic Operating Rule

Number and name of the chapter		The content in the article
	Introductory Provisions	4.3.6.1
1	Purpose of the Plant (activity)	4.3.6.2
2	Description of Production (activity)	4.3.6.3
3	Description of the Plant	4.3.6.10
4	Start-up (activity preparation)	4.3.6.11
5	Operation and Control during Operation (activity performance)	4.3.6.12
6	Failures and Critical Factors	4.3.6.13
7	Shutdown (cessation of activity)	4.3.6.14
8	Periodical Works	4.3.6.15
9	Emergency Instructions	4.3.6.16
9.1	Indications of an Accident	4.3.6.16.1
9.2	Causes of the Accident and their Occurrence	4.3.6.16.2
9.3	Removal of the Accident	4.3.6.16.3
9.4	Instructions / Emergency Procedures in Case of Power Failure	4.3.6.16.4
	Annexes	4.3.6.17

4.3.6 Table of Contents

4.3.6.1 Introductory Provisions (for OR and OR-BOR)

The chapter shall contain the following phrasing: *“This regulation is binding on all employees of the production plant (building)..., operating..., performing..., etc. An employee who causes damage to the company by violating this*

regulation or any related regulations with which he or she has been acquainted shall be obliged to compensate for the damage incurred in accordance with the provisions of Act No. 262/2006 Coll., the Labour Code, on the liability of employees for damage”.

In the case of a OR-BOR, it must further be stated: *"The chapters Occupational Safety and Hygiene and Environmental Protection are drawn up in the BOR (indicate number), to which it is related..."*.

4.3.6.2 Purpose of the Plant (activity)

A brief explanation of the purpose, important features and characteristics of the plant, its importance and relation to the production/technological process, the meaning and purpose of the products, their further processing or use, etc.

4.3.6.3 Description of the Production (activity)

A brief technological description of the production (technical description of the activity), a clear explanation of the process from the processed raw materials through any intermediate product to the final products, or related to the technological diagram, which is an annexe to the operating rule / technology regulation.

4.3.6.4 Occupational Safety and Hygiene

Information on the conditions under which operation and maintenance of the plant or other work activities are carried out. The chapter does not contain direct and specific occupational safety instructions. These are elaborated in other chapters of the OR (Chapters 5 to 9) and the OR-BOR (Chapters 4 to 8). The chapter must contain information on specific risks to the safety and health of employees and a list of specific measures to eliminate or minimise them. The appropriate CP in RP should be contacted when drawing up this chapter.

4.3.6.5 General Safety Risks

A list of identified and evaluated risks to the safety and health of employees, occurring during the work activities listed, e.g.:

- hazardous factors – pressures, temperatures, steam, electrical voltage;
- hazardous situations – leaks, spillages, overpressure, dust boiling, flames, when checking the operation of the plant or lubrication, etc.;
- hazardous places – on equipment, machines (protection against moving parts by means of covers, barriers, grates, etc., or warning of the possibility of their damage due to operation), in production rooms, premises (handling transport and escape routes), on electrical installations and equipment (sparking, insulation, etc.), the possibility of static electricity, etc.;
- hazardous handling and operations, work with fire, at heights (railings, grates, personal restraints, etc.), in hazardous areas, below ground level, simultaneous operations (safe coordination of activities), movement on the track, cable shunting, handling of railway tank and freight wagons, etc.

4.3.6.6 Chemical Substances and Mixtures

In chapter 3.2 of the BOR or OR or IOR / chapter 10.2 of the OM, data on all chemical substances and mixtures occurring at the workplace (production plants, warehouses, etc.) are given in the form of a list/table (see example below).

At the same time, a reference to the CASEC database of safety data sheets must be provided in this chapter (e.g. *Detailed information on the chemicals and mixtures listed is provided in the CASEC database [on the Intranet](#) – see *Integrated Management System / Environmental Management System (EMS) / CASEC safety data sheets*). It is possible to provide references to other operational and technological documents, where additional safety information on chemical substances and mixtures is elaborated (training material, Rules according to Act No. 258/2000 Coll., on the protection of public health, etc.).*

The list of chemicals and mixtures used must include the following (regardless of whether they are classified as hazardous or not):


- Raw materials, intermediates, products
- Operating chemicals
- Laboratory chemicals
- Catalysts
- Lubricating oils
- Cleaning agents

- Adhesives
- Biocides
- Disinfectants
- Excipients
- Other unspecified chemicals

For each chemical substance and mixture the following must be indicated:

- Name of the chemical/mixture (trade name if purchased)
- Hazardous properties in the form of H-phrases
- Usage in the workplace
- The use of graphic symbols is also recommended

Example:

Name	Perchloroethylene
Hazardous properties (H-phrases)	H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H336 May cause drowsiness or dizziness H351 Suspected of causing cancer H411 Toxic to aquatic life, with long-lasting effects
Use	Solvent
Graphic symbols	

4.3.6.7 Explosion Protection Documentation (EPD)

The EPD must be prepared where machinery, technical plant, transport equipment, apparatus and tools are operated and used in workplaces with an explosion hazard. The EPD shall be prepared as a separate document. The contents of chapters 3.3 or 12.2 in the case of OM will refer to this document.

4.3.6.8 Special Instructions

List of technical standards or other binding regulations which lay down the conditions for the activities carried out on reserved technical plant (pressure equipment, lifting and transport equipment, gas equipment, electrical equipment, etc.) or on equipment for which 'operator competence' must be demonstrated. *Note Employees must be demonstrably trained in these instructions if they operate such equipment.*

4.3.6.9 Additional Safety Instructions

Instructions that will come into force if the seriousness of the safe procedure so requires. These instructions are related to a specific work-related, highly specialised activity.

4.3.6.10 Description of the Plant

A brief technical description of the plant, indicating the basic data, control and management functions related to the operation or work activity, if applicable, in relation to the process diagram in the annexe to the IOR, OR or OR-BOR. The code designation of the plant in the operating rule / OM must correspond to its designation on the relevant P&ID diagram or be based on the asset register (SAP).

4.3.6.11 Start-up (activity preparation)

A summary of the safety instructions to be implemented before the plant is put into operation or the work activity is started and the specific measures to eliminate or minimise the risks arising from these activities for the process unit described.

A chronological description of the procedure of individual work and production operations when starting up 'from backup' or 'after repair' and instructions to ensure protection, safety and hygiene at work. Where appropriate, document the procedure by reference to the process (technical) diagram in the annexe to the operating rules (e.g. handling, control, operating and measuring points).

4.3.6.12 Operation and Control during Operation (performance of activities)

A description of instructions to ensure the safe and orderly operation and control of the production plant or machinery, including direct occupational safety instructions.

Standards of the technological regime, determination of the permissible range, optimal and limit conditions and values, warning of the possible consequences of non-compliance with the technological regime. Specify and elaborate the continuity and coordination of production units, continuity of raw materials and materials supply and product and waste removal, regular work tasks, monitoring of control and measuring equipment, duties of employees, their mutual cooperation, instructions ensuring trouble-free and economical operation of the plant or performance of work activities.

4.3.6.13 Failures and Critical Factors

A description of possible failures and critical factors in the production process or work activity, causes, indications of a failure – critical condition, at which measuring and control points abnormal conditions can manifest themselves. Furthermore, indicate the exact and safe way of eliminating the deviation from the technological regime, failure – critical condition, indicate the possible use of other specific PPE (apart from standard PPE), including the conditions for their use. Determine the competence to decide on the procedure under exceptional conditions and situations where the activity cannot be carried out according to the OR.

4.3.6.14 Shutdown (cessation of activity)

Instructions for emergency and normal shutdown of the plant 'for backup' or 'for repair' according to the sequence of operations, including instructions for safe work.

4.3.6.15 Periodical Works

Tasks that need to be carried out over a longer period of time, such as cleaning, purging, regeneration – changing cartridges, lubrication according to lubrication schedules, etc. Antifreeze measures for the plant that is generally off-site and prone to freezing at low outdoor temperatures (bleeding, dripping, more frequent inspection, reheating, changing connections, reduction or increase in power or flow, change in product temperatures, shutdown, etc.). Indicate any safety instructions when describing the operation.

4.3.6.16 Emergency Instructions

A brief overview of the main causes of an accident and its occurrence. A description of the indications of an accident and the procedure for its elimination and the restoration of the plant to normal operating conditions. (The emergency instructions are part of the OM, OR and IOR, in case the BOR is prepared they are part of the OR-BOR). The emergency instructions shall be in accordance with the procedures outlined in Plan 001 "Plant Emergency Plans".

Indications of an Accident

An overview of indications that may accompany an accident, e.g. drop in measured values, product ejection, shocks, heating, deformation, signalling, acoustic and visual phenomena.

Causes of the Accident and their Occurrence

An overview of causes and reasons for accidents e.g. drop in pressure or quantity of raw material supplied, failure of power, pumps, blowers, mechanical damage to the plant, valves, metering, dosing, inadequate operation or supervision, poor lubrication, corrosion, erosion and other influences.

Removal of the Accident

Basic rules for emergency response, e.g. shutdown of the plant, adjustment to another mode, depressurisation, starting of replacement sources and equipment, leak or fire liquidation, equipment repair, sealing, etc.

(Of these alternatives, according to the specifics of the workplace, individual points should be elaborated using the data from Articles 4.3.6.4 to 4.3.6.8, 4.3.6.12 and 4.3.6.13).

Instructions / Emergency Procedures in Case of Power Failure

Instructions / emergency procedures shall be included in the emergency instructions in case of a failure of supply of energy such as cooling water, steam, electricity, nitrogen and air for metering and control. Where these instructions / emergency procedures are contained in another document, reference to that document shall be given (the reference must be fully addressable and the referenced document traceable).

4.3.6.17 Annexes

Diagrams of the technological, technical or functional layout, showing the production or work process with all objects, interconnections, control, measuring, regulating and automation elements and equipment.

Examples:

- related documents, tables, graphs, charts, balance sheets, etc.,
- diagrams of any safety, alarm or warning systems, fire diagrams,
- other possible additions to the previous chapters.

4.3.6.18 Introductory Provisions (for the BOR)

The chapter shall contain the following phrasing: *“This regulation is binding on all employees of the production plant / building.....”. For the actual operation (performance of the activity), the operating (work) rules issued for the individual related production plant apply”. “An employee who causes damage to the company by violating these regulations or related regulations with which he or she has been acquainted shall be obliged to pay for the damage incurred within the meaning of the provisions of the Labour Code on the liability of employees for damage”.*

4.3.6.19 Purpose and Importance of the Plant

An explanation of the purpose and significance of the technological (technical) process of the plant, products and their relation to further processing and use.

4.3.6.20 Description of the Technological Process

A list of the main production cells, technical description of the activity, clear explanation and description of the process from raw materials through intermediate products to final products. Provide physico-chemical and qualitative data on raw materials and products.

4.3.6.21 Environmental Protection

The chapter lists the sources of air pollution and the places where waste and waste water are generated in production. It specifies the method of recording and determining the amount of pollutants emitted into the environment. It explains the duties of the operator in the event of emergencies as defined by the individual organisational management standards.

4.3.6.22 Air

The chapter lists the sources of air pollution related to this production, the monitored pollutants emitted into the air, the emission limits (if set), the method of determining the amount of pollutant emissions into the air (continuous measurement, one-off measurement by the supply company, regular sampling by laboratories). The obligations of the operators of air pollution sources in case of emergency according to Directive 440 'Air Protection' are specified.

4.3.6.23 Water Management

The chapter provides an overview of the characteristics of individual waste waters (which pollutants they contain) and the volumes of these waters; a list of the places where waste water is generated and the way it is treated (e.g. de-oiling, treatment); the pollutants monitored in the waste water discharged from the plant, the concentration limits for individual sites (if set), and the method of determining the amount of pollutants and the volume of waste water (continuous measurement, regular sampling by laboratories, balance and records). In case there is an emergency plan for water protection, verified by ENU and approved by the competent state administration, it is sufficient to indicate their solution in this plan by reference. If it is not elaborated, indicate specific solutions to emergency situations.

4.3.6.24 Waste Management

The chapter lists the waste produced at the production plant, their registration, collection, storage, transport and disposal. If the waste is recycled or sold for reprocessing, the chapter also provides this information. The issue of waste and packaging management is dealt with in Directive 445 'Rules for Waste and Packaging Management' or Directive 445/1 'Rules for Metal Waste Management'.

4.4 Operator Manual

4.4.1 General Information

Notes on the content and outline of the Operator Manual are given in Chapters 4.4.2 and 4.4.3.

4.4.2 Operator Manual

Table 4 shows the outline of the Operator Manual with the individual chapters.

Table 4 – Operator Manual Outline

Number and name of the chapter	
1	Description of the Technological Process
	1.1. Purpose of the Unit
	1.2. Process Description
2	Description of the Plant and Control Systems
	2.1. Technical Description of the Plant
	2.2. Process Control
	2.3. Blocking and Protection of the Plant
3	Procedure for Taking Over the Plant (after a stop)
4	Start-up Procedures
	4.1. After Long-term Shutdown
	4.2. During Short-term Shutdown
5	Regular Operation
	5.1. Normal Operation
	5.2. Technology Cards
	5.3. Efficiency of Operation
	5.4. Other Variants of Operation
6	Procedures for Shutting Down the Plant
7	Plant Discharge Procedures
8	Environmental Protection
	8.1. General Requirements
	8.2. Air Protection
	8.3. Water Protection
	8.4. Waste Management
9	Energy and Utilities
10	Occupational Safety, Health Protection, Fire Protection
	10.1. General Requirements
	10.2. Chemical Substances and Mixtures
	10.3. Fire and Gas Detectors
	10.4. Fixed Fire Extinguishing System
	10.5. Operational Risks

Number and name of the chapter	
11	Security Systems
12	Emergency Instructions (New)
12.1.	Emergency Procedures
12.2.	Explosion Protection Documentation (EPD)
13	Non-standard Activities
14	Annexes
14.1.	Tables
14.2.	Drawings/diagrams

4.4.3 Table of Contents

4.4.3.1 The content of the individual chapters of the OM is prepared in accordance with the individual provisions set out in Chapter 4.3.6 of this Directive.

4.4.3.2 When using physical units in the text of the OM, only the SI system of units should be used.

4.5 Contents of the Technology Cards and Technology Reglements

4.5.1 General Information

The rules for TC in this Directive do not apply to the Refinery units, where the technology cards are not an operational and technological document, but a set of operational limits and optimal values of technological, operational and analytical parameters for production control, which is placed in the form of an application on the Intranet.

4.5.2 Technology Card

When creating the technology cards, the author is obliged to use the content structure given in Table 5. In case the content of some chapters is identical to the information in the TC, only the reference to the relevant chapter is given in the TC.

Table 5 – Contents of the Technology Cards

Number and name of the chapter	Table of Contents
1. Product Characteristics	See Table 6, contents of chapters
2. List of Materials, Raw Materials, Semi-finished Products and Excipients	
3. Nature and Basic Scheme of the Technological Process	
4. Description of Individual Stages of the Production Process	
5. Standards of the Technological Regime	
6. Production Control	
7. Annexes	

4.5.3 Technology Regulation

When creating the technology reglements, the author is obliged to use the content structure given in Table 6.

Table 6 – Contents of Technology Reglements

Number and name of the chapter	Table of Contents
1. Product Characteristics	<p>Name, appearance, composition, use and important physico-chemical and physical constants for production or use and, where appropriate, add a reference to internal documentation with detailed product data.</p> <p>Instructions for handling, including disposal of products, are made available in the form of safety data sheets in the CASEC database on the Intranet.</p>
2. Bibliography	<p>A list of the most important domestic and foreign literature on the production in question. Most important patents, the number and title of the patent file. A list of the research and laboratory reports and significant improvement proposals that have been applied in production, as well as a reference to the relevant documentation on the basis of which the binding quality characteristics of the product have been established.</p>
3. A list of Raw Materials, Intermediates and Excipients	<p>The list may be supplemented for each product by parameters relevant to its use in the technology and, where appropriate, a reference to internal documentation detailing the chemicals used in the workplace.</p> <p>Instructions for handling, including disposal of raw materials, excipients and selected intermediates are made available in the form of safety data sheets in the CASEC database on the Intranet.</p>
4. Nature and Basic Scheme of the Technological Process	<p>The sequence of the production process, description of the individual reactions and the movement of matter. A brief description of the individual production stages, usually expressed by chemical equations.</p>
5. Description of Individual Stages of the Production Process	<p>A brief description of the production technology. Possible deviations from the prescribed technological regime, their causes and influence on the further processing and production quality. Methods of eliminating these deviations. It need not include details concerning the handling of machinery, measuring and control apparatus, organisation and safety at work, protection of the workplace and environment, etc. (detailed descriptions are given in the operating rules). The annexe is a current diagram of production and simplified diagrams of mass and enthalpy balances based on project documentation, if available, with reference to the file, the actual design where it is stored or available, including drawing documentation numbers.</p>
6. Overview of the Production Plant Used	<p>An overview of the production plant in the form of a table containing: the number and name of the production equipment (apparatus), basic design characteristics, including equipment to minimise environmental impact (flammable liquid storage sumps, catch basins, double-walled tanks), identification of the type of apparatus, basic functional dimensions (structural dimensions, volumes, heat exchange surfaces, etc.), basic characteristics of the operating mode (power, temperature, pressure, etc.), type of construction material. The data in this overview must be consistent with the records kept by the maintenance departments and with the plant data certificates.</p> <p>Specific anti-corrosion measures applied to the relevant production plant, or experience with corrosion of the materials used by the operating media. If known, the lifespan of individual apparatus or their parts shall also be indicated.</p>
7. Standards of the Technological Regime	<p>An overview of the binding values of the technological regime in the form a table, broken down by individual stages of production and technological operations.</p>
8. Consumption, Capacity and Service Standards	<p>An overview of capacity, yield and consumption standards for materials and energy that are related to the raw material or the final product. The consumption according to the TES valid for the given year is indicated, and these must be updated every year in accordance with the current TES. An overview of the staff structure and their required qualifications.</p>
9. Production Control	<p>An overview of production control using measuring instruments and laboratory test methods. The description of the control by operating measuring instruments is given in the form of a clear list of important measuring points and control circuits (the required accuracy of measurement to be given in the prescribed units). Draw the basic measuring and control circuits (mainly balance and with decisive importance for the technological regime management) in the diagrams using the markings according to PPU 502 (Refinery units) and N 11 023 (Other units of ORLEN Unipetrol RPA s.r.o.).</p>

Number and name of the chapter	Table of Contents
	Laboratory production control is given in the form of tables indicating the exact method and procedure for carrying out this control in each production section. In particular, the place of sampling and the designation of the sample, the parameters to be checked and their limit values, the frequency of testing, the test methods and the name of the laboratory carrying out the control are specified. Where 'Laboratory Control Plans' are drawn up, a reference shall be indicated, which shall include the designation and name of the plan.
10. List of Operating Rules and Related Documentation	A list of all operational, emergency and safety regulations, including related or follow-up regulations, applicable to the production section specified in the technology reglement.
11. Form Templates	Templates for all forms of primary operational and technical records (operational records, etc.).
12. Annexes	Diagrams for the preceding chapters, especially for chapters 4, 5, 6, 7 and 9. Symbols according to PPU 502 (Refinery units) and N 11 023 (Other units of ORLEN Unipetrol RPA s.r.o.) must be used for marking of measuring and control circuits. Deviations are permitted provided they are specified in the explanatory notes. Block diagrams indicating the sampling points. Technology cards (only for TR, where there are frequent changes in the technological regime).

4.6 Designation

- 4.6.1 The assignment of the designation is made by the Administrator.
- 4.6.2 Operating regulations (including Local Operating Rules for gas equipment) are designated by A – [number according to Annexe A], e.g. A – 6000 or OR – [Serial number of the regulation according to the records] and BOR – [Serial number of the regulation according to the records] in the case of Refinery units.
- 4.6.3 Any changes in the designation numbers outside the prescribed range in Annexe A can only be made in consultation with MSD.
- 4.6.4 TC (for test operation) are designated by the Administrator as TC – [number] according to the maintained list. The name of the product is added to the card title according to the template – ‘Technology card for the production of [product name]’.
- 4.6.5 TR are designated by TR – [number] by the Administrator according to the maintained list.
- 4.6.6 TC (for permanent operation, where frequent changes of the technological regime occur) are annexed to the TR. In the case of a large number of technology cards, this annex may be bound separately. In this case, however, identification identical to the TR must be ensured.
- 4.6.7 OM are designated by OM – [number] by the Administrator according to the maintained list.

4.7 Comment Procedure

- 4.7.1 General rules set out in Directive 821 ‘Internal Documentation’ shall apply to the comment procedure, except for the deadline applicable to the comment procedure, which shall be set by the Administrator.
- 4.7.2 Each proposal must be submitted by the Administrator for comment procedure to at least:
- the relevant unit / section / production section director (depending on the organisational structure),
 - the production team / operation / section manager (depending on the organisational structure),
 - the head of the department acting as a maintainer,
 - representatives of the ED and DIPPQ (prip_pd.JEKO@unipetrol.cz),
 - representatives of the SD (bozp@unipetrol.cz),
 - the fire brigade commander.
- 4.7.3 If the issue described contains facts relating to other special activities/data, the Administrator shall submit the document to other departments in agreement with the author.

4.8 Verification, Approval and Distribution

- 4.8.1 Verification of operating rules, technology cards and regimes is carried out by the head of the unit one management level below the approver and under whose authority the relevant author is placed.
- 4.8.2 The approval is carried out by the director of the unit under whose authority the subject of the operating rule, technology card or regulation is placed.
- 4.8.3 The distribution is carried out by the Administrator in accordance with the requirements of Directive 821 'Internal Documentation'.

4.9 Amendments, New Editions and Cancellations

The rules for making amendments, new editions and cancellations of documentation are given in general form in Directive 821 'Internal Documentation' and are applicable to operating rules, operator manuals, technology cards and reglements.

4.10 Review

Reviews of operating rules, operator manuals, technology cards / reglements are carried out in accordance with Directive 821 'Internal Documentation', chapter 4.11.

5 Responsibility

Activity	Author	Holder	Administrator	Verifier	Approver	Article number
Preparation	A, R		C			4.1.9
Compliance with Editing and Content	A, R		C			4.2
Designation	I		A, R			4.6
Comment Procedure	C		A, R	I	I	4.7
Verification			C	A, R		4.8.1
Approving			C		A, R	4.8.2
Distribution		I	A, R			4.8.3
Issuance of Amendments, New Editions and Cancellations	R,C	I	R	C	A	4.9
Revision – Initiation and Monitoring	C		A, R	I	I	4.10
Revision – Assessment of the State of the Document	A, R		I			4.10

Notes:

- R - RESPONSIBLE „The responsible”
- A - ACCOUNTABLE „Bears full blame for non-performance“
- C - CONSULT „Included in the process”
- I - INFORM „Keep informed”

RACI matrix with comment (according to the Policy of "Efficiency Improvement of Processes and their Optimisation")

6 List of Related Documents

Plan 001	Plant Emergency Plans (not binding on contractors)
Directive 027	Investment Project Management (not binding on contractors)
Directive 440	Air Protection (not binding on contractors)
Directive 445	Rules on Waste and Packaging Management (not binding on contractors)
Directive 445/1	Rules for the Metal waste Management
Directive 821	Internal Documentation (not binding on contractors)
Directive 843	Changes to Technological Process and Plant (not binding on contractors)
PPU-502	Principles for Working with the SI Database
N 11 023	DCS, ESD and PLC Standards for ORLEN Unipetrol

Annexe A Operating Rules – Assigned numbers for designation

Department	Numbers for designation
Logistics Unit (LU)	1561 – 1599, 5460 – 5499, 6800 – 6899
Technical Section (TS)	4300 – 4399, 7200 – 7299, 8400 - 8449
Unit Agro (UA)	800 –1399, 1500 – 1560, 1700 – 1799, 2500 – 2599, 5100 – 5199, 5400 – 5459, 5800 – 5999
Water Management Section (WMS)	4400 – 4699
Energy Service Unit (ESU)	1 – 49, 150 – 299, PE-1300 – 1499
Ethylene Unit Production Team (EUPT)	8000 - 8399
Warehouses/Pipeline Production Team (WPPT)	8450 – 8699
Polyolefins Production Unit (PPU)	6000 – 6045, 6046 – 6099, 7000 – 7099, 7100 – 7199
Refinery Units	According to the maintained documentation list.