

Shutdown/Turnaround Checklist

Planning & Preparation

Activities related to planning, risk assessment, permit acquisition, and communication prior to the shutdown.

Planned Shutdown Start Date	
Enter date	
Diamera d Chartelaure Fred Date	
Planned Shutdown End Date	
Enter date	
Estimated Shutdown Duration (Days)	
Estimated Shutdown Duration (Days) Enter a number	
Enter a number	
Enter a number Shutdown Scope Description	

Capital Upgrade Emergency Shutdown	
Emergency Shutdown	
Corrective Maintenance	
Corrective Maintenance	
Preventative Maintenance	
Capital Upgrade	
Emergency Shutdown	
♣ Upload File	
Permit Required (Yes/No)	
Write something	

PPE Requirements (Select all that apply)
Hard Hat
Safety Glasses
Gloves
Safety Shoes
Respirator
Hearing Protection
High-Visibility Vest
Briefing/Toolbox Talk Topics Covered
Write something
Date of Safety Briefing
Enter date
Time of Safety Briefing
Emergency Contact Person(s)
Contact 1
Contact 2
Contact 3
Emergency Procedures Reviewed (Fire, Medical, Spill)
Write something

Attach Relevant Safety Documentation (SDS, Permit to Work)
□ Upload File □ U
Safety Supervisor Sign-off
Utilities & Services
Steps required to isolate, depressurize, and secure utilities like electricity, water, steam, and compressed air.
Main Power Supply Voltage (V)
Enter a number
Steam Supply Isolation Method
Blind Flange
☐ Valve Isolation
Other (Specify)
Detailed Notes on Steam Isolation Procedure
Write something
Scheduled Time for Water Supply Isolation

Compressed Air Line Isolation Complete Isolation Partial Isolation (Specify)
Description of Partial Compressed Air Isolation Write something
Date of Last Utility System Inspection Enter date
Water Tank Level (%), prior to shutdown Enter a number
Nitrogen Purge Required? Yes No

Equipment Isolation & Lockout/Tagout (LOTO)

Procedures for isolating and securing equipment to prevent accidental startup.

Select Isolation Method Physical Isolation (Valves, Blinds) Lockout/Tagout (LOTO) Double Break Isolation Energy Absorbent Devices
Describe Isolation Procedures
Write something
Lock Number (if applicable)
Enter a number
Energy Source Electrical Pneumatic Hydraulic Steam Water
Affected Equipment (Check all that apply) Pumps Motors Valves Compressors Reactors Heat Exchangers

solation Verification	Date	
Enter date		
solation Verification	Time	
echanical W	'ork	
ks related to mechani	ical repairs, replacements, and inspections.	
Dagariba tha angaitic	c mechanical work to be performed.	
Jeschbe me specino	. IIICCHAINCAI WUIK IU DE DEHUHICU.	
•	Thechanical work to be performed.	
Write something	Thechanical work to be performed.	
•	Thechanical work to be performed.	
Write something		
Write something Estimated labor hour	rs required for mechanical work.	
Write something		
Write something Estimated labor hour		
Write something Estimated labor hour Enter a number		

Replacement Overhaul Inspection Repair Other Estimated Start Date for Mechanical Work. Enter date Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something Mechanical Work Completion Signature	Type of Mechanical Repair (e.g., replacement, overhaul, inspection).	
Inspection Repair Other Estimated Start Date for Mechanical Work. Enter date Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Replacement	
Estimated Start Date for Mechanical Work. Enter date Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Overhaul	
Estimated Start Date for Mechanical Work. Enter date Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Inspection	
Estimated Start Date for Mechanical Work. Enter date Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Repair	
Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Other	
Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something		
Estimated Start Time for Mechanical Work. Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Estimated Start Date for Mechanical Work.	
Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Enter date	
Specialized tools or equipment required. Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something		
Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Estimated Start Time for Mechanical Work.	
Crane Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something		
Specialized Wrench Set Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Specialized tools or equipment required.	
Hydraulic Tools Welding Equipment None Part Number(s) of replaced components. Write something	Crane	
Welding Equipment None Part Number(s) of replaced components. Write something	Specialized Wrench Set	
Part Number(s) of replaced components. Write something	Hydraulic Tools	
Part Number(s) of replaced components. Write something	Welding Equipment	
Write something	None	
	Part Number(s) of replaced components.	
Mechanical Work Completion Signature	Write something	
Mechanical Work Completion Signature		
	Mechanical Work Completion Signature	

Electrical Work

ctivities involving electrical equipment, including testing, repairs, and upgrades.		
Voltage Readings - Phase A		
Enter a number		
Voltage Readings - Phase B		
Enter a number		
Voltage Readings - Phase C		
Enter a number		
Insulation Resistance Test Result (Megger)		
☐ Pass ☐ Fail		
☐ Not Performed		
Detailed Observations During Insulation Resistance Testing		
Write something		
Electrical Safety Checks Performed		
Grounding Verification		
Overcurrent Protection Responsed Protective Equipment (PRE) Inspection		
Personnel Protective Equipment (PPE) Inspection Arc Flash Hazard Assessment Review		

Enter date	
Upload Infrared Thermography Report (if	applicable)
♣ Upload File	
Equipment Tag Number for Disconnect Sv	vitches
Write something	
Electrician Sign-off	
nstrumentation & Control	Systems
sks related to calibration, testing, and mainter	
asks related to calibration, testing, and mainte	
asks related to calibration, testing, and mainterstems.	
casks related to calibration, testing, and maintend stems. Calibrate Flow Meter - Loop X	
Calibrate Flow Meter - Loop X Enter a number	
Enter a number PLC Program Backup Status	

Record any observed deviations during calibration	
Write something	
Last Calibration Date - Controller Y	
Enter date)
Time of Calibration - Controller Y	
Upload Calibration Certificates	
♣ Upload File	
HMI Screen Functionality Test Result	
Pass	
☐ Fail	
☐ Not Tested	
Loop Checks Performed	
PID Tuning	
Signal Integrity	
Input/Output Validation	
Communication Tests	

Process & Cleaning

Describe the cleaning procedure to be followed. Include any specific chemical or techniques. Write something Farget cleanliness level (e.g., % reduction in contaminants) Enter a number Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Jpload SDS (Safety Data Sheets) for cleaning chemicals. Lypload File Date of Last Cleaning Enter date	Spection.	ing, and preparing process equipment for maintenance or
Farget cleanliness level (e.g., % reduction in contaminants) Enter a number Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals.	or techniques.	ig procedure to be followed. Include any specific chemical
Enter a number Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Dipload SDS (Safety Data Sheets) for cleaning chemicals. Lupload File Date of Last Cleaning	Write something	
Enter a number Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Dipload SDS (Safety Data Sheets) for cleaning chemicals. Lupload File Date of Last Cleaning		
Enter a number Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Dipload SDS (Safety Data Sheets) for cleaning chemicals. Lupload File Date of Last Cleaning		
Cleaning Method Selected Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning	Target cleanliness le	evel (e.g., % reduction in contaminants)
Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning	Enter a number	
Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning		
Manual Cleaning Pressure Washing Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning	Cleaning Method Se	lected
Chemical Cleaning (specify in LONG_TEXT) Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning		
Other (specify in LONG_TEXT) Upload SDS (Safety Data Sheets) for cleaning chemicals. Upload File Date of Last Cleaning	Pressure Washing	
Jpload SDS (Safety Data Sheets) for cleaning chemicals. Lupload File Date of Last Cleaning	Chemical Cleaning (specify in LONG_TEXT)
Jpload SDS (Safety Data Sheets) for cleaning chemicals. Lupload File Date of Last Cleaning	_	
Upload File Date of Last Cleaning		
Date of Last Cleaning	Upload SDS (Safety	Data Sheets) for cleaning chemicals.
	📤 Upload File	
Enter date	Date of Last Cleanin	g
	Enter date	
Record any unusual observations or issues encountered during cleaning.	Record any unusual	observations or issues encountered during cleaning.
Write something	,	
Time comotanig	Write something	

Waste Disposal Method	
Recycle	
Landfill	
Specialized Disposal (specify in LONG_TEXT)	
Estimated Cleaning Duration	
Post-Shutdown Activities & Restart	
rocedures for post-maintenance checks, system re-integration, and controlled estart.	equipment
Planned Restart Date/Time	
Enter date	
Actual Restart Time	
Pressure Readings (Confirm within spec)	
Enter a number	
Temperature Readings (Confirm within spec)	
Enter a number	

Checklist Verification - Restart Sequence Complete? Yes No
Confirm Safety Interlocks Functioning Correctly Yes No
Any Issues Encountered During Restart?
Write something
Restart Verification Signature
Production Levels Restored?
☐ Yes ☐ No
Notes on initial production run
Write something

Documentation & Sign-off

Ensuring all work is properly documented, signed off, and lessons learned are captured.

Shutdown Start Date
Enter date
Shutdown End Date (Planned)
Enter date
Planned Restart Time
Summary of Work Performed
Write something
Total Shutdown Duration (Hours)
Enter a number
Deviations from Planned Shutdown (Check all that apply)
Unforeseen Repairs
Scope Changes Equipment Delays
Safety Concerns
None

Supporting Documentation (e.g., Inspection Reports, Photos) Lagrange Upload File	
Shutdown Supervisor Sign-off	