



Introduction of crude to CDU&VDU Complex Unit

常减压装置首次引原油试车

Site : 装置: CDU&VDU COMPLEX UNIT Process Unit: 工艺单元: CDU&VDU COMPLEX UNIT

Project Name: 项目名称: HENGYI (BRUNEI) PMB PETROCHEMICAL PROJECT

Planned Startup Date: 计划开车日期: 02.09.2019

HENGYI REVIEW AND APPROVAL:

恒逸人员审批:

Team Leader of PSSR Review Team :

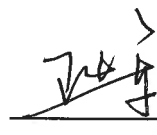
PSSR审查组长

Date日期:



HSE Senior Process Safety Engineer : HSE总监:

Date日期:

 2019.8.31

Manufacturing / Project Manager :

主管生产副总经理 / 项目经理:

Date日期:



2019.8.31

PSSR 审查组成员签到表 PSSR Sign-in Sheet

[illegible]

附录 7.2——：开车前安全审查清单（完整版）
APPENDIX 8.2 – Pre-Startup Safety Review Checklist (Completion Version)

I. Construction and Design in Accordance with Design Specifications 根据设计规范进行的施工和设计审查

No.	Item 项目	Complete 完成	N/A 不适用	Person Responsible 负责人	Date 日期	Comments 备注
A. Installation and Turnover 安装和移交						
Person affirmed 确认人:		date 日期:				
A1	Systems have been turned over from contractor with complete turn-over documentation and formally accepted, and signed-off by HengYi Production Department prior to commissioning 系统是否已经由承包商进行了移交，移交文件是否完整，是否是正式接收，在试车前是否由恒逸生产部签署？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	8-31	
A2	Is the entire project complete, if not have those incomplete portions of the project been communicated to the appropriate personnel which may be affected? Was risk associated with partial turnover assessed? 整个项目是否已经完成？如果没有，是否将项目的未完成部分通知了有关责任人员？是否对部分移交的项目进行了危险评定？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	8-31	
A3	Post-construction walk-through inspection complete and deficiencies/punch list items corrected: 施工后走查是否完成，缺陷/尾项是否进行了整改？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	8-31	
A3a	a) on process piping & systems 工艺配管和系统	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	8-31	
A3b	b) on instrumentation 仪表	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	8-31	
B. Piping Systems 管道系统						
Person affirmed 确认人:		date 日期:				
B1	All vessels are closed and properly secured 所有的容器是否关闭并牢固固定？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	2019.8.31	
B2	Proper installation and orientation of all valves (process, instrumentation, utility, etc.) have been verified (including orientation of control valves and check valves) 是否对所有阀门（包括工艺、仪表和公用工程等）的正确安装和方位进行了核实（包括调节阀和止回阀的方位）？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	2019.8.31	
B3	Inspect valves, flanges and spec breaks to ensure proper pressure rating and compatibility. 是否对阀门、法兰和“8”字盲板进行了检查，以确保其正确的压力等级和匹配。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	2019.8.31	
B4	All flanges have been inspected for proper gaskets, and bolts tightened (Gross Leak	<input checked="" type="checkbox"/>	<input type="checkbox"/>	张崇林	2019.8.31	

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	Check), isolation kits, and restriction orifices. 是否对所有法兰的垫片、螺栓拧紧度（总体泄漏检查）、隔离套件以及限流孔板进行了检查？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B5	All tubing and tubing fittings have been inspected for proper fit-up and leakage. 是否对所有配管和管件的正确安装和泄漏进行了检查？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B6	All fail safe valves have been reviewed for proper action (fail open, fail close, fail unchanged); and location. 是否对所有故障防护阀的准确动作（故障打开、故障关闭和故障不动作）及其位置进行了检查？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B7	Piping and equipment has been inspected for damage, debris, integrity, and anodes 检查管道和设备是否有损坏和毛刺，并对其整体性和极板进行了检查？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B8	All actuated valves and block valves have been lubricated and stroked to ensure proper operation; any necessary packing adjustments have been made. 是否对所有驱动阀和切断阀进行了润滑和行程检查，以确保其正常工作，是否进行了必要的填料调整？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B9	Lock open and lock closed valves have been inspected and are properly secured in their intended position, and verified against documentation 是否对锁定打开和关闭阀进行了检查，它们是否正确固定在要求位置，是否对照文件进行了核实？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B10	All block valves have been reviewed for normal position (normally open or closed) and handle is able to go full travel. Safe access to valve operation verified. 是否对所有切断阀的正常位置（常开或常闭）进行了检查，手柄是否能够完全转动，是否对阀门的安全接近空间进行了核实？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B11	Relief valves and rupture disks have been tested, tagged, and properly installed and in a functional state: 是否对泄压阀和防爆膜进行了测试并做了标记，安装是否正确，是否处于功能状态？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B11a	a. with block valves locked open and bypass valves locked closed, and documented 切断阀开锁，旁通阀闭锁，并进行了记录。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	已记录，未锁
B11b	b. relief valve checklist is complete and settings correspond to design requirements 泄压阀检查清单是否完成，设定值是否符合设计要求？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B11c	c. Rupture disks have been verified for correct installation (proper direction, correct disk, design temperature, and telltale) 是否对防爆膜的正确安装（正确方向、防爆膜的正确型号、设计温度和定位标记）进行了核实？	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏成强	2019.8.31	
B12	All construction blinds removed as required. All permanent blinds are in place; all temporary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	

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	blinds have been removed. The blind list has been reviewed and approved. 所有的施工盲板是否按照要求进行了拆除? 所有永久性盲板是否安装就位? 所有的临时盲板是否已经拆除? 盲板清单是否经过了审查和批准?					
B13	Remaining blinds are tagged and documented per HengYi procedure 对于剩余的盲板, 是否根据恒逸规程进行标记和记录?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B14	Small bore piping adequately braced 小孔径管线是否捆扎牢固?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
B15	All filters, screens, and strainers (temporary or permanent) are properly located and installed. 所有过滤器、滤网和粗滤器(临时或永久)的位置和安装是否正确?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
B16	All lines are properly labelled 所有的管线是否都正确做上了标签?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	一部分是临时
B17	All piping bypasses have been confirmed to be in their required position 是否对所有管线的旁通位置进行了确认?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B18	Vents, drains, and sample points located and configured for safe use. 放空点、导淋点和取样点的位置和设置是否安全?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
B19	Utility hoses inspected, with proper fittings, bleed-offs, and check valve. This is especially important for Nitrogen connections which must have unique hose connectors. 是否对公用工程软管进行了检查, 包括正确的配件、排放件和止回阀。这对于氮气连接尤其重要, 氮气连接必须有特殊的软管连接件。	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	饶仲明	2019.8.31	N2连接软管需要改造, N2气管线及连接件都是专用的。
C. Rotating Equipment 动设备						
person affirmed 确认人:		date 日期:				
C1	All lubrication systems are in service. Bearings are lubed per manufacturer's specs. 所有的润滑油系统是否投用? 是否按照厂商的规范对轴承进行了润滑?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
C2	All equipment has been filled with proper fluids to the appropriate level and charged as necessary. 所有的设备是否用正确的流体加注到正确的液位, 并按照需要进行了补液?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
C3	Mechanical equipment has been checked for proper alignment and rotation; functional checkouts have been performed on equipment and controls. 是否对机械设备的找正和转动进行了检查? 是否对设备和控制系统进行了功能检查?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
C4	Rotating equipment trip points, especially overspeed, have been checked and tested.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	
C5	All equipment guards have been installed 是否对动设备的跳车设定点尤其是超速进行了检查和测试? 所有设备的防护部件是否安装?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	宇成	2019.8.31	

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C6	Equipment has adequate provision for drainage, clean-up, isolation, lock-out, de-pressure verification, and equipment access/removal to perform maintenance 就设备的导淋、清理、隔离、锁定、泄压验证以及为进行维护所需的设备接近/设备拆除, 是否有足够的防护措施?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
C7	Vibration monitoring system in ready state 振动监控系统是否具备投用条件?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	赵明	2019.8.31	没有在线检测
D Instruments, Controls, and DCS 仪表、控制系统和 DCS						
Person affirmed 确认人: date 日期:						
D1	Orifice plates verified to be correctly installed 是否对孔板的正确安装进行了核实?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D2	Instrument taps verified to be properly lined up 是否对仪表旋塞的调整进行了核实?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	赵明	2019.8.31	
D3	Air supplies to transmitters and/or control valves are verified open 到变送器和/或调节阀的仪表风气源是否已打开?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D4	Control valves confirmed to stroke properly 是否对调节阀的行程动作进行了确认?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	附件
D5	Fail safe actions have been verified 是否对故障防护动作进行了核实?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D6	Control loops and alarms have been tested 是否对控制回路和报警进行了测试?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	update!
D7	Actual alarm triggers loaded to DCS 实际报警触发器是否加载到了 DCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D8	Dedicated DCS Console available to monitor commissioned systems, and receive and display their alarm conditions 专用 DCS 控制台是否能够对已完成试车的系统进行监控, 是否能够接收和监控其报警状态?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D9	Instruments weather-proofed 仪表是否进行了防风雨保护?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D10	Instruments calibrated 仪表是否进行了调校?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D11	All alarm, shutdown, and relieving set-points have been checked. 是否对所有的报警、停车和泄压设定进行了检查?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D12	All bypasses and jumpers on control or safety circuits have been removed. 是否已将所有控制或安全回路中的旁路和跳线拆除?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	附件
D13	All critical/SIS instruments and associated logic have been calibrated/checked and are ready for use. 是否对所有关键/SIS 仪表及其相关逻辑进行了调校/检查, 并确保可以进行使用?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D14	Level transmitter fill fluids installed (where appropriate) 液位变送器的流体是否加注 (如果需要)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	赵明	2019.8.31	
D15	Loop checks complete (any new instruments). 回路检查是否完成 (任何新仪表)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D16	All instrument/panel covers properly in place. 所	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	

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	有仪表/控制盘盖是否正确安装就位?					
D17	All instruments manifolds properly lined up with vent plugs in place. 所有仪表总管上的放空丝堵安装是否正确?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	d 下排值
D18	Instrument PVs reading ambient or zero. 仪表PV 读数是否为环境值或零值。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D19	Instrument purges on. 仪表风是否已投入使用?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D20	Heat tracing on as required. 伴热系统是否按照要求已经投用?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
D21	Ensure no Control System or DCS System Alarms 确保没有控制系统或 DCS 系统报警。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	赵明	2019.8.31	
E Electrical 电气						
person affirmed 确认人:		date 日期:				
E1	All explosion-proof boxes and conduit covers are properly secured and all purges have been lined up. 所有防爆箱和导线管盖、帽是否正确固定就位, 所有的吹扫设备是否已进行了调整?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
E2	Any equipment and associated breaker panels not to be used or not available for use are out of service. All lockouts are flagged, tagged and listed. 不使用的或无法使用的所有设备及其相关断路器控制盘不能投用, 所有锁定应插上信号旗、作上标记并列清单。	<input type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
E3	Electrical relays, breakers, and emergency power systems have been inspected and tested. 是否对电气继电器、断路器和应急电力系统进行了检查和测试?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
E4	The UPS and/or emergency power and backup systems have been tested and are in a ready state. 是否对 UPS 和/或应急电力和后备系统进行了测试, 是否具备投用条件?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
E5	Breakers have been properly labeled for quick identification of users 是否对断路器进行了正确的标记, 以方便操作人员的快速识别。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
E6	Lock-out provisions exist at switchgears and the start/stop switches 是否在开关设备和启动/停车开关上提供了锁定保护措施?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	李博	2019.8.31	
E7	Start/stop buttons, emergency stop buttons verified and properly labelled 是否对启动/停止按钮和紧急停车按钮进行了核实, 并正确进行了标记?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李博	2019.8.31	
F. Safety Systems 安全系统						
Person affirmed 确认人:		date 日期:				
F1	all safety equipment installation complete 初级安全设备的安装是否完成?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗恩	2019.8.31	
F2	all safety equipment inspections performed 是否对安全设备进行了检查?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗恩	2019.8.31	
F3	Barricades to prevent traffic access to unit have been installed 是否对为防止车辆进入单元设置了路障?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗恩	2019.8.31	

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F4	Fire protection systems are adequate. Performance test completed 防火系统是否满足要求? 性能试验是否已经完成?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F5	Deluge systems tested for proper coverage and readiness 是否对雨淋灭火系统的喷淋范围进行了测试, 是否具备投用条件?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F6	Fire-proofing provided 是否提供了消防设施?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F7	Fire detection, gas detection systems for combustible as well as poisonous gases are installed as applicable and have been reviewed for proper detector location and correct response / action. 火灾检测系统和可燃气体和有毒气体的气体检测系统的安装是否正确, 是否对检测器的位置以及正确响应/动作进行了审查?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F8	Safety equipment, including firefighting devices, fire extinguishers, escape devices, and eye wash stations, have been inspected and reviewed for proper operation and location. 是否对安全设备包括消防设施、灭火器、逃生设施和洗眼站的正常运行和位置进行了检查和审查?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F9	Hazard zones clearly identified 危险区是否已明确划分?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F10	All safety signs installed such as "Hearing Protection Required", etc 所有的安全警示牌 (如“需进行听觉保护”等) 是否已经安装?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F11	Hot surfaces have adequate burn protection 热表面是否有足够的防烫伤保护措施?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
F12	Platforms, toeplates, stairs, ladders, cages etc installed correctly. (note: Grangemouth fatality with improper ladders and cages) Adequate capability for egress from platforms. 平台、踏板、楼梯、梯子、机架的安装是否正确 (注意: 安装不符合要求的梯子和机架会导致人生伤亡事故)? 平台的出口是否有足够的荷载能力?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	商君	2019.8.31	
G. Tanks 储罐 person affirmed 确认人: _____ date 日期: _____						
G1	Storage tanks are well equipped to prevent from static electricity and thunder 储罐的防静电、防雷设施完好。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏成英	2019.8.51	
G2	Respiration valves for tank are adjusted and on-spec. 储罐的呼吸阀已调试合格。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏成英	2019.8.51	
G3	There are obvious signs for tank item number, pipe media name, flow direction and tank fire-proof. 储罐位号、管线介质名称与流向、罐区防火有明显标志。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏成英	2019.8.51	

II. HSE Information and Studies

HSE 资料和研究

开车前安全审查程序
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No.	Item 项目	Compl 完成	N/A 不 适	Person Responsible 负责人	Date 日期	Comments 备注
	A. Process Safety Information UPDATED and complete, available, and transferred to the designated custodian, including: 工艺安全资料已经更新, 完整可用, 并已转交给指定的管理人员, Person affirmed 确认人: _____ date 日期: _____					
A1	a) P&Ids --- As-built, legible, accurate, reflecting actual installation and available for startup P&Id 图——为竣工图、清晰易懂、准确、反映实际的安装状况, 在开车时能够使用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城云	2019.8.31	
	B. Hazard Analysis Completed 危险分析已经完成 Person affirmed 确认人: _____ date 日期: _____					
B1	All changes to design, including field changes, have been reviewed for hazards, approved through the project management of change process, and all relevant information has been updated. 对设计的所有变更, 包括现场变更, 已对其危险性进行了审查, 并按照项目变更管理规程实施了审批, 同时所有相关的资料已经更新。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城云	2019.8.31	
B2	Process Hazard analysis (HAZOP) complete for entire process (including changes) and accepted safety items field verified as implemented and closure documented 对整个工艺(包括变更)的工艺危险分析(HAZOP)是完整的, 可接收的安全项目已按照实施规程在现场进行了核实, 项目关闭被记录。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城云	2019.8.31	
B3	Have HSE recommendations from HSE studies, PHSERs, specialist reviews, been resolved and closure documented? HSE 研究中的 HSE 建议、PHSER 中的建议、专家审查建议是否实施, 项目关闭是否被记录?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城云	2019.8.31	PHSER不使用 HAZOP, QRA, SIL 报告已有

III. Safety, Operating, Maintenance, and Emergency Procedures Prepared

安全、操作、维护和紧急事件响应规程准备就绪

No.	Item 项目	Complete 完成	N/A 不 适	Person Responsible 负责人	Date 日期	Comments 备注
	A: Operating Procedures 操作规程 Person affirmed 确认人: _____ date 日期: _____					

开车前安全审查程序
Pre-Startup Safety Review Procedure

A1	Startup procedures developed /updated, reviewed, complete, have been issued and are readily available. 开车规程已经编写/更新和审查，是完整的，已经下发并随时可用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A2	Normal operating procedures updated, complete, have been issued and are readily available 正常操作规程已经更新，是完整的，已经下发并随时可用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A3	Shutdown (line up) procedure developed/updated, complete, have been issued and are readily available and reviewed. 停车（调整）规程已经编写/更新和审查，是完整的，已经下发并随时可用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A4	Safe-off process procedures (emergency shutdowns) updated, reviewed and approved. 安全关闭工艺规程（紧急停车）已被更新、审查和批准。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A5	Have environmental permit requirements been incorporated into operating procedures? 环境许可要求是否已编写到操作规程中？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A6	Updated or revised operating procedures signed off by operators (startup, shutdown, emergency, etc) 已被更新或已修改的操作规程是否由操作人员签字（开车、停车和紧急事件等）？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A7	Control of work procedure ready and operational 作业控制程序已经准备就绪，并且可以操作	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A8	Sampling procedures developed/updated and schedule established. 取样规程已经编写/更新，同时取样一览表已经确定。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A9	Winterization procedures and Freeze protection list complete. 冬季运行规程和防冻保护表是完整的。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	} 不使用
A9a	a) Operations (Process)运行（工艺）	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
A9b	b) Maintenance (Equipment)维护（设备）	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
A10	Procedures and checklists for safety equipment updated or developed, including: 安全设备规程和检查清单已更新或编写，包括：	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
A10a	a) Fire monitors 火灾监测器	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	

开车前安全审查程序
Pre-Startup Safety Review Procedure

A10b	b) Deluge systems 雨淋灭火系统	<input checked="" type="checkbox"/>	<input type="checkbox"/>	王开旭 2019.8.31	
A10c	c) Fire extinguishers 灭火器	<input checked="" type="checkbox"/>	<input type="checkbox"/>	王开旭 2019.8.31	
A10d	d) Safety Showers/Eyewashes 安全淋浴/洗眼设施	<input checked="" type="checkbox"/>	<input type="checkbox"/>	肖恩 2019.8.31	
A10e	e) PPE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	肖恩 2019.8.31	
A10f	f) Locked Valve Checklists 锁闭阀门检查清单	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A10g	g) Rupture Disks checklists 防爆膜检查清单	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强 2019.8.31	
A10h	h) Ongoing weekly safety inspection forms complete 实施中的周安全检查报告是否完整?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	肖恩 2019.8.31	
A11	Critical alarm tables established or updated, including: 关键报警表已经确定或更新, 包括:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A11a	a) Set points 设定点	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A11b	b) Testing frequency 试验频率	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A11c	c) Testing procedure 试验规程	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A11d	d) Alarms rationalized 报警合理设定	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A12	Fugitive emissions program developed/updated. 放射规程已编写/更新 无组织	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	李春林 2019.8.31	
A13	Waste Management Procedures Developed/updated 废物管理规程已经编写/更新	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	张坤明 2019.8.31	
A14	Safety Management Systems developed/updated and in place 安全管理系统已经编写/更新, 同时准备就绪。	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	张坤明 2019.8.31	安全管理系统在操作规程
A15	Post responsibility, patrol inspection and shift hand over etc. are established. 岗位责任、巡回检查、交接班等十项制度已建立	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A16	Purging, cleaning, air tightness, dry, displacement, three-agents filling, instrument joint-calibration are completed and confirmed. 吹扫、清洗、气密、干燥、置换、三剂装填、仪表联校等已完成并经确认。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
A17	Online analyzers and instrument adjustment are ready for use, industry air-conditioners are put into use. 在线分析仪表、仪器经调试具备使用条件、工业空调已投用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强 2019.8.31	
B. Emergency Procedures 紧急事件响应规程 Person affirmed 确认人: date 日期:					

开车前安全审查程序
Pre-Startup Safety Review Procedure

B1	Emergency action or response plan updated and personnel trained. 紧急行动或响应计划已经更新，人员进行了培训。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31
B2	Procedures to be followed by those who must remain on the unit to perform critical functions prior to emergency evacuation. 在紧急撤离前，必须留在单元内实施关键操作的人员应遵守的规程是否编写？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31
C: Mechanical Integrity and Maintenance Procedures 机械整体性和维护规程					Person
affirmed 确认人: date 日期:					
C1	Mechanical integrity and maintenance procedures developed/updated for process equipment, including testing frequencies: 工艺设备的机械整体性和维护规程已经编写/更新，其中包括试验频率：	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1a	a) Vessels 容器	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1b	b) Exchangers 换热器	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1c	c) Pumps 泵	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1d	d) Relief Systems 泄压系统	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1e	e) Valves 阀门	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1f	f) Piping Components 管道部件	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1g	g) Safety Systems 安全系统	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1h	h) Fired Heaters 火焰加热器	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C1i	i) Compressors 压缩机	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C2	Mechanical Integrity System Defines: 机械整体系统包括的内容:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C2a	a) Inspection 检查	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C2b	b) Testing 试验	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C2c	c) Documentation 文件	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C3	Baseline inspection readings taken for equipment and piping and properly documented. 对设备和管道进行了基线检查，并进行了正确记录。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C4	Have testing program and frequency been established or updated for safety instrumented systems? 仪表控制安全系统的测试程序和频率是否已经明确或更新？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31
C5	Vendor information: 厂商资料:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C5a	a) Collected 收集厂商资料	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	
C5b	b) Recommended maintenance procedures for equipment collected 收集了设备的建议维护规程	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31
C6	Spare parts storehouse and procedures established: 备件仓库及其	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yan	2019.8.31

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	管理规程已经确定:					
C6a	a) Assure parts are to the specifications 确保备件符合规格要求	<input checked="" type="checkbox"/>	<input type="checkbox"/>	杨文	2019.8.31	
C6b	b) Required spare parts identified 所需的备件已经明确	<input checked="" type="checkbox"/>	<input type="checkbox"/>	杨文	2019.8.31	
C6c	c) Spare parts are available 备件有库存	<input checked="" type="checkbox"/>	<input type="checkbox"/>	杨文	2019.8.31	
D. Communication systems 通讯系统						
Person affirmed 确认人:		date 日期:				
D1	Commanding telephone system is running reliably 指挥系统电话畅通	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.08.31	
D2	Post telephone system is open and fine. 岗位电话已开通好用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.08.31	
D3	Direct line, coordination, fire alarm telephone are reliable and fine for use. 直通、调度、火警电话可靠好用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.08.31	
D4	Wireless telephone and handie-talkie sound well. 无线电话、报话机呼叫清晰。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.08.31	
E. Transportation 交通						
Person affirmed 确认人:		date 日期:				
E1	Railway, road, jetty and pipe conveying system are established and ready for use. 铁路、公路、码头及管道输送系统已建成投用。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
E2	System for defining quality and quantity of raw material, fuel, intermediate product and product exchange are already in place. 原料、燃料、中间产品、产品交换的质量、数量方式等制度已经落实。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
E3	Off-spec treatment means are in place. 不合格品处理手段已落实。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
E4	Product package facility has been tested by the physical materials. Package materials are all available. 产品包装设施已用实物试车, 包装材料齐全	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
E5	Product sales and transportation means are already in place. 产品销售和运输手段已落实	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
E6	Product ex-work inspection, loading and transportation are exercised. 产品出厂检验、装车、运输已演习。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
F. Safety, operating and maintenance 安全、操作和维护						
Person affirmed 确认人:		date 日期:				
F1	Safe production management system, regulations, ledgers are all available. Safety management system is already established. People have been given	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

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	safety training and obtained post certificate. 安全生产管理制度, 规程、台帐齐全, 安全管理体系建立, 人员经安全教育后取证上岗			苗君	2019.8.31	
F2	Hot work system, no-smoking system and vehicle management system are established and published. 动火制度、禁烟制度、车辆管理制度已建立并公布。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F3	Fire patrol inspection system and fire engine site management system are formulated. The firefighting response plan is implemented. The fire paths are fully accessible and the fire drills are done. 消防巡检制度、消防车现场管理制度已制定, 消防作战方案已落实, 消防道路已畅通, 并进行过消防演习。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F4	Everyone knows how to use firefighting facilities and protective devices are in place. 岗位消防器材、护具已备齐, 人人会用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F5	Gas preventive and rescue measures are implemented. 气体防护、救护措施已落实。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F6	Site persons wear PPE as required and the first-aid knowledge is popularized to staff. 现场人员劳保用品穿戴符合要求, 职工急救常识已经普及。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F7	The firefighting foam station, vapor curtain, water curtain and sprinkler, and fire & gas alarm, flammable and toxic gas detectors for the production plant and tank farm are put into use, 100% in good conditions. 生产装置、罐区的消防泡沫站、汽幕、水幕、喷淋以及烟火报警器、可燃气体和有毒气体监测已投用, 完好率达到 100%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	
F8	Pressure vessels like boilers are confirmed and certified by labor department. 锅炉等压力容器已经劳动部门确认发证。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	马石全	2019.8.31	
F9	Blinds are managed by dedicated person with records and site signs available. 盲板已有专人管理, 设有台帐, 现场挂牌	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
F10	Site first-aid station is established and equipped with ambulance, etc., 24-hour on duty. 现场急救站已建立, 并备有救护车等, 实行 24 小时值班。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	苗君	2019.8.31	

IV. Employee Training Complete and Documented 人员培训已经完成并对培训进行了记录

No.	Item 项目	Complete 完成	N/A 不适用	Person Responsible 负责人	Date 日期	Comments 备注
Person affirmed 确认人: _____ date 日期: _____						
1	Training of operators, shift supervisors, operating engineers, and operating superintendents/managers complete as applicable and qualifications documented: 按照要求, 完成了对操作工、当班检查员、运行工程师和运行负责人/经理的培训, 同时对技能鉴定进行了记录:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
1a	a) Operating procedures 操作规程	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
1b	b) Safe work practices 安全工作惯例	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
1c	c) Emergency evacuation procedures 紧急撤离规程	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
1d	e) Core Safety Training 核心安全培训	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
2	Have environmental permit requirements been incorporated into training? 环境许可要求是否融入到培训中?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
3	Training conducted on maintenance and mechanical integrity procedures 对维护和机械整体性规程进行了培训	<input checked="" type="checkbox"/>	<input type="checkbox"/>	王波	2019.8.31	
4	Contractors associated with the process trained on hazards of the process, safe work practices, and steps required to perform job safely 对与工艺有关的承包商, 在工艺危险、安全工作惯例以及为确保安全工作所需的步骤方面进行了培训。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
5	Vendor, contract services, and specialist support for startup identified and confirmed available 对在开车时的厂商、合同服务和专家支持进行了明确, 同时确认开车时能够获得这些服务和支持。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
6	All kinds of people are tested and qualified and have obtained post certificates. 各工种人员经考试合格, 已取得上岗证。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
7	Accidents learning cases from the similar plants offshore and onshore are compiled and studied. The accidents and the symptoms of accidents since the commissioning of the plant have been summarized and learned in accordance with the principle of "three never being	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	

开车前安全审查程序
Pre-Startup Safety Review Procedure

passed".已汇编国内外同类装置事故案例，并组织学习，对本装置试车以来的事故和事故苗头本着“三不放过”的原则已进行分析总结，吸取教训。				
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V. Site Cleanup and Preparedness 现场清理和开车准备

No.	Item 项目	Complete 完成	N/A 不适用	Person Responsible 负责人	Date 日期	Comments 备注
Person affirmed 确认人:		date 日期:				
1	Facility care/control/custody has been transferred to Operations. 设施保管/控制/监管已移交给运行。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李永	2019.8.31	
2	Area has been cleared of construction equipment, surplus equipment, extraneous tools, unused parts, and empty drums. 施工设备、剩余设备、无关工具、未使用部件和空罐被清理出装置区。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李永	2019.8.31	
3	Obstructions have been removed to provide adequate access to emergency equipment, for emergency vehicles and paths for egress in an emergency. 障碍物已被清理，保证到紧急设备有足够的接近空间，为紧急车辆提供足够接近空间，同时为紧急出口提供通道。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李永	2019.8.31	
4	Scaffolding that could hinder operators has been removed 妨碍操作工实施操作的脚手架已被拆除。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李永	2019.8.31	
5	All temporary piping, hoses, and process or utility connections not required for startup have been removed 开车不需要的所有临时管道、软管和工艺或公用工程连接已被拆除。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
6	Piping systems have been flushed, where appropriate. 对需要进行冲洗的管道系统完成冲洗。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
7	Drains have been inspected for blockage. 已对导淋是否有阻塞进行了检查。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
8	All drain/vent valves are closed and plugged, all low points are drained 所有的导淋/放空阀门被关闭并塞紧，对所有的低点都进行了排液。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
9	All required utilities have been confirmed to be available 所有所需的公用工程已被确认可用。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏成强	2019.8.31	
10	Equipment is air-free, dried to the prescribed dew point, and ready for introduction of feed 设备中不能有空气，干	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李永	2019.8.31	

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	燥到所要求的露点，具备进料条件。					
11	Activities concurrent with startup have been identified. Risks associated with these activities have been assessed and appropriate safeguards have been verified to be in place. 与开车同时进行的工作已被明确，与这些工作相关的危险已进行了评定，合适的安全保护措施已被核实并准备就绪。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	尚君	2019.8.31	
12	Management of change has been transferred from the project to the site's MOC system. 变更管理已从项目移交到现场 MOC 系统。	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	
13	Water network, flow rate and water quality meet the process requirements and water supply is stable. 水网压力、流量、水质符合工艺要求、供水稳定。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
14	Pre-membrane for cooling water system is already done and qualified, running steadily. 循环水系统预膜已合格，运行稳定。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李金	2019.8.31	
15	Chemical water, fire-fighting water and condensate and water drainage system are all put into use, running reliably. 化学水、消防水、冷凝水、排水系统均已投用，运行可靠。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
16	Double power supply is already in place, running in two loops. 已实现双电源，双回路供电。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李金	2019.8.31	
17	Instrument power is running steadily. 仪表电源稳定运行。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李金	2019.8.31	
18	Electrical coordinators have worked at post. 电力调度人员已上岗值班。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李金	2019.8.31	
19	Power supply circuitry maintenance is already in place. People are working on shifts for patrol inspection of circuitry. 供电线路维护已经落实，人员开始倒班巡线。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	李金	2019.8.31	
20	Steam system is already supplying steadily. 蒸汽系统已平稳供给。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
21	Steam system is incorporated in the reticulation based on pressure level and running with stable parameters. 蒸汽系统已按压力等级并网、运行、参数稳定。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
22	There is no obvious spilling, weeping, dripping leaking, with good insulation. 无明显跑、冒、滴、漏，保温良好。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
23	Industrial air, instrument air and nitrogen systems are running well. 工业风、仪表风、氮气系统运行正常。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
24	Pressure, flow rate and dew point etc. are on-spec. 压力、流量、露点等参数合格。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	

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25	Chemical raw materials and lube oils (grease) are all available and on-spec. 化工原材料、润滑油（脂）已全部到货并检验合格。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
26	The three-stage filtration system for Lube oils is already in place. Lube points for equipment are clarified. 润滑油三级过滤制度已落实，设备润滑点已明确。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
27	Verify there are no incomplete / ongoing MOC actions for identified system. 落实已确定的系统没有未完成或继续进行的 MOC（变更管理）行动。	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	

VI. Environmental 环境

No.	Item 项目	Complete 完成	N/A 不适用	Person Responsible 负责人	Date 日期	Comments 备注
Person affirmed 确认人:		date 日期:				
1	Have changes to the original permitting information been provided to HSE for review? (as-built changes need to be reviewed by HSE) 对原始许可资料的变更是否已提供给 HSE 进行审查（竣工变更需要 通过 HSE 审查）？	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	孙鹏	2019.8.31	
2	Have permits or exemptions been received? 是否得到许可或免除？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
3	Have environmental permit requirements been identified for operating procedures and training? 对于操作规程和培训，是否明确环境许可要求？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	清污分流 操作说明
4	Have required sampling ports been installed for environmental monitoring? 基于环境监控目的，所需的取样口是否已经安装？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
5	Have all new and reworked valves and piping connections in VOC service been hydrotested or gas tested to ensure leak free performance? 是否已对 VOC 应用中的所有新阀和返修阀以及管道连接进行了液压 试验或气体试验，以确保没有任何泄	<input checked="" type="checkbox"/>	<input type="checkbox"/>	魏城强	2019.8.31	
6	ISO14001 compliance verified 是否对与 ISO14001 一致性进行了核实？	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	在计划中
7	Have all waste streams been checked for proper handling? 是否对废物料的正确处理进行检查？	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	大部分废物 交有资质 单位处理
8	Adequate facilities are available for storage of off-spec product or facility has recycle capability 不合格品的储存设施是否足够，或设施是否有循环能力？	<input type="checkbox"/>	<input checked="" type="checkbox"/>	魏城强	2019.8.31	

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9	Have fluids from pressure testing, pickling, and other commissioning activities been captured and properly disposed? 压力试验、酸洗和其它试车工作产生的液体是否能被收集并正确处理?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
10	Have startup notifications been issued to relevant environmental agencies? 开车通知是否已下发给有关环境机构?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
11	Have environmental testing requirement for post-startup been planned? 是否已对开车后的环境测试要求进行了计划?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	

VII. Health 健康

No.	Item 项目	Complete 完成	N/A 不适用	Person Responsible 负责人	Date 日期	Comments 备注
Person affirmed 确认人:		date 日期:				
1	Has an ergonomics walk-through been conducted and issues resolved? 是否进行了人类工程学走查, 问题是否得以解决?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
2	Noise abatement and design considerations have been discussed with HSE and noise testing planned 是否与 HSE 部门对噪音消除和设计考虑进行了讨论, 噪音试验是否已经计划?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
3	Have health monitoring processes been updated and implemented? Has data been collected and retained? 是否对健康监控程序进行了更新和实施? 数据是否已收集和保留?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
4	Have procedures been updated to reflect changes to PPE requirements as a result of the project? 规程是否被更新, 以反映出项目在 PPE 要求方面的最终变更?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
5	Have unique requirements for PPE been supplied? 是否已提出了对 PPE 的特殊要求?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
6	Work areas in buildings properly ventilated 建筑物内工作区域的通风是否合理?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	孙鹏	2019.8.31	
7	Radiation Source strength from instrumentation within Site specifications 仪表放射源的强度是否在现场规范要求的范围内?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	孙鹏	2019.8.31	

VIII. DOCUMENTED EXCEPTIONS 未完项记录表

No.	Date 日期	Exception Description 例外说明	Reason for Deviation 背离原因	Category Type 类别 (A/B/C)	Person Responsible 负责人	Completion Date 完成日期
1	2019.8.31	1011 单元消防喷淋系统未投用。		A	蔺君	2019.8.31 完成
2	2019.8.31	塔裙座底部人孔无隔离, C640 裙座内有杂物, 人孔无隔离。		A	宋玉龙	2019.8.31 完成
3	2019.8.31	1011 单元现场管线标识不完善		B	魏城瑶	2019.8.31
4	2019.8.31	常减压装置区现场承包商临时工棚, 人员开工前需撤离。		B	张崇林	
5	2019.8.31	现场副班人员未携带气体检测仪。		A	蔺君	2019.9.2 14:50 (仅有4台)
6	2019.8.31	FAR3 一部外操间应急柜无标识, 无“非紧急情况下禁动”标识		A	蔺君	2019.9.2 完成
7	2019.8.31	1011 单元现场存放的应急物质堆放点无明显标识, 旁边的灭火器箱未画线。		A	蔺君	2019.9.1 完成
8	2019.8.31	1011 单元 E635B 换热器上部截止阀无盲板		A	宋玉龙	2019.9.1 完成
9	2019.8.31	常减压一楼一般固废桶内有废吸油毡, 垃圾桶未定置摆放。		A	蔺君	2019.9.1 完成
10	2019.8.31	D832 旁的废甘油空桶需清走。		A	宋玉龙	2019.9.1 完成
11	2019.8.31	1011-P-425A 旁围堰内地漏不通。		A	蔺君	2019.8.31 完成

Notes 注

1. A类——公用工程引进前须完成 Category A - complete prior to OSBL introduction.
2. B类——物料引进开车前须完成 Category B - complete prior to feed stock introduction.
3. C类——开车后3个月内须完成 Category C - complete within 3 months of commissioning.

2019.8.31