**Hengyi Industries Sdn. Bhd.**

**恒逸实业（文莱）有限公司**

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**Management on High-altitude Routine Inspection**

**for No.1 Refinery Department**

**炼油一部高空巡检管理规定**

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In order to ensure the safety of the daily operations of the unit and to avoid accidents, and also as a supplement to the routine inspection of each work post according to the company’s unified arrangement and requirement for high-altitude routine inspection, No.1 Refinery has set up high-altitude routine inspection for its three units and have done the following provisions:

为确保装置日常生产的安全、避免事故的发生，作为对岗位日常常规巡检的补充，按公司统一安排对高、远点设置巡检点的要求，炼油一部对所属三套装置设置高空巡检点，并做以下规定：

1. **Point of Routine Inspection巡检点**

There are 6 high-altitude routine inspection points set up for the three units, respectively:

炼油一部三套装置共设置高空巡检站点6个，分别为：

1.1 ADU/VDU area’s pre-distillation column (C-200) OVHD;

常减压蒸馏装置区初馏塔（C-200）塔顶；

1.2 ADU/VDU area’s atmospheric column oil transfer line platform;

常减压蒸馏装置区常压塔转油线平台；

1.3 ADU/VDU area’s vacuum column (C-400) OVHD;

常减压蒸馏装置区减压塔（C-400）塔顶；

1.4 ADU/VDU area’s vacuum column oil transfer line platform;

常减压蒸馏装置区减压转油线平台；

1.5 Light Ends Recovery Unit area’s desorber (C-630) OVHD;

轻烃回收装置区脱吸塔（C-630）塔顶；

1.6 Acid Gas & LPG Treating Unit area’s saturated dry gas absorber (C-101) OVHD

产品精制装置区饱和干气脱硫塔（C-101）塔顶。

1. **Content of Routine Inspection巡检内容**

2.1 Inspection content of the top of pre-distillation column (C-200) at ADU/VDU area: Check whether there is leakage or other abnormal conditions at pre-distillation column (C-200), atmospheric column (C-300), gas stripping column (C-301) and also at the top of the columns. Check with panel operator if the instrument indication data in DCS is the same with the on-site pressure, liquid level, etc.

常减压蒸馏装置区初馏塔（C-200）塔顶巡检站点检查内容：检查初馏塔（C-200）、常压塔（C-300）、汽提塔（C-301）塔区域及塔顶有无泄漏以及其他异常情况，与内操核对现场压力、液位等仪表指示数据与DCS数据是否一致。

2.2 Inspection content of atmospheric column oil transfer line platform at ADU/VDU area: Check whether there is any leakage or any abnormal conditions at the top of atmospheric furnace as well as the atmospheric oil transfer line. Check with panel operator whether the instrument indication data such as the opening of the butterfly valve, the negative pressure of the furnace chamber, etc. is the same as that of DCS.

常减压蒸馏装置区常压塔转油线平台巡检站点检查内容：检查常压炉炉顶、常压转油线有无泄漏及其他异常情况，与内操核对现场烟道蝶阀开度、炉膛负压等仪表指示数据与DCS数据是否一致。

2.3 Inspection content of vacuum column OVHD at ADU/VDU area: Check whether there is leakage or other abnormal conditions at vacuum column (C-400) as well as the top of the column. Check with panel operator whether the on-site pressure, liquid level of the oil sump, etc. is the same as DCS. Check the operation condition of the vacuum system; if there is any leakage or any obstructions

常减压蒸馏装置区减压塔（C-400）塔顶巡检站点检查内容：检查减压塔（C-400）区域以及塔顶有无泄漏及其他异常情况，与内操核对现场压力、集油箱液位等仪表指示数据与DCS数据是否一致，检查抽真空系统运行情况，有无泄漏和不畅现象。

2.4 Inspection content of vacuum column oil transfer line platform at ADU/VDU area: Check whether there is any leakage or any abnormal conditions at the top of vacuum furnace as well as the vacuum oil transfer line. Check with panel operator whether the instrument indication data such as the opening of the butterfly valve, the negative pressure of the furnace chamber, etc. is the same as that of DCS.

常减压蒸馏装置区减压转油线平台巡检站点检查内容：检查减压炉炉顶、减压转油线有无泄漏及其他异常情况，与内操核对现场烟道蝶阀开度、炉膛负压等仪表指示数据与DCS数据是否一致。

2.5 Inspection content of desorber (C-630) OVHD at Light Ends Recovery Unit area: Check whether there is leakage or other abnormal conditions at absorber (C-610), desorber (C-630), stabilizer (C-640) and also at the top of the columns. Check with panel operator if the instrument indication data in DCS is the same with the on-site pressure, liquid level, etc.

轻烃回收装置区脱吸塔（C-630）塔顶巡检站点检查内容：检查吸收塔（C-610）、脱吸塔（C-630）、稳定塔（C-640）塔区域以及塔顶有无泄漏及其他异常情况，与内操核对现场压力、液位等仪表指示数据与DCS数据是否一致。

2.6 Inspection content of saturated dry gas absorber (C-101) OVHD at Acid Gas & LPG Treating Unit area: Check whether there is leakage or other abnormal conditions at column area at Acid Gas & LPG Treating Unit area (C-101, C-102, C-103, C-104, C-105) and also at the top of the columns. Check with panel operator if the instrument indication data in DCS is the same with the on-site pressure, liquid level, etc.

产品精制装置区饱和干气脱硫塔（C-101）塔顶巡检站点检查内容：检查产品精制塔区（C-101、C-102、C-103、C-104、C-105）以及塔顶有无泄漏以及其他异常情况，与内操核对现场压力、液位等仪表指示数据与DCS数据是否一致。

1. **Time of Routine Inspection巡检时间**

3.1 Every Tuesday, before the day shift ends, the routine inspection of pre-distillation column (C-200) OVHD, atmospheric column oil transfer line platform, vacuum column (C-400) OVHD and vacuum column oil transfer line platform at ADU/VDU area shall be completed.

每周二白班下班前完成常减压蒸馏装置区初馏塔（C-200）塔顶、常压塔转油线平台、减压塔（C-400）塔顶和减压转油线平台的巡检工作。

3.2 Every Thursday, before the day shift ends, the routine inspection of desorber (C-630) OVHD at Light Ends Recovery Unit area and saturated dry gas absorber (C-101) OVHD at Acid Gas & LPG Treating Unit shall be completed.

每周四白班下班前完成轻烃回收装置区脱吸塔（C-630）塔顶和产品精制装置区饱和干气脱硫塔（C-101）塔顶的巡检工作。

1. **Form of Routine Inspection巡检形式**

Routine inspection is done in the form of inspection signboards in red and yellow colors, with “yellow” outwards on the first and third week of the month (observation angle is at the bottom of the column) and “red” outwards on the second and fourth week of the month.

以翻红、黄两种颜色巡检标识牌的形式进行巡检，每月的单周为“黄色”对外（人员位置在塔下观察的角度为外），每月的双周为“红色”对外。

1. **Inspection Time of Operation Dept. 运行部检查时间**

Inspection time of the operations department will be carried out every运行部对巡检情况的检查时间为每周三和周五。

1. **Assessment考核**

6.1 If the Operations Dept. finds out that no high-altitude routine inspection is done, each inspection point will deduct BND$30/time.

运行部检查发现未进行高空巡检，每次考核30文币/一个站点。

6.2 If the company finds out that no high-altitude routine inspection is done, it will be assessed according to the company’s regulation.

公司检查发现未进行高空巡检按公司规定进行考核。

6.3 If the company finds out that no high-altitude routine inspection is done, operation department will superimpose the assessment.

公司检查发现未进行高空巡检，运行部将叠加考核。